

ED 345 047

CE 061 141

AUTHOR Ettinger, Judith M., Ed.
TITLE Improved Career Decision Making in a Changing World. Integrating Occupational Information and Guidance. Participant's Resource Guide and Training Manual.

SPONS AGENCY National Occupational Information Coordinating Committee (DOL/ETA), Washington, DC.

REPORT NO ISBN-0-912048-94-8; ISBN-0-912048-95-6

PUB DATE 91

NOTE 1,064p.

AVAILABLE FROM Garrett Park Press, P.O. Box 190-B, Garrett Park, MD 20896.

PUB TYPE Guides - Classroom Use - Teaching Guides (For Teacher) (052)

EDRS PRICE MF08 Plus Postage. PC Not Available from EDRS.

DESCRIPTORS Adult Education; Career Counseling; *Career Development; Career Education; Career Guidance; Career Information Systems; *Career Planning; Competency Based Education; Counselors; *Counselor Training; *Decision Making; Disabilities; Early Parenthood; Females; High Risk Students; *Information Utilization; Inservice Education; Instructional Materials; Job Skills; Learning Activities; Learning Modules; *Occupational Information; Secondary Education

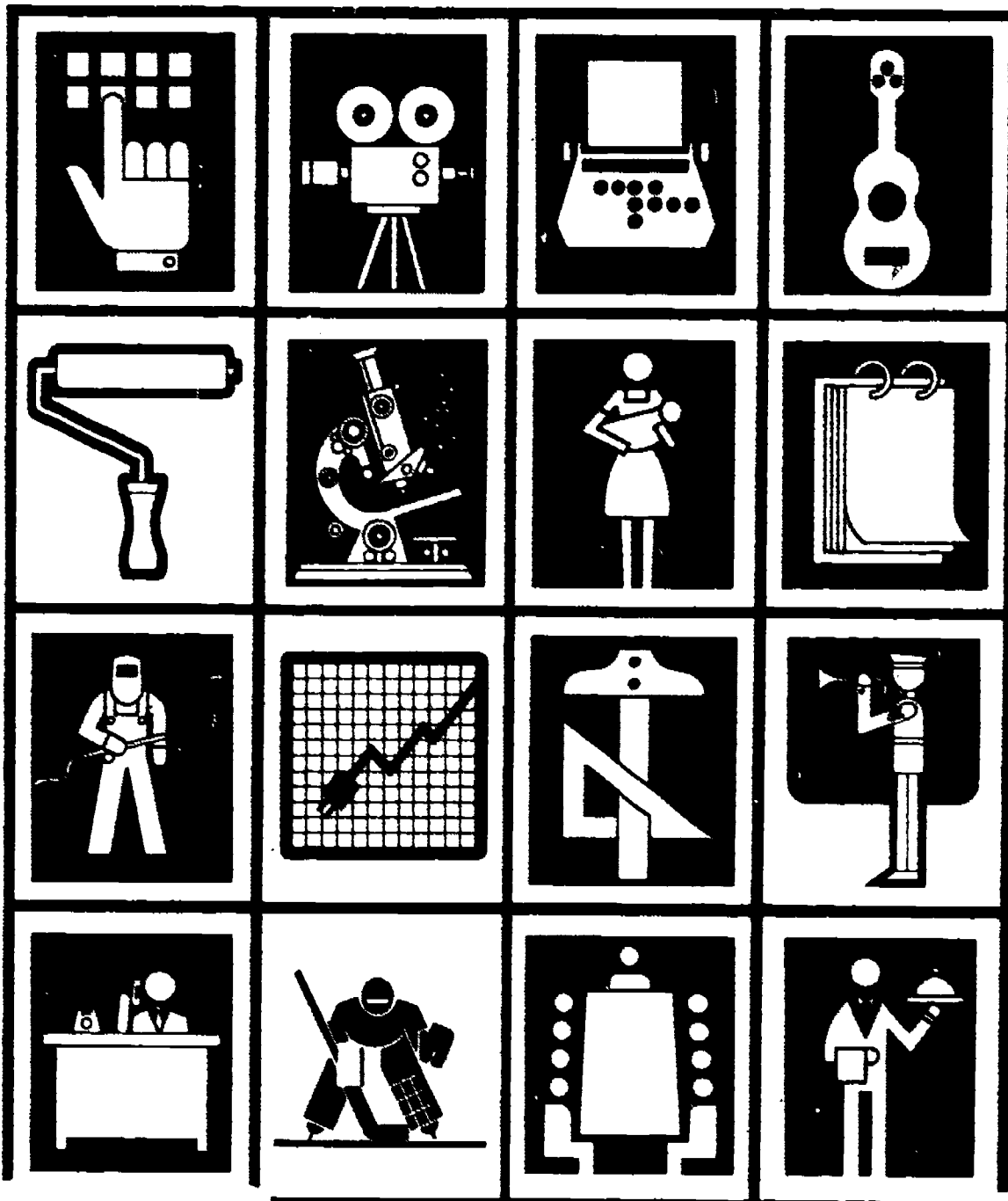
IDENTIFIERS National Career Development Guidelines

ABSTRACT

This participant's resource guide and trainer's guide are designed to train career development facilitators to help their clients use labor market information. The participant's resource guide contains 10 modules. Each module consists of these components: National Career Development Guidelines (NCDG) Counselor Competencies, abbreviated version of the trainer's lecturette with copies of transparencies embedded within the text, and references. Module subjects are as follows: introduction; definitions of terms and concepts related to career development and labor market information; demographic trends that have an impact on career decision making; theories of career development; information and how to assess and use it; developing an awareness of multicultural issues; and specific needs of adults, women and teen parents, persons with disabilities, and children at risk. An Action Plan follows Module 1. Thirty-five activities are provided. Appendixes include the following: career counseling competencies; State/National Occupational Information Coordinating Committee contacts; directory of state career information delivery systems; the NCDG; state guidance supervisors; guidelines for use of computer-based career information and guidance systems, career software review, and preparation and evaluation of career and occupational information literature; government printing offices; sources of state/local job outlook; annotated list of 14 print references; overview of equal opportunity legislation; labor market information directors; state data center organizations; and acronyms. The trainer's guide provides the information, research, theories, and implementation activities necessary for conducting the inservice program. Modules include a listing of content with related activities, lecturette, transparency masters, and references. The final section contains applications of the concepts presented in the modules--activities, case studies, small group exercises, and problem-solving scenarios. (YLB)

ED345047

Improved Career Decision Making in a Changing World



U.S. DEPARTMENT OF EDUCATION
Office of Educational Research and Improvement
EDUCATIONAL RESOURCES INFORMATION
CENTER (ERIC)

This document has been reproduced as received from the person or organization originating it.
 Minor changes have been made to improve reproduction quality.

• Points of view or opinions stated in this document do not necessarily represent official OERI position or policy.

"PERMISSION TO REPRODUCE THIS MATERIAL IN OTHER THAN PAPER COPY HAS BEEN GRANTED BY

J. V. Lender

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)."

BEST COPY AVAILABLE

CE 000141

Improved Career Decision Making in a Changing World

EDITOR

Judith M. Ettinger

CONTRIBUTING AUTHORS

Dennis Engels, University of North Texas.

Judith Ettinger, Vocational Studies Center, University of Wisconsin-Madison.

Jean Jolin, Vocational Studies Center, University of Wisconsin-Madison.

Roger Lambert, Vocational Studies Center, University of Wisconsin-Madison.

Maile Pa'alani, Wisconsin Occupational Information Coordinating Committee.

Janet Pugh, Wisconsin Department of Industry, Labor and Human Relations.

DESKTOP PUBLISHING

Julie Peterson, Vocational Studies Center, University of Wisconsin-Madison.

Kimberlee Verhage, Vocational Studies Center, University of Wisconsin-Madison.

Organizations and individuals undertaking special projects funded by the U.S. Department of Labor for the National Occupational Information Coordinating Committee are encouraged to express their professional judgments. The interpretations and viewpoints stated in this document, therefore, do not necessarily represent the official position or policy of the U.S. Department of Labor, the NOICC members or their representatives, or the NOICC staff, and no official endorsement should be inferred.

Library of Congress Cataloging-in-Publication Data

Improved career decision making in a changing world / contributing authors: Dennis Engels ... [et al.] ; editor, Judith M. Ettiinger.

p. cm.

Includes bibliographical references.

ISBN 0-912048-95-6. -- ISBN 0-912048-94-8 (training manual)

1. Career development. 2. Employee counseling. 3. Labor market--Research. 4. Minorities--Employment. I. Engels, Dennis W. II. Ettiinger, Judith M.

HF5549.5.C35I57 1991

158.6--dc20

91-29766

CIP

Copyright © 1991 Garrett Park Press

**Published and distributed by the Garrett Park Press
PO Box 190-B, Garrett Park, MD 20896**

ISBN Number 0-912048-95-6

Library of Congress Number

91-29766

ICDM Resource Group

Gary Crossley
ICESA
444 No. Capitol St., NW - Suite 126
Washington, D.C. 20001

R. V. Dorothy
National Veterans Training Institute
1250 14th St., Suite 650
Denver, CO 80202

Charlie R. Gertz
AT&T Bell Lab, Rm. 1D-640
101 JFK Parkway
Short Hills, NJ 07078

Nancy Hargis
Oregon OICC
875 Union Street NE
Salem, OR 97311

Gisela Harkin
U.S. Dept. of Education, OVAE, DVTE
Switzer Bldg. Room 4321
300 C St, SW
Washington, DC 20202

Joe McDaniel
Mississippi Dept. of Education
P.O. Box 771
Jackson, MS 39205

Chuck Mollerup
Room 301, Len B. Jordan Bldg.
650 West State St.
Boise, ID 83720

Daniel Marrs
North Dakota SOICC
1600 East Interstate - Suite 14
Post Office Box 1537
Bismarck, ND 58502

Mildred T. Nichols
Rhode Island SOICC
22 Hayes St.
Providence, RI 02908

Nancy S. Perry
P.O. Box 805
Augusta, ME 05332-0805

Mike Pilot
7223 Whitson Dr.
Springfield, VA 22153

Karen Reiff
Career Planning & Placement Specialist
Capital Area Career Center
611 Hagadorn Road
Mason, MI 48854

Charlotte Rodriguez
1902 14th Avenue
Greely, CO 80631

Pat Schwallie-Giddis
AACD
5999 Stevenson Avenue
Alexandria, VA 22304

Karen Wempen
IL Rehabilitation Services
623 E. Adams St.
Springfield, IL 62705

Counselor Educators Advisory Group

**Loretta Bradley
Box 4560 COE
Department of Educational Psychology
Texas Technical University
Lubbock, TX 79409**

**David Jepsen
University of Iowa
N368 Lindquist Center
Iowa City, IA 52242**

**Les Richmond
Education Department
Loyola College of Maryland
4501 N. Charles Street
Baltimore, MD 21210**

**Clemmie Solomon
3401 27th Avenue
Temple Hills, MD 20748**

**Howard Splete
Oakland University
522 O'Dowd Hall
Rochester, Michigan 48309**

Table of Contents

Participant's Resource Guide

Page

List of Figures

Foreword

Module 1.	Introduction	1-1
	Action Plan	Action Plan-1
Module 2.	Definitions of Terms and Concepts Related to Career Development and Labor Market Information	2-1
Module 3.	Demographic Trends That Impact Career Decision Making	3-1
Module 4.	Theories of Career Development:	4-1
Module 5.	What Is Information? How Can It Be Accessed? How Can It Be Used?	5-1
Module 6.	Developing An Awareness of Multicultural Issues	6-1
Module 7.	Specific Needs of Adults	7-1
Module 8.	Specific Needs of Women and Teen Parents	8-1
Module 9.	Specific Needs of Persons with Disabilities	9-1
Module 10.	Specific Needs of Children At-Risk	10-1

Applications and Activities

Activity #1.	Signature
Activity #2.	Career Keno
Activity #3.	Dyadic Encounter
Activity #4.	Icebreaker Interviews
Activity #5.	LMI Continuum
Activity #6.	Future Metaphors
Activity #7.	Career Planning Metaphors
Activity #8.	LMI Visualization
Activity #9.	Earning Power
Activity #10.	Lost Job
Activity #11.	Carousel of Careers
Activity #12.	Advertising LMI Resources
Activity #13.	LMI Scavenger Hunt
Activity #14.	Classification Systems and Resources
Activity #15.	Implications Wheel
Activity #16.	State and Local Resources
Activity #17.	Helping Anna Find Work
Activity #18.	Around the House

Activity #19.	Public and Private Self
Activity #20.	Label Awareness
Activity #21.	Decision Making
Activity #22.	Past Challenges
Activity #23.	Career Lifeline
Activity #24.	Sex Role Commandments
Activity #25.	Sentence Completions
Activity #26.	What Do You Know About Women in the Work Force?
Activity #27.	Gender Equity
Activity #28.	Walk in My Shoes
Activity #29.	Most I Could Handle
Activity #30.	Case Study - Carl Young
Activity #31.	Case Study - Marie Alvarez
Activity #32.	Case Study - Joseph Deer
Activity #33.	Case Study - Jane Williamson
Activity #34.	Case Study - Bernie Maas
Activity #35.	Case Study - Thomas Lee

Appendices

Appendix A.	NCDA Career Counseling Competencies
Appendix B.	SOICC Offices
Appendix C.	NOICC Staff
Appendix D.	Directory of State-Based Career Information Delivery Systems
Appendix E.	National Career Development Guidelines
Appendix F.	State Guidance Supervisors
Appendix G.	Guidelines for the Use of Computer-Based Career Information and Guidance Systems
Appendix H.	Career Software Review Guidelines
Appendix I.	Guidelines for the Preparation and Evaluation of Career and Occupational Information Literature
Appendix J.	Government Printing Offices
Appendix K.	Sources of State and Local Job Outlook
Appendix L.	Annotated List of Selected Printed References
Appendix M.	Overview of Equal Opportunity Legislation
Appendix N.	Labor Market Information Directors
Appendix O.	State Data Center Program Coordinating Organizations
Appendix P.	Acronyms

List of Figures

<u>Figure</u>	<u>Title of Figure</u>
1.1	Career Influences
1.2	Goals of the ICDM Program
1.3	National Career Development Guidelines
1.4	Student Competencies
1.5	Sample Questions to Ask of Information
1.6	Samples of Information
Action Plan 1	Programs Hopes and Personal Change
Action Plan 2	Daily Planner
Action Plan 3	Developing an Action Plan
2.1	Labor Force Concepts
2.2	Industrial Sectors
2.3	NOICC/SOICC Organization
3.1	Number of Older Americans Will Experience Fastest Growth Rate from 1990 to 2000
3.2	The Middle Aging of the Work Force
3.3	Non-Whites Are A Growing Share of the Work Force
3.4	Most New Entrants to the U.S. Labor Force Will Be Non-White, Female or Immigrants
3.5	Women Are A Growing Share of the Work Force
5.1	Two Examples of Information
5.2	A Continuum From Primary Data to Knowledge
5.3	CIDS Files and File Cross References
5.4	Example From a CIDS Printed Resource
5.5	Sample Classroom Activities
5.6	Sample Index
5.7	Examples From the OOH
5.8	Examples from the DOT
5.9	Example From the GOE
5.10	Example From the <i>Military Career Guide</i>
5.11	Example From the SOC
5.12	Example From the SIC
5.13	Industry/Occupational Relationships Route
5.14	North Dakota OIS Bookkeeping and Accounting Clerks
5.15	Example of Local Information
5.16	Outlook 1990-2005
5.17	Sequence of Projection Procedures to Determine Occupational Demand
5.18	Labor Force
5.19	Labor Force Will Continue to Grow

List of Figures continued

- 5.20 Labor Force Grows Faster Than Population
- 5.21 Labor Force Growth By Age
- 5.22 Age Distribution of Labor Force is Changing
- 5.23 Women's Share of Labor Force is Growing
- 5.24 Labor Force Participation Rate Trends Differ for Men and Women
- 5.25 Labor Force Growth Slows More for Women than Men
- 5.26 Labor Force Growth by Race and Hispanic Origin
- 5.27 Labor Force Entrants by Race and Hispanic Origin, Projected 1990-2005

- 5.28 Distribution of the Labor Force by Race and Hispanic Origin
- 5.29 Economic Outlook
- 5.30 GNP Growth and Projected Alternatives
- 5.31 Unemployment Rates and Projected Alternatives
- 5.32 Industry Employment
- 5.33 Employment Growth by Major Economic Sectors, 1975-2005
- 5.34 Employment Growth, 1975-90 and Projected 1990-2005
- 5.35 Job Growth in Services Outpaces Other Industry Divisions, 1990-2005

- 5.36 Employment Growth Within Services and Retail Trade Will Be Concentrated

- 5.37 Industries Adding the Most Jobs, 1990-2005
- 5.38 Industries With the Fastest Job Growth, 1990-2005
- 5.39 Industries With the Most Rapid Job Declines, 1990-2005
- 5.40 Industries With the Fastest Growing Output, 1990-2005
- 5.41 Fastest Growing and Declining Manufacturing Industries, 1990-2005

- 5.42 Occupational Employment
- 5.43 Employment Growth by Major Occupational Group, 1990-2005
- 5.44 Job Openings for Replacement and Growth, 1990-2005
- 5.45 Fastest Growing Occupations, 1990-2005
- 5.46 Fast-Growing Occupations Generally Requiring at least a Bachelor's Degree 1990-2005

- 5.47 Fastest Growing Occupations Generally Requiring Post-secondary Training But Less Than a College Degree, 1990-2005

- 5.48 Fastest Growing Occupations Generally Requiring No More Than a High School Diploma, 1990-2005

- 5.49 Job Growth May Be Viewed in Two Ways: Changes, 1990-2005
- 5.50 Occupations Adding the Most Jobs, 1990-2005
- 5.51 Employment Change in Declining Occupations, 1990-2005
- 5.52 Education Pays
- 5.53 Annual Earnings of Workers by Highest Level of Educational Attainment, 1987

- 5.54 Educational Attainment of Workers by Race and Hispanic Origin
- 5.55 Concentration of Blacks and Hispanics by Major Occupation Group, 1990

- 5.56 Educational Attainment and Earnings
- 5.57 Female Earnings as a Percent of Male Earnings
- 5.58 Sample of How Labor Market Information is Used

List of Figures continued

- 6.1 Non-Whites Are A Growing Share of the Work Force
6.2 Concentration of Blacks and Hispanics by Major
Occupational Group, 1988
6.3 Locus of Control and Locus of Responsibility by Sex
- 8.1 Women's Share of Labor Force is Growing
8.2 Labor Force Entrants by Sex
8.3 Educational attainment and Earnings
8.4 Percent Distribution and Median Earnings
8.5 Median Earnings of Males and Females by Occupation
8.6 Percent of Families with Children at Home in Which
Both Spouses Work Outside the Home
- 9.1 U.S. Secondary School Special Education Students, 1987
9.2 Life Centered Career Education Curriculum
9.3 The Train-Place-Train Model
- 10.1 Labor Force Status of 1987-88 High School Dropouts
and Graduates: October 1988
10.2 Educational Attainment and Earnings

Foreword

Improved Career Decision Making in a Changing World (ICDM) is designed to help career development facilitators and their clients make wise decisions as participants in a labor market that is characterized by economic, demographic and technological change. As the United States approaches the year 2000, an older and more socially diverse work force must produce, trade and prosper in a global economy that is technologically advancing at a rapid pace. People of all colors, ages and cultures are seeking roles in the changing world of work--where and how do they fit into this modern mosaic of production and distribution?

The purpose of the *Improved Career Decision Making in a Changing World* Program is to help people find answers to career-related questions through the use of labor market information (LMI). The need for the answers--information--is greater today than ever before as more preparation is needed and competition becomes keener for the better jobs. We also move around more within the labor market. Most workers can expect to change jobs more than half a dozen times during their lives. We need information more than ever, but there is so much labor market information in today's "Information Age" that it is difficult for the average person to locate, sift through and interpret it to make intelligent career decisions.

The professionals to whom we often turn, career development facilitators, play a key role in career decision making and specifically, in the information-seeking process. They need to know how to help their clients find information, process it and use it effectively. The goal of the ICDM Program is to train career development facilitators to help their clients use labor market information to make thoughtful, responsible and enlightened decisions about occupations and careers.

Is helping clients in their career development and decision making important work? We certainly think so. Choosing one's career is no longer an isolated incidence that can be left to chance circumstances. Our work is too important; it is central to our lives; we are often identified by what we do. If we are happy, satisfied, and fulfilled in our work roles, these elements spill into our personal lives.

To provide our citizens with this important occupational and career information, the National Occupational Information Coordinating Committee (NOICC) and the State Occupational Information Coordinating Committees (SOICCs) have accepted the mission to train career development facilitators to help their clients use labor market information. NOICC has sponsored the Improved Career Decision Making (ICDM) Program through cooperating SOICCs since 1981 and to date has trained over 30,000 career development facilitators. The training is provided through ICDM curriculum materials and workshops organized by the SOICCs with funding assistance from NOICC.

The ICDM Trainer's Guide and Participant Resource Guide are revisions of the original training materials, *Using Labor Market Information in Career Exploration and Decision Making*, published in 1986. This newer version is competency-based, using the counselor/staff competencies listed in the National Career Development Guidelines, also a NOICC Project. This ICDM curriculum is designed to be user-friendly. It can serve all population groups and it can be delivered in a variety of training modes and circumstances. It truly represents what is needed for *Improved Career Decision Making in a Changing World*.

In closing, I want to acknowledge the contributions of Roger Lambert and Judith Ettinger from the Vocational Studies Center at the University of Wisconsin, Maile Pa'alani, the Wisconsin SOICC Director, Walton Webb and Valerie Lloyd from the NOICC Office and the reviewers who took the time to contribute their expertise to the development of this publication.

Juliette Lester
Executive Director

Module 1

Introduction



National Career Development Guidelines-Counselor Competencies

Skills to assist individuals in setting goals and identifying strategies for reaching goals.

Knowledge of changes taking place in the economy, society, and job market.

Knowledge of education, training, employment trends, labor market, and career sources.

Introduction

Module 1

Introduction

"Hi, I'm Jane Cruz."

"Well, it's nice to meet you, Jane, I'm Tom Chen."

"You look familiar, Tom. I know I've seen you before. Do you work in this area?"

In many first time meetings such as this, the work we do is often our most descriptive label. How do we choose our work roles? Did she aspire to be in sales? Did he choose to become a nurse? How are these choices made? Are they the result of long-term planning or do we more frequently just stumble into the first job available upon graduation?

The decisions we make about our careers throughout our lives are crucial to our well-being. Yet, despite the importance of a career, the 1989 Gallup Survey found that less than half of today's adults made a conscious and informed career choice. Instead, chance and environment played an important role.

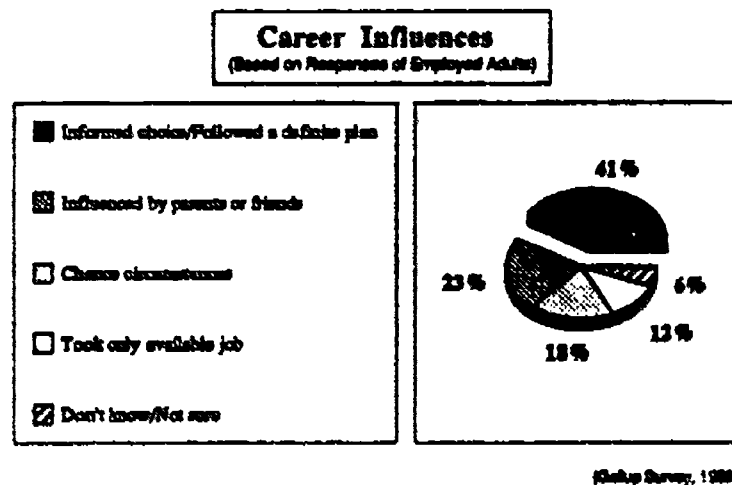


Figure 1.1

Career decision making is a complex process. During this process, clients typically analyze their personal traits, backgrounds and interests. One step in this process is to relate self-knowledge to the available opportunities in the world of work. Yet, because we are faced

with a broad, rapidly changing spectrum of careers, we cannot assume a client or student will have the skills to locate, use and evaluate the most up-to-date and valid information effectively. Most people need "handles" to bring some order to the resources that help them. Some clients are capable of researching and using the available information to make good decisions; others may need help in locating and evaluating information to answer their questions. The *Improved Career Decision Making* training program will teach you about available resources that contain answers to many of these questions. This inservice program is designed to help you find, interpret and use career and labor market information with your clients.

The goals of the program are:

Goals of the *ICDM Program*

Train career development facilitators to help students and clients:

1. Understand labor market information,
2. Use information to make career decisions,
3. Improve decision making skills, and
4. Develop an action plan to make more effective use of information in career decision making.

Figure 1.2

Career Decision Making and the Role of Information

What can a career development facilitator do to enable clients and students to make effective decisions? The National Career Development Guidelines, developed by the National Occupational Information Coordinating Committee, define competencies for staff who deliver career guidance and counseling programs.

National Career Development Guidelines

Counseling

Knowledge of developmental issues individuals address throughout the life span.
Knowledge of counseling and career development theories and techniques.
Knowledge of decision-making and transition models.
Knowledge of role relationships to facilitate personal, family, and career development.
Knowledge of different cultures to interact effectively with all populations.
Skills to build productive relationships with counsees.
Skills to use appropriate individual and group counseling techniques to assist individuals with career decisions and career development concerns.
Skills to assist individuals in identifying influencing factors in career decision making, such as family, friends, educational opportunities, and finances.
Skills to assist individuals in changing biased attitudes that stereotype others by gender, race, age, and culture.
Skills to assist individuals in understanding the relationship between interpersonal skills and success in the workplace.
Skills to assist individuals in setting goals and identifying strategies for reaching goals.
Skills to assist individuals in continually reassessing their goals, values, interests, and career decisions.
Skills to assist individuals in preparing for multiple roles throughout their lives.

Information

Knowledge of changes taking place in the economy, society, and job market.
Knowledge of education, training, employment trends, labor market, and career resources.
Knowledge of basic concepts related to career counseling such as career development, career progression, and career patterns.
Knowledge of the changing gender roles and how these impact on work, family, and leisure.
Knowledge of employment information and career planning materials.
Knowledge of employment-related requirements such as labor laws, licensing, credentialing, and certification.
Knowledge of state and local referral services or agencies for job, financial, social, and personal service.
Knowledge of federal and state legislation that may influence career development programs.
Skills to use career development resources and techniques designed for specific groups.
Skills to use computer-based career information systems.

Individual and Group Assessment

Knowledge of assessment techniques and measures of skills, abilities, aptitudes, interests, values, and personalities.
Skills to identify assessment resources appropriate for specific situations and populations.
Skills to evaluate assessment resources and techniques related so that their validity, reliability, and relationships to race, gender, age, and ethnicity can be determined.
Skills to administer, interpret, and personalize assessment data in relation to the career development needs of the individual.

National Career Development Guidelines *continued*

Management and Administration

Knowledge of program designs that can be used in organizing career development programs.
Knowledge of needs assessment techniques and practices.
Knowledge of management concepts, leadership styles, and techniques to implement change.
Skills to assess the effectiveness of career development programs.
Skills to identify staff competencies for effective career development programs.
Skills to prepare proposals, budgets, and timelines for career development programs.
Skills to identify, develop, and use record keeping methods.
Skills to design, conduct, analyze, and report the assessment of individual and program outcomes.

Implementation

Knowledge of program adoption and planned change strategies.
Knowledge of barriers affecting the implementation of career development programs.
Skills to implement individual and group programs in a variety of areas such as assessment decision making, job seeking, career information and career counseling.
Skills to implement public relations efforts which promote career development activities and services.
Skills to establish linkages with community-based organizations.

Consultation

Knowledge of consulting strategies and consulting models.
Skills to assist staff in understanding how to incorporate career development concepts into their offerings to program participants.
Skills to consult with influential parties such as employers, community groups and the general public.
Skills to convey program goals and achievements to legislators, professional groups, and other key leaders.

Specific Populations

Knowledge of differing cultural values and their relationship to work values.
Knowledge of unique career planning needs of minorities, women, the handicapped, and older persons.
Knowledge of alternative approaches to career planning needs for individuals with specific needs.
Skills to identify community resources and establish linkages to assist adults with specific needs.
Skills to find appropriate methods or resources to communicate with limited English proficient individuals.

The Guidelines also include student competencies.

Career Development Competencies by Area and Level

	Elementary	Middle/Junior High School	High School	Adult
Self-Knowledge				
	Knowledge of the importance of self-concept.	Knowledge of the influence of a positive self-concept.	Understanding the influence of a positive self-concept.	Skills to manage a positive self-concept.
	Skills to interact with others.	Skills to interact with others.	Skills to interact positively with others.	Skills to manage effective interactions.
	Awareness of the importance of growth and change.	Knowledge of the importance of growth and change.	Understanding the impact of growth and development.	Understanding developmental change and transitions.
Educational and Occupational Exploration				
	Awareness of the benefits of educational achievements.	Knowledge of the benefits of educational achievements to career opportunities.	Understanding the relationship between educational achievement and career planning.	Skills to enter and participate in education and training.
	Awareness of the relationship between work and learning.	Understanding the relationship between work and learning.	Understanding the need for positive attitudes toward work and learning.	Skills to participate in work and life-long learning.
	Skills to understand, and use career information.	Skills to locate, understand, and use career information.	Skills to locate, evaluate, and interpret career information.	Skills to locate, evaluate, and interpret career information.
	Awareness of the importance of personal responsibility and goal work habits.	Knowledge of skills necessary to seek and obtain jobs.	Skills to prepare to seek, obtain, maintain, and change jobs.	Skills to prepare to seek, obtain, maintain, and change jobs.
	Awareness of how work relates to the needs and functions of society.	Understanding how work relates to the needs and functions of the economy and society.	Understanding how societal needs and functions influence the nature and structure of work.	Understanding how the needs and functions of society influence the nature and structure of work.
Career Planning				
	Understanding how to make decisions.	Skills to make decisions.	Skills to make decisions.	Skills to make decisions.
	Awareness of the interrelatedness of life roles.	Knowledge of the interrelatedness of life roles.	Understanding the interrelatedness of life roles.	Understanding the impact of work on individual and family life.
	Awareness of different occupations and changing male/female roles.	Knowledge of different occupations and changing male/female roles.	Understanding the continuous changes in male/female roles.	Understanding the continuous changes in male/female roles.
	Awareness of the career planning process.	Understanding the process of career planning.	Skills in career planning.	Skills to make career transitions.



National Occupational Information Coordinating Committee • Suite 116, 2109 M Street, N.W., Washington, D.C. 20037 • (202) 684-9689

Figure 1.4

To master these competencies, a variety of self-awareness activities are completed. The next step is to relate self-knowledge to the many available careers.

According to Meyer (1988), the glut of information prohibits us from stopping once we locate the information. Information only has meaning if it is evaluated in light of what individuals know about themselves. Ensuring that it is collected in a manner that best serves the individual is the critical step. First, it is important for those seeking career information to sort out the relevant from the irrelevant. Second, as

facilitators, we need to monitor the process of collection. Third, the information needs to be processed as it is collected so it becomes part of the decision about to be made. Fourth, the results of this processing need to be understood and integrated by the individual.

To illustrate, a student may be considering a career as a tobacco grower. The student wants to know what the job will entail. What will I do on the job? What will my income be? What kind of training do I need? The ICDM training program will teach you about available resources that contain answers to many of these questions.

Sample Questions to Ask of Information:

1. How will consumer behavior affect opportunities?
2. What public policies will impinge on this career?
3. How many workers are already in this field?
4. How many new workers will be needed in the future?
5. Where would I have to live to work in this occupation?
6. What will my work environment be like?
7. How will technology change the industry?

Figure 1.5

What Is Career and Labor Market Information?

It is information about jobs, workers, the work place and the preparation needed to work. It is readily available to the public through career information delivery systems (CIDS), printed materials, computer-based systems, videotapes, microfiche, current periodicals, newspapers and books.

A Changing Work Place

It is important for career development facilitators not only to understand the information about occupations but also to have knowledge about the broader issues that result in fluctuations in our social, political and economic systems, as well as changes in the occupational structures. For example, the composition of today's labor market has continued to change as the population shifts and our economy changes.

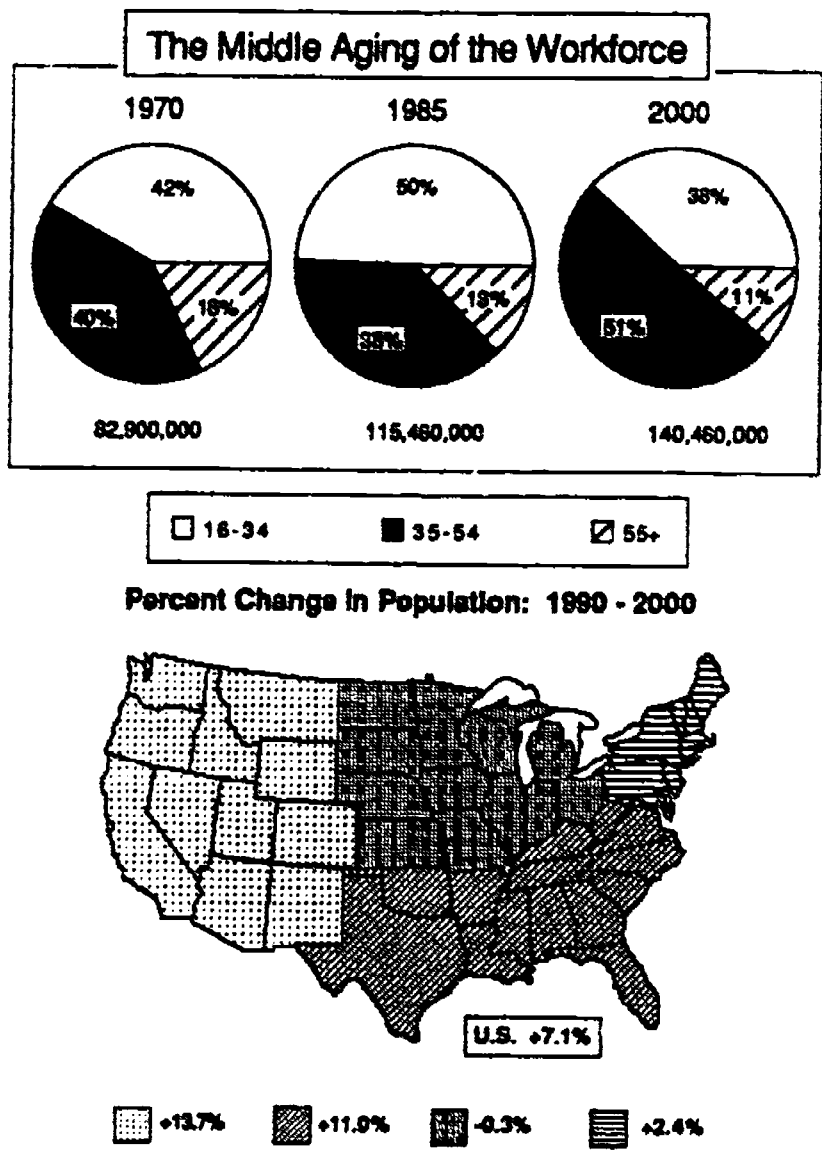


Figure 1.6

Another way to illustrate the importance of decision making is by examining our national priority for informed and skilled workers. They need basic skills, career education, and an understanding of the changing world of work.

Conclusion

The wealth of information may seem intimidating and the process for incorporating this information into career decision making may seem overwhelming. This inservice program, *Improved Career Decision Making in a Changing World*, will help you understand where to find information, how to make effective use of information and how to continually update your skills and knowledge through readily available resources.

**Introduction
Module 1
References**

- Brown, D., & Brooks, L. (1991). *Career counseling techniques*. Boston: Allyn and Bacon.**
- Johnston, W. B., & Packer, A. H. (1987). *Workforce 2000: Work and workers for the 21st century*. Indianapolis: The Hudson Institute.**
- Meyer, H. E. (1988, May 15). Real-World Intelligence. *American way*, 54-65.**
- National Career Development Association (1990). *National survey of working America*. Washington DC: National Occupational Information Coordinating Committee.**
- Peterson, G. W., Sampson, J. P., & Reardon, R. C. (1991). *Career development and services*. Pacific Grove, CA: Brooks/Cole.**
- U.S. Department of Labor, U.S. Department of Education, and U.S. Department of Commerce (1988, July). *Building a quality workforce*. Washington DC: Office of Public Affairs, Employment and Training Administration, U.S. Department of Labor.**

Notes

The Action Plan



National Career Development Guidelines-Counselor Competencies

Skills to use career development resources and techniques designed for specific groups.

Skills to implement individual and group programs in a variety of areas such as assessment, decision making, job seeking, career information and career counseling.

Skills to assist individuals in setting goals and identifying strategies for reaching goals.

The Action Plan

Nothing is more terrible than activity without insight."
Thomas Carlyle, 1795-31.

Change: A Personal Challenge

Most of us have heard the familiar saying, "There are people who make things happen, people who watch things happen, and people who wonder what happened." From personal experience, we admire people who "make things happen." Through our own efforts, however, we realize how hard it is to take action and make changes in our lives. We recognize what it takes to accomplish our goals--motivation, hard work, determination, tenacity, support from others, and sometimes, just plain luck.

Despite the personal sacrifices that may be required, many of us do want to change or improve certain aspects of our personal lives or work situations. We are motivated to make changes when we are exposed to new concepts and ideas that can improve or enrich our lives. As a result of these influences, we are charged with a mental and physical energy to change our behavior in some way--to quit smoking, to lose weight, to take a course in speed reading, or to develop a new program to better meet the needs of our students. Unfortunately, our motivation to act often withers, wanes and gradually subsides, due to factors such as the time needed to achieve change, the people who may be standing in the way, the money to implement our plans, the personal discipline that is necessary, or simply the pressures of daily life.

Needed: A Road Map

What is often missing is a "road map" to reach our destination. By studying persons who have achieved, psychologists have discovered that they have two common characteristics:

1. they set goals for themselves; and
2. they write them down.

In other words, they have **plans of action**, which serve as detailed road maps to their goals. The purpose of this section is to help you develop your own road maps, or Action Plans, of professional growth as a career development facilitator.

Some Barriers To Change

What prevents us from applying what we have learned? There are three distinct types of barriers that prevent the transfer of skills from an inservice program to the work site:

- **The participant.** Because of personal standards and ideas about how career facilitating should be accomplished, the participant may reject the values and concepts in the training course. Or, the participant may lack the confidence to use or apply the new skills developed during the training.
- **The participant's supervisor.** The supervisor may not encourage the participant to use the new skills or may not support the participant who applies what has been learned.
- **The organization.** The participant's new skills may not be accepted in the work environment due to time constraints, pay structures, incompatible office policies and procedures, or the lack of authority to act.

Overcoming Barriers: A Training Approach

To prevent these barriers from occurring, a comprehensive plan of action should be initiated before the training begins. We suggest the following approach:

Step 1.

The participant and supervisor develop mutual training objectives.

Your supervisor can work cooperatively with you by communicating his/her needs. The supervisor who has a voice in defining the skills that are needed will take a greater interest in the outcome of the training.

An example of a mutual objective might be:

To develop stronger ties between the school and the business community in order to place more students in work experience or internship programs.

Step 2.

Participant lists pre-training objectives.

Your first task in the training session is to outline what you wish to gain from the inservice. This enables the trainer to better meet your needs. Your objectives will be translated into an Action Plan at the conclusion of the training session. This Action Plan will contain activities and tasks to be completed back at your work site. A form for this purpose, "Program Hopes and Personal Change," is included in your guide.

An example of a participant objective might be:

To become skilled in how to access local labor market information to better advise students who wish to work in the community.

Step 3.

The training instills confidence in the participant.

In order to instill confidence, most modules will incorporate hands-on, work-related activities to develop your skills in the use of labor market information. A written form, the "Daily Planner" can be found in the guide. *It is important that you take at least five minutes to fill in the "Daily Planner" at the conclusion of each training module.*

An example of a practical training activity might be:

Role playing a career counseling session during which the counselor is showing the client how to scan and evaluate the help wanted ads in a newspaper to gain a broader understanding of the local labor market.

Step 4.

The training enables the participant to develop a supportive network.

Your work site may need to be modified in order to accomplish training goals. These modifications become components of your Action Plan.

An example of a training activity to enable the participant to develop a peer network would be:

A brainstorming session on how to develop ties between the school and the business community that results in the formation of interest or support groups among the participants that would continue beyond the training session.

Step 5.

An Action Plan is completed at the conclusion of training.

Your concluding activity will be the formulation of your plan of action. A two page worksheet, "My Action Plan," will help you create a specific outline with details, such as the resources needed and time frames required. When writing the plan, it is important that you consider the factors that will enable you to reach the Action Plan goals, as well as the obstacles that must be overcome. By doing so, you can develop realistic strategies to reach your objectives.

After the Action Plan has been completed, you will have time to discuss the plan with fellow trainees. Research has shown that group discussion is very valuable; the "talking it over" process creates a bond between you and your plan of action.

As a result of this training in Improved Career Decision Making (ICDM), you will be better informed about how the labor market works. You will develop skills in maintaining up-to-date information about its fluctuations and changes. You can utilize these skills by integrating information resources into your career counseling. It is critical that the skills developed during your training be transferred to the work place. By applying what you have learned, you can help your clients make the best possible career choices.

Your Action Plan is the culmination of the training session. Once you have achieved your training objectives, an Action Plan needs to be developed as a mechanism to assist you in making the important transfer of skills from the training session to your work environment.

It's Easy!

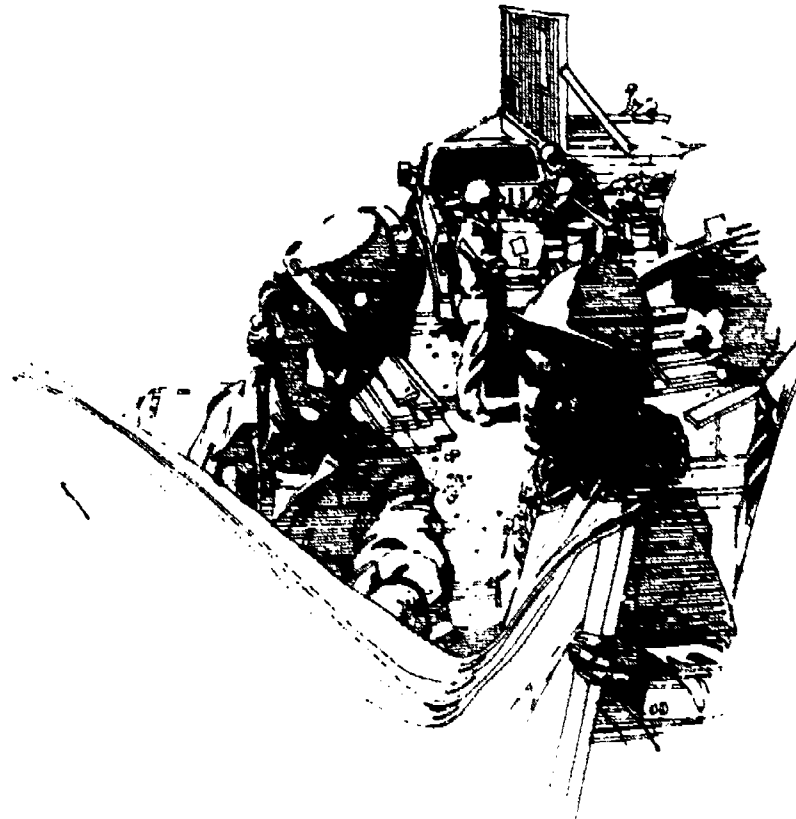
The creation of an Action Plan should not be intimidating, because the framework for your plan already exists. You have been formulating your plans from the very beginning of your training when you listed your hopes for the program and possibilities for change on "Program Hopes and Personal Change." During training, you have gradually added pieces to your plan. A review of your notes from each training

module will reveal this information on your "Daily Planner." Your final Action Plan will combine:

- **your original objectives as stated in "Program Hopes and Personal Change,"**
- **the actions listed in the last column of your module notes from your "Daily Planner," and**
- **any additional goals you wish to set for yourself and your organization.**

A systematic approach to writing your plan is outlined on "My Action Plan." Once formulated, the Action Plan becomes a self-pledge; it is a commitment to engage in new behaviors as individuals and organizations as a result of the training.

The plan itself should be simple, realistic, and measurable. The plan defines what you want to do, how and when you will do it, what help you will need, and how you will measure what you have accomplished. An example can be found on the following pages.



Example Of An Action Plan

As a result of my training I plan to:

- **set up a resource center called "Jobs in River City," with information on local employment opportunities;**
- **become active in the Chamber of Commerce in order to establish ties with community businesspersons; and**
- **work with other facilitators to establish a work study partnership between my organization or school and a local business or industry.**

To illustrate the complete Action Plan process that is outlined on the participant's worksheet, we will use the first goal, setting up a resource center on local employment opportunities, as an example. Some of the services this center might provide would be:

- **a Career Information Delivery System (CIDS) for career exploration and information;**
- **Federal, state, and local labor market information publications, such as the *Dictionary of Occupational Titles (DOT)*, *Standard Occupational Classification (SOC)*, *Occupational Outlook Handbook (OOH)*, *Occupational Outlook Quarterly (OOQ)*, *Standard Industrial Classification (SIC)*, local newsletters, etc.;**
- **a list of the major employers in the community, with descriptions of their businesses or industries and the principal occupations found within them;**
- **telephone numbers of personal contacts that may be helpful, e.g., job telephone lines, human resource departments of governmental agencies and large employers, Job Service and JTPA contacts, private employment agencies, etc.;**
- **a chart showing the major occupational classifications within the local labor market, with information on qualifications, wages, hours and conditions of employment;**
- **cost of living information for River City: food, utilities, housing, etc.;**
- **information on tax deductions taken from paychecks, employee benefits and legal rights;**
- **a map showing where major employers are located, along with local public transportation services and schedules;**
- **video/audio tapes of local employers describing the qualifications they are seeking in prospective employees;**

- a listing of postsecondary educational and training institutions, with catalogs of their offerings;
- a job bulletin board taken from the listings in the local newspaper or Job Service Office;
- a file of job postings from public institutions and any other large employers within the city;
- instructions for resume and cover letter writing; files of sample resumes and introduction letters;
- samples of common job application forms used by major employers in the area with instructions to follow; and
- a sign-up sheet for personal counseling services.

With this goal in mind, a Jobs in River City Resource Center, "My Action Plan" could be outlined in the following way on the worksheet:

I. Defining my concern

- A. I have carefully reviewed my professional environment; the area that I would like to see improved relates to the lack of information our students have about job opportunities in River City.
- B. I am concerned about this situation because:
1. many of our students wish to remain in River City and will be seeking work in this area;
 2. national and state labor market information does not always apply to conditions in River City; and
 3. our students lack job search skills.
- C. The major facts that relate to this situation are:
1. sixty percent of our high school graduates remain in River City;
 2. fifty percent have completed their education; they will not go on to a postsecondary program; they will be looking for work in River City;
 3. students need information about where they can find work and how to get it;
 4. "Education for Employment" is a goal of our school district; and
 5. my principal supports school-wide efforts to educate for employment.

II. Seeking a solution

A. The elements of my situation most amenable to change are:

- 1. having the cooperation of most teachers and the school administration in setting up a Jobs Resource Center;**
- 2. learning about the labor market in River City, thereby improving my career counseling skills; and**
- 3. the frustration expressed by students looking for work; they have a need for a Jobs Resource Center.**

B. The elements of my situation least amenable to change are:

- 1. the limited availability of time to set up the Center: finding materials, interviewing employers, developing handouts, etc.;**
- 2. finding money in our budget to purchase some of the publications and computer software that would enhance the Resource Center;**
- 3. convincing all staff members to support and contribute to the Resource Center; and**
- 4. assuring that all students have access to the Resource Center.**

C. I would use these indicators to consider my concerns to be satisfactorily resolved:

- 1. the completion of a Resource Center within three months;**
- 2. the Resource Center will be used by at least 60% of the student body before the end of the school year as determined by a record keeping procedure;**
- 3. students, staff members and administrators who use the Center will complete written evaluations of its effectiveness; and**
- 4. the Center will establish working relationships with private and public employment agencies, such Job Service and JTPA;**
- 5. the evaluations of the Center will be used to improve its future content and operation.**

D. The forces that I see as unfavorable to (or blocking) the hoped-for change are:

- 1. coworkers who may not approve of the time that I will be spending to set up the Center;**
- 2. teachers who may be unwilling to allow their students class time to use the Jobs Resource Center;**

3. local businesses and industries that may be uncooperative;
and
4. a lack of student awareness as to how the Center can help them.

E. The forces I see as favoring (supporting) the change are:

1. students looking for work;
2. the school district administration;
3. the library director;
4. special education teachers;
5. parents; and
6. local employers who envision the value of the Center.

F. The solution I see to my concern is:

1. to work closely with those persons who will support my efforts to establish the Center;
2. to communicate frequently with persons who may oppose or resent my efforts in order to address their concerns and enlist their support and cooperation;
3. to involve local business people in the planning of the Center;
and
4. to ask my principal to appoint an ad hoc advisory committee composed of teachers, parents and local business people to assist in the planning and development of the Center.

III. An Action Plan to implement my solution

A. I see the time frame for the plan to be operative as follows:

1. Center established in three months;
2. student, staff and administrative evaluations of the Center in nine months; and
3. Center revisions in twelve months.

B. I will need the assistance of these individuals to implement my plan:

Name: Principal Sam Martinez
About: Administrative and financial support of the Center

Name: Library Director Helen Han
About: Help in finding information resources

Name: Chamber of Commerce President Sue Young
About: Getting cooperation from local businesses

Name: English teacher Michael Feldman
About: Sample resumes, cover letters and job applications

C. I will need to communicate the plan to:

Name: Staff members, administrators and students
About: Purpose/design/time frame for the Center

Name: Local employers
About: The purpose of the Center; their employment needs

Name: Parents of students
About: How the Center can help their child

Name: Members of my own department
About: Duties, responsibilities, time frames, etc.

D. I intend to follow up and evaluate the success of my plan by doing the following:

1. reviewing, tabulating and analyzing the evaluations of the Jobs Resource Center completed by the students, staff and administration by the end of the school year;
2. using the findings from the evaluations to set goals to improve the Center during the following school year; and
3. communicating these future plans to students, staff and administration.

Conclusion

As you can see by this example, your Action Plan can be a powerful instrument of change. Your plan outlines your goals and develops strategies to achieve, monitor and refine them. It is truly amazing what people can accomplish by simply setting realistic goals and writing them down.

Program Hopes and Personal Change

1. My hopes and expectations for this training are. . .

2. If my supervisors could have a goal for this training, they would want me to. . .

3. If my peers or associates could have a goal for this training, they would want me to. .

4. If the individuals that I supervise could have a goal for this training, they would want me to. . .

Adapted from *The Winning Trainer*, J.E. Eitington, Gulf Publishing Co., Houston, TX, 1990

Second Component of Action Plan for _____
 name

Directions: Notes should be taken by the participant on this worksheet at the end of each training session (allow 5 minutes).
 When the training is concluded this Planner is used to create the Action Plan.

ICDM

Daily Planner

	Key Points of Module	Key Points Related to My Needs	Action I Intend to Take
Module 1			
Module 2			
Module 3			
Module 4			
Module 5			
Module 6			
Module 7			
Module 8			
Module 9			
Module 10			

Action Plan-12

Developing an Action Plan

I. Purpose

The final phase of this program is designed to give you an opportunity to apply the concepts and skills that you have learned to an actual on-the-job concern of your choice. This should provide real and lasting meaning to your training experience. It will also provide you with a maximum return from your investment of time and effort in the training session.

II. Procedure

- A. Select a topic about which you have a genuine concern; that is, an area that requires some worthwhile improvement or remedial action. The concern may relate to management, an operational matter, an administrative change, a plan for self-improvement, an improvement in relations with others (supervisors, coworkers), etc. It may involve overcoming a deficiency or meeting a new challenge or opportunity. You alone know where a real need for change or betterment exists.**
- B. Individual work (20 minutes): Use the three-part *Action Plan Worksheet* to help you work through the details of your problem-solving activity.**
- C. Small group work (30 minutes): You will be assigned to a team of three (two other participants who share your concerns and yourself). Each of you will have the opportunity to present your concern and plan for action to the other two members for review, critique, feedback, and counsel. Each presenter will have ten minutes to secure help from the other two participants. Although this is your concern, objective "outsiders" can be of real help, because they may see things you might have overlooked. Feedback from your teammates will sharpen the issues for you and help you think through the steps outlined in your action plan.**

Adapted from *The Winning Trainer*, J.E. Elington, Gulf Publishing Co., Houston, TX, 1990

Action Plan of _____
name

My Action Plan

I. Defining my concerns

1. I have carefully reviewed my "back-home" situation, and the area I would like to see improved relates to. . .
2. I am concerned about this situation because. . .
3. The major facts that relate to this situation are. . .

II. Seeking a solution

1. The elements of my situation most amenable to change are. . .
2. The elements of my situation least amenable to change are. . .
3. I would use these indicators to consider my concerns to be satisfactorily resolved.
4. The forces that I see as unfavorable to (blocking) the hoped-for change are. . .
5. The solutions I see to my concerns are. . .
6. The major facts that relate to my concern are. . .

Adapted from *The Winning Trainer*, J.E. Ethington, Gulf Publishing Co., Houston, TX, 1990

My Action Plan cont.

III. An action plan to implement my solution

1. I see the time frame for my plan to be operative as follows:

2. I will need the assistance of these individuals to implement my plan:

Name: _____ **about:** _____

Name: _____ **about:** _____

Name: _____ **about:** _____

Name: _____ **about:** _____

3. I will need to communicate the plan to:

Name: _____ **about:** _____

Name: _____ **about:** _____

Name: _____ **about:** _____

Name: _____ **about:** _____

4. I intend to follow up and evaluate the success of my plan by doing the following:

Action taken: _____ **Date:** _____

Action taken: _____ **Date:** _____

Action taken: _____ **Date:** _____

Action taken: _____ **Date:** _____

Adapted from *The Winning Trainer*, J.E. Eittington, Gulf Publishing Co., Houston, TX, 1990

My Action Plan cont.

III. An action plan to implement my solution

1. I see the time frame for my plan to be operative as follows:

2. I will need the assistance of these individuals to implement my plan:

Name: _____ about: _____

Name: _____ about: _____

Name: _____ about: _____

Name: _____ about: _____

3. I will need to communicate the plan to:

Name: _____ about: _____

Name: _____ about: _____

Name: _____ about: _____

Name: _____ about: _____

4. I intend to follow up and evaluate the success of my plan by doing the following:

Action taken: _____ Date: _____

Action taken: _____ Date: _____

Action taken: _____ Date: _____

Action taken: _____ Date: _____

Adapted from *The Winning Trainer*, J.E. Elington, Gulf Publishing Co., Houston, TX, 1990

Notes

Module 2

Definitions of Terms and Concepts Related to Career Development and Labor Market Information



National Career Development Guidelines-Counselor Competencies

Knowledge of education, training, employment trends, labor market, and career resources.

Knowledge of employment information and career planning materials.

Definitions of Terms and Concepts Related to Career Development and Labor Market Information

Module 2

Terms and Concepts Related to Career Development

Career

Career is a life style concept that involves a sequence of work or leisure activities in which one engages throughout a lifetime. Careers are unique to each person and are dynamic, unfolding throughout life. They include not only occupations but pre-vocational and postvocational concerns as well as how persons integrate their work life with their other life roles. (Herr and Cramer, 1984)

Job

A group of similar, paid positions requiring some similar attributes in a single organization. (Super, 1976)

Work

Conscious effort, other than that having as its primary purpose either coping or relaxation, aimed at producing benefits for oneself and/or oneself and others. (Hoyt, 1991)

Occupation

A group of similar jobs found in different industries or organizations. (Herr and Cramer, 1984)

Skill

An attribute required of the worker in order to complete a work task. (Jepsen, 1991)

Task

An element of work to be completed. (Jepsen, 1991)

Career Development

The total constellation of psychological, sociological, educational, physical, economic, and chance factors that combine to shape the career of any given individual. (Splete, 1978)

Career Decision Making

The following steps constitute the decision making process:

- determine the concern to be acted upon,
- project possible alternative actions,
- review possible consequences of each alternative action,
- choose the best alternative at this time,
- decide how and when to implement the alternative,
- implement it,
- evaluate the results of the action, and
- determine whether a related decision needs to be made now or if further planning is needed.

(Splete, 1978)

Career Guidance

A systematic program of coordinated information and experiences designed to facilitate individual career development and, more specifically, career management. (Herr and Cramer, 1984)

Career Education

The totality of experiences by which persons acquire knowledge and attitudes about self and work, and the skills by which to identify, choose, plan and prepare for work and other life options. (Herr and Cramer, 1984)

Developmental Guidance

Developmental Guidance is based on the premise that as children and adults mature, they pass through various developmental stages vital to their growth. Programs that systematically address the learning, personal/social, and career development needs of all individuals are the basis for this preventative approach to counseling and guidance. (Wilson, 1986)

National Career Development Guidelines

The National Career Development Guidelines are based on developmental guidance concepts and as a result are preventative, goal oriented and proactive in nature. (NOICC, 1989)

They reflect the national movement to improve career guidance and counseling programs throughout the life span and to support standard-setting efforts which:

- increase the understanding of lifelong career development needs, based on the conceptual framework of developmental guidance,
- expand the definitions of comprehensive career guidance and counseling programs,
- emphasize competency-based education and training,
- support program accountability efforts,
- heighten interest in achieving professional consensus on program guidelines and standards,
- renew legislative support for career guidance and counseling programs, and
- increase emphasis on certification of counselors, including career specialization.

(See Figures 1.2 and 1.3 for a listing of the Guidelines.)

Major components addressed in the Guidelines include:

- **Student Competencies and Indicators.** Guidelines for the outcomes of career guidance and counseling programs are the basis for program development. The competencies are stated as broad goals. The indicators describe specific attitudes, knowledge and skills related to career development. They are divided into five sequential levels: elementary, middle or junior high school, high school, young adult and adult. They are organized into three broad areas: self-knowledge, educational and occupational exploration, and career planning.
- **Institutional Capabilities.** This section provides a statement of the necessary commitment, structure, and support required for effective career guidance and counseling programs including administrative commitments, physical facilities, and supportive materials.
- **Personnel Requirements and Counselor Competencies.** This section provides a description of the roles of various staff members as well as specific competencies needed by counselors to deliver career guidance and counseling programs.

A basic understanding of the key concepts, vocabulary and measures of labor market information is essential to its effective use.

For those engaged in education, counseling, job development and job placement, an understanding of how to use labor market information

effectively in career decision making is critical. Although one might not want, or necessarily need, technical knowledge of numbers and statistics, knowing the terms and concepts will help explain information found in the lay press or in technical reports.

What Is a Labor Market?

Labor markets bring together buyers and sellers seeking to exchange one thing of value for another. Sellers are individuals seeking work, and buyers are employers offering wages and other benefits in exchange for work. Through the operation of the market, employers obtain the labor needed to transform raw materials into goods and services, and workers earn an income to support themselves and others.

Labor markets are dynamic and constantly changing. They tend to be more complicated than other kinds of markets. There are many interacting variables that influence supply and demand in a labor market. The commodity being sold, the labor supply, is controlled by human beings with individual values and abilities who are free to make choices about education, training, occupation and geographical location. Moreover, workers can even choose to work for themselves and become their own employers.

What Is Labor Market Information?

Labor market information (LMI) is systematized data, produced on a regular basis, about employment, unemployment, jobs and workers. It includes information about people, jobs and employers.

Although many people may think of LMI as only basic employment and unemployment statistics, labor market information is, in fact, a wide array of employment related data on economic conditions and labor force characteristics, such as population, education, income, occupational descriptions and employment conditions.

Who Uses Labor Market Information?

The interpretation of labor market information contributes to the development of public policies and programs. Educators and students need data on occupational outlooks to make sound decisions about programs of study and careers. Young people need information about occupational descriptions, educational requirements, wages, and the employment outlook to make choices about careers and training. Managers of job training and retraining programs need labor market

information to identify those most in need of training programs, to develop new curricula for vocational training, to design and implement appropriate programs and to place graduates in jobs. Employers use labor market information to set wages, design working conditions and evaluate alternative business opportunities.

Who Collects Labor Market Information?

The federal government is responsible for developing, maintaining and reporting labor market information and information about the nation's economy. The states collect this raw data for the federal government.

Several federal agencies are involved in the collection effort. They play a major role in data development by specifying a common methodology for data collection, processing and reporting that results in standard data available for each state. The major agencies are:

- **The U.S. Bureau of Labor Statistics (BLS)** collects and issues statistics on labor market conditions and social trends that affect the demand for labor. BLS is responsible for the methodology and procedures used by state agencies to collect data on the labor force.
- **The U.S. Bureau of the Census** collects a wide range of demographic, social and economic data. The Census also collects national, state and local data to describe the size, characteristics and status of the labor force.
- **The U.S. Office of Educational Research** collects and disseminates information about educational institutions, levels of enrollment, basic literacy skills attainment and information about school leavers.
- **The U.S. Office of Vocational and Adult Education (OVAE)** sets standards for spending federal vocational education funds. The planning requirements issued by the OVAE have a significant impact on the kinds of occupational information needed for vocational planning.

Defining the Labor Force

LABOR FORCE CONCEPTS

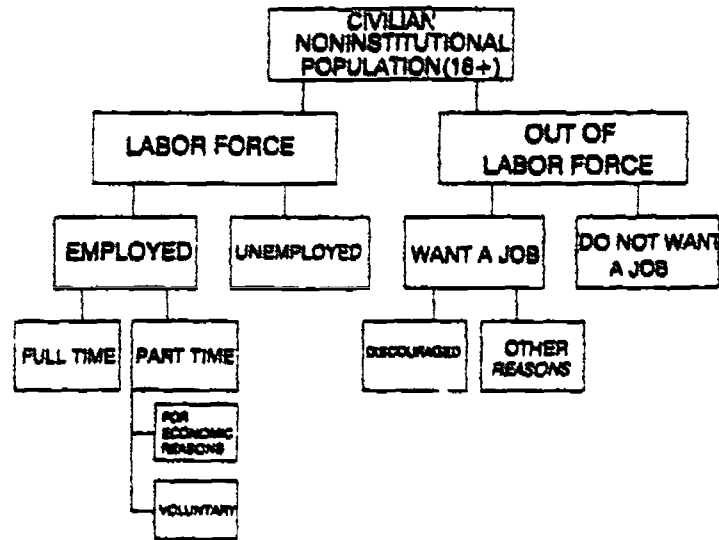


Figure 2.1

Civilian Noninstitutional Population

This group consists of all persons 16 years of age and older who are not members of the resident armed forces and who do not reside in institutions, such as nursing homes, prisons or mental hospitals. This is the group from which potential workers are available.

Civilian Labor Force and Labor Force Participation Rate

The group consist of the total number of civilians who are employed and unemployed. It does not include those persons employed by the armed forces. The proportion of the total civilian noninstitutional population, or of a demographic subgroup of that population classified as "in the labor force," is known as the labor force participation rate.

Employed

The BLS definition for employed are those people who:

- worked for pay or profit at any time during the payroll period which included the 12th day of the month;
- held jobs, but were temporarily absent from them for such reasons as a vacation, weather, personal illness or an industrial dispute; or
- worked without pay in a family-owned business for 15 or more hours.

The number of employed are estimated monthly through the Current Population Survey. The employed group includes three sub-groups of workers, wage and salary workers, self-employed workers and unpaid family workers.

- Wage and salary workers - People who work for wages, salaries, commissions, tips or pay in kind from a private employer, a non-profit employer or a governmental unit. Nonfarm wage and salary workers make up the major portion of this category.
- Self-employed workers - People who work for profit or fees in their own business, profession or trade, or who operate a farm.
- Unpaid family worker - Persons who work without pay for at least 15 hours a week on a farm or in a business operated by a household member who is related by birth or marriage.

Full-Time Employed

These are people who are employed 35 hours or more per week.

Part-Time Employed

These are people who are employed less than 35 hour a week. Part-time workers are further broken down into two groups: those who are part-time by choice, and those who are part time for economic reasons. The economic reasons include slack work, material shortages and the inability to find a full-time job. Some of these people are referred to as the "underemployed".

Unemployed

This group is defined by BLS as those persons who meet the following criteria:

- performed no work at all for pay or profit in the week of the 12th of the month;
- looked for a job at some point in the past four weeks; and
- were available for work in the survey week.

These people represent an unutilized but available labor supply.

Out of the Labor Force

This is a residual category of persons who are neither employed nor unemployed. These include people who are enrolled in school, those with family care responsibilities, persons with disabilities and those who are retired. Many of these people may move into and out of the labor force as economic or personal conditions warrant.

Want a Job

These tend to be the people who want a job, but who are not actively looking because they perceive there are no jobs available, or believe they are not skilled. They are sometimes thought of as "discouraged." This category may also include persons who want a job, but are not highly marketable, such as those lacking skills or who are differently abled.

Hidden Unemployment

These are discouraged workers, who for a variety of reasons think they cannot find work and sooner or later cease looking. Example: Unskilled workers in the ghettos of many large cities who, lacking education and/or transportation, often cannot find jobs and become resigned to life on the streets or on welfare.

Underemployment

This occurs when a worker is either overqualified for a job or works fewer hours than desired. Example: A college graduate in microbiology who can find no work in his/her field and ends up as a clerk in a department store.

Do Not Want a Job

These are people who have other responsibilities, such as schooling or caring for family members, as well as those persons who have already retired.

Frictional Unemployment, usually for a short duration, is caused when people are between jobs. Example: A waitress who quits a job to look for a position that offers better wages.

Structural Unemployment arises when there is a job skill mismatch such that the skills workers possess are not those that employers require. Example: A football player who has been released and who has no other job skills on which to rely.

Seasonal Unemployment is created when jobs are available for only a portion of the year. Example: Migrant workers who "follow the harvest" of various crops, but who have little chance of working in the colder months.

Cyclical Unemployment is caused by boom and bust cycles in the economy. Example: Oil field workers who enjoy plentiful and lucrative work when the price of oil is up and suffer economic setbacks as the price drops.

Unemployment Rate represents the number of unemployed as a percent of the labor force. The seasonally adjusted unemployment rate eliminates the influence of regularly recurring seasonal fluctuations which can be ascribed to weather, crop-growing cycles, holidays, vacations, regular industry model changeover periods, and the like, and therefore, more clearly shows the underlying basic trend of unemployment.

What Are Industries?

Industries are groups of firms that produce similar goods and services. Our economy has two basic kinds of industries: those that produce goods and those that provide services.

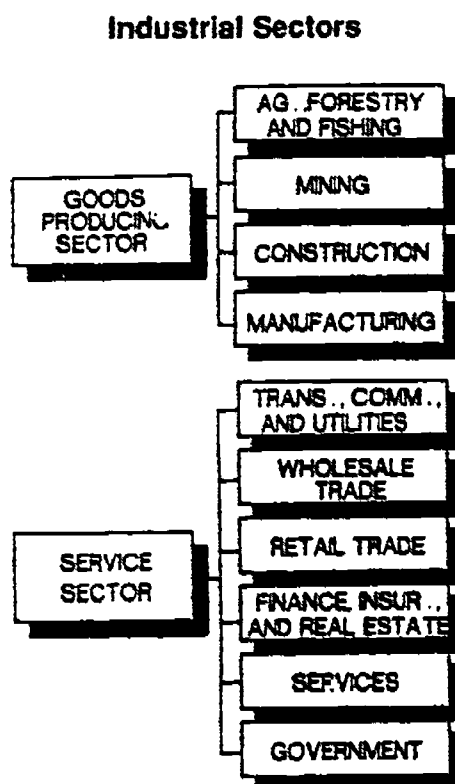


Figure 2.2

The **goods producing industries** supply everything from gasoline to drill presses to lamb chops. These industries employ less than one-third of U.S. workers. Major goods producing industries include:

- **Agriculture** (farming, food and fiber processing, and manufacturing of farm tools and fertilizers, to name a few elements of a basic industry)
- **Mining** (industries producing most of the basic raw materials and energy sources that industries and consumers use, including coal mining, metal mining, and oil exploration and processing)
- **Contract construction** (industries that build, alter, and repair

roads, bridges and structures, such as factories)

- **Manufacturing** (industries that manufacture goods ranging from miniature computer circuits to textiles to spacecrafts)

The **service industries** either provide services such as medical care or haircuts, or maintain and distribute the goods listed above. More than two-thirds of U.S. workers are employed in these major industrial groups. They include:

- **Transportation, communication and public utilities** (industries grouped together because they provide a public service. They are regulated and sometimes owned by public agencies, such as telephone companies, power companies, airlines, and truckers)
- **Trade** (industries involved in the distribution and sale of goods from producers to consumers, such as restaurants, wholesale textile dealers, and department stores. There are two divisions, one called wholesale trade and another called retail trade.)
- **Finance, insurance and real estate** (industries that provide financial services, protection, and property to businesses and consumers; among those in this group are banks, consumer credit agencies, insurance companies, and real estate brokers.)
- **Services** (industries engaged in providing a personal service to consumers, such as private hospitals, private schools, hotels, and the Girl Scouts)
- **Government** (national, state and local agencies including public schools, the postal service, police and fire protection, the Army)

There are several groups of industries in each division. For instance, under "services" one would find business services, legal services, educational services, health services, etc. Health services includes hospitals, offices of dentists, medical and dental laboratories, outpatient care facilities, nursing and personal care facilities. It is important to understand this type of industry breakdown because it provides a useful means for analyzing labor force activity.

Industries, like people, are highly dependent on each other. For instance, the trade industry depends upon the manufacturing industry to provide the goods it sells, and manufacturing depends upon the finance, insurance and real estate industries for the loans needed to buy goods and to expand. The manufacturing sector also depends on the finance industry for insurance and for the land and buildings needed for warehouses and stores. In turn, the trade industry relies upon public utilities industries for transportation, electricity, telephones, and so on.

Industry Definitions According to the Standard Industrial Classification (SIC)

In an economic context, industries are groups of firms that produce essentially the same goods or services. The **Standard Industrial Classification (SIC)** system of the U.S. Office of Management and Budget provides definitions and coding of industries based on their products or services. Narrower definitions of products or services are used to distinguish industries from one another at finer levels of detail. The SIC system is based on an ordering of products and services, arranged at increasingly greater levels of detail.

What Is an Occupation?

An **occupation** is a group of similar jobs found in different industries or organizations. With hundreds of thousands of meaningful differences existing in the overall marketplace, it is important to be able to recognize major categories of occupations when performing human resources planning, vocational counseling and economic development activities.

Data on occupational employment are needed to generate insights into the types of jobs held by workers, the characteristics of the job duties performed, and the skills and abilities required to function within the job in an acceptable manner.

Not only do jobs differ in their skill requirements, but all jobs are not available to all potential workers. Arising from attempts to restrict the entry of unqualified workers or other potential competitors, job qualification barriers reinforce the skill distinctions that exist naturally. Such barriers may include certification or registration guidelines, occupational licensing and apprenticeship requirements.

Occupational Shifts

Occupations undergo change. There are at least three designations to describe this change process.

1. A **new occupation** is an occupation in which major tasks, skills and duties are not included in any currently existing occupation, or in which tasks are combined in significantly different ways that preclude workers from other occupations performing the work without training beyond a short demonstration.
2. A **changing occupation** is an existing occupation that has

experienced change in duties, skills or tasks significant enough to require training beyond a short demonstration, but not significant enough to classify into another occupation, or to create a new occupation.

3. An **emerging occupation** is an occupation (defined by a reasonably well accepted descriptive phrase) that is growing rapidly from a small base either within an economy as a whole, or within a particular industry, and has significant education or training implications.

Occupational Definitions and Coding Systems

Occupational definitions and coding systems were developed for the purpose of assembling and simplifying detailed data on the skill and performance requirements of jobs. There are many ways to classify occupations. Each is designed for a different audience to meet a different need. Each system is based on functional differences in the work done and the work settings where work is performed.

The *Dictionary of Occupational Titles (DOT)* is probably the most familiar occupational classification system and contains the greatest level of detail. The DOT was first developed in the 1930s. It provides concise descriptions of job tasks for over 17,000 separate occupational titles. The system tries to describe jobs based on the nature and content of the specific tasks a worker needs to perform. Formal education and training requirements for individual occupations are also described.

The *Standard Occupational Classification (SOC)* system was developed by the U.S. Department of Commerce. The SOC provides a mechanism for cross-referencing and aggregating occupation-related data collected by social and economic statistical reporting programs. The system covers all occupations in which work is performed for pay or profit, including work performed by unpaid family workers. Occupations unique to volunteer settings are not included. The SOC is hierarchically structured on four levels: division, major group, minor group and unit group. Subsequent levels represent finer levels of detail. Residual categories are included where needed to handle groups of occupations that do not warrant separate identification or do not fit into one of the specific groups.

A third occupational classification system developed by the Bureau of Labor Statistics is the *Occupational Employment Statistics (OES)* system used in the OES survey. This schema is closely related to the SOC and is used to collect occupational staffing patterns from employers

and to develop occupational projections. The OES contains over 750 job titles and definitions that specify job tasks and functions for individual occupations, sometimes on an industry specific basis. The OES system combined with benchmarked industry employment data, is capable of identifying and measuring the level of employment for specific categories of workers engaged in similar job tasks.

The OES helps to develop an accurate profile of occupational employment by industry, to provide basic data for projecting future occupational requirements, and to identify new and emerging occupations and declining occupations.

The OES survey is a mail survey which includes a sample of nonfarm establishments reporting to the state's Unemployment Insurance program. The survey collects data on both full- and part-time employees. The survey cycle covers a three-year period. Manufacturing industries are surveyed in one year, selected nonmanufacturing industries another year, and the balance the next year.

The primary source of occupational employment information is the OES/Matrix program generated with state and national data (Micro-Matrix). This program is designed to provide very detailed information on the occupational employment outlook for use in career guidance and planning employment and training programs. Outputs from the Matrix program show base year employment, projected employment in the target year, and the estimated number of average annual job openings. Job openings consist of new jobs expected to be created by growth--or job loss due to projected employment declines--plus openings likely to be created by mortality and labor force withdrawal. Matrices may be available statewide and for selected LMAs.

The projections are a key element in assessing the employment potential of different occupations and making an informed judgment on which training programs to provide. The projections show which occupations are expected to grow most rapidly and which are trailing or declining. The projections also provide estimates of the number of job openings likely to be created in each occupation. The number of future job openings is a function of the size of the occupation and the demographic and age structure of the workers in the occupation, in addition to projected economic growth.

In evaluating employment prospects, it is important to consider the level of job openings, as well as the growth rate of the occupation.

Sometimes, there is a preoccupation with growth in ranking occupations for training. This can be misleading since some slower-growth occupations may be generating a large number of job openings, or, alternatively, only a small number of workers may be employed in high-growth occupations. (For a fuller discussion of the projections, see Module 5.)

The survey questionnaire includes a list of occupations appropriate to each industry in the survey. Each surveyed employer is asked to give information about the number of full- and part-time employees for each occupation represented within the establishment. Employers are asked to list any occupations that do not fit under the titles provided in the questionnaire. Larger employers are asked to include information about new occupations in their firms that require substantial training or are emerging due to technological changes in the industry. This information provides valuable data for improving future occupational lists and for identifying occupations that are changing in nature or are new altogether. Currently, occupational employment estimates by industry are developed for approximately 750 occupations.

A fourth system for classifying occupations is used by the Bureau of the Census. This system over time has come to look much like the *Standard Occupational Classification*.

Definitions of Terms and Concepts Related to Career Development and Labor Market Information
Module 2
References

- Herr, E. L., & Cramer, S. H. (1984). *Career guidance and counseling through the life span* (2nd ed.). Boston: Little, Brown & Company.
- Hoyt, K. B. (1991, Winter). The concept of work: Bedrock for career development. *Future choices*, 2(3), 23-30.
- Jepsen, D. (1991, May). *Personal communication*.
- National Occupational Information Coordinating Council (1989). *National career development guidelines handbook*. Washington, DC: author.
- Pietrofesa, J., Hoffman, A., & Splete, H. (1984). *Counseling: An introduction* (2nd ed.). Boston: Houghton Mifflin.
- Splete, H. (1977). *Career development counseling*. Boulder, CO: Colorado Career Information System.
- Super, D. E. (1976). *Career education and the meaning of work*. Monographs on career education. Washington, DC: The Office of Career Education, U. S. Office of Education.
- Wilson, P. (1986). *School counseling programs: A resource and planning guide*. Madison, WI: Wisconsin Department of Public Instruction.

NOICC/SOICC ORGANIZATION

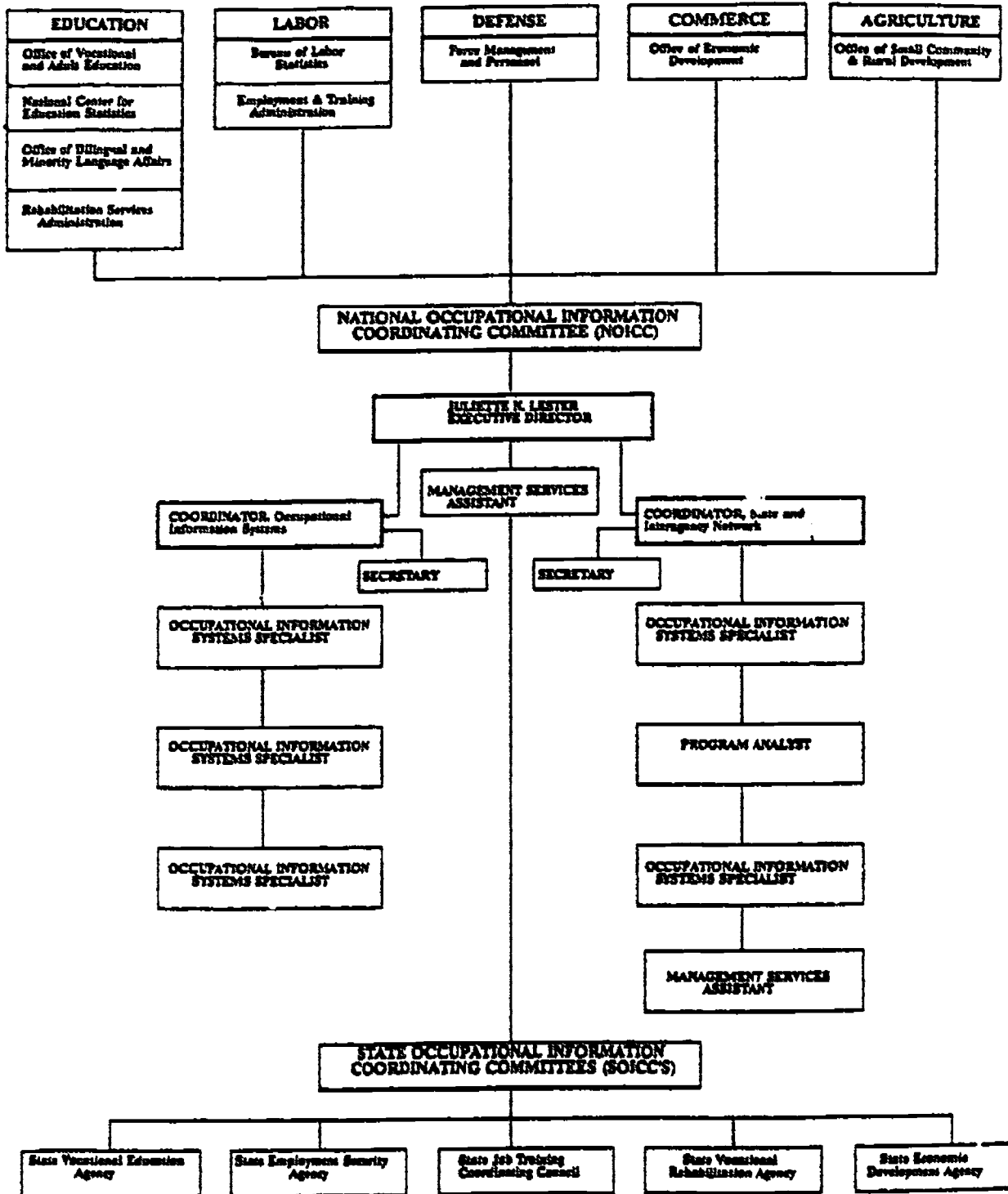


Figure 2.3

October 24, 1970

Module 3

Demographic Trends That Impact Career Decision Making



National Career Development Guidelines-Counselor Competencies

Knowledge of changes taking place in the economy, society, and job market.

Knowledge of changing gender roles and how these impact on work, family, and leisure.

Demographic Trends That Impact Career Decision Making

Module 3

Introduction

There are a number of relatively predictable factors that will have a direct bearing on the future labor force in this country. Many are demographic in nature; this refers to the number of births, deaths and the distribution of the population across the country. Demographics help us understand a great deal about the workers in our labor force: How many young adults will enter the work force over the next 10 years? How many workers are likely to retire during that period? Will there be a labor shortage or surplus? In this module, we will discuss demographic trends that can help answer these kinds of questions.

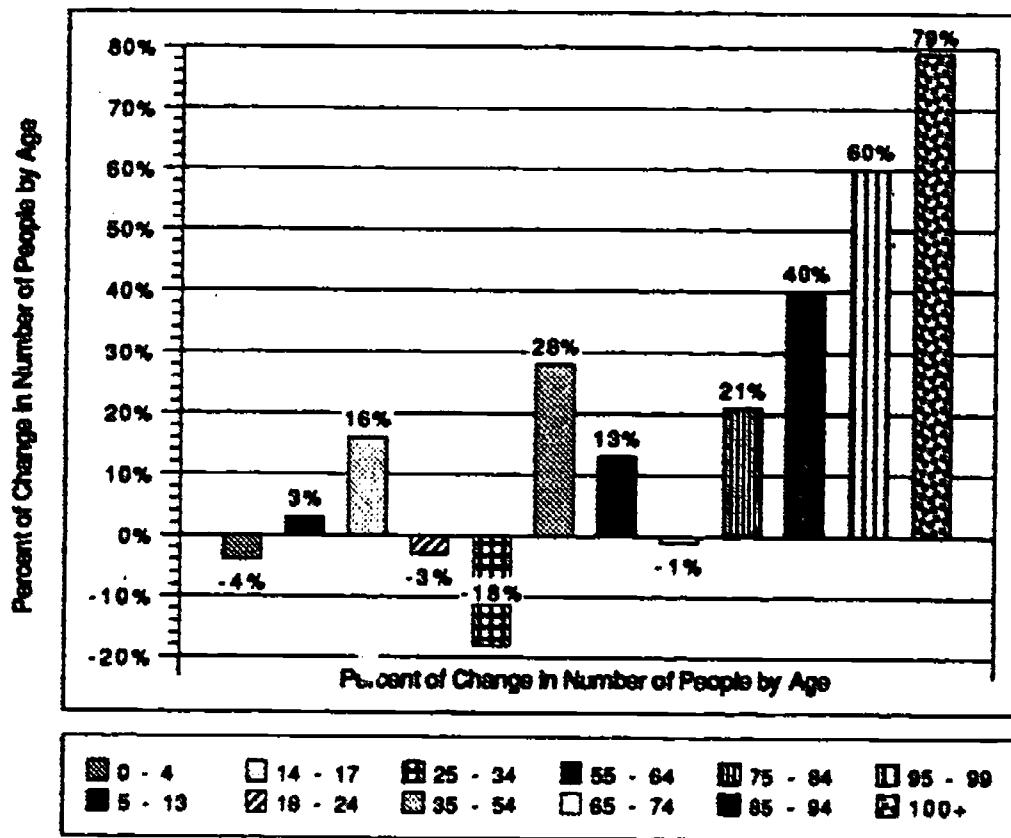
The three demographic trends that will be discussed are:

1. the maturation of America;
2. the increasing diversity of our population; and
3. the increasing number of women in the labor force.

Demographic Trend #1: The Maturation of America

There are few demographic forces at work in our society that are as powerful in their consequences and as predictable and certain in their outcome as the aging of our population. Over the coming decade, a shrinking pool of younger people will be available to enter the work force due to prior trends in lower birthrates. In addition, people are living longer; there is an increase in life expectancy.

Number of Older Americans Will Experience Fastest Growth Rate from 1990 to 2000

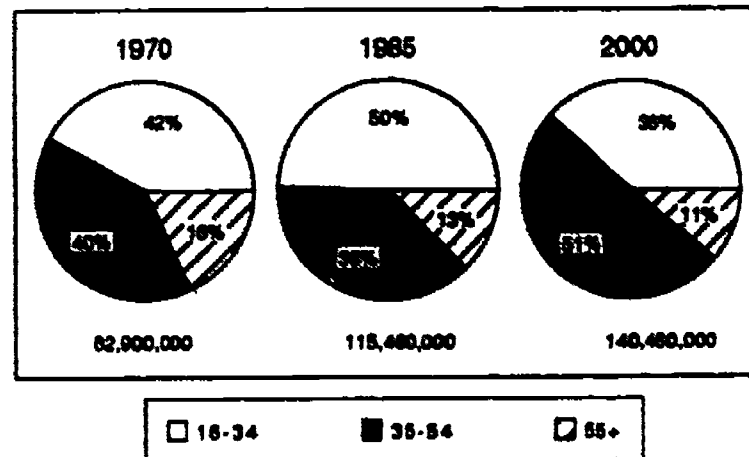


Source: U.S. Bureau of the Census, 1989
Figure 3.1

There are two separate components to this phenomenon. The first is the increasing number of people at the upper end of the age spectrum. This effects the age of the work force and also the occupations and industries that provide goods and services to the elderly.

The second component involves what is commonly referred to as the aging of the "baby boom" generation. Between 1946 and 1965, 75 million babies were born in this country; 70% more than the number in the preceding 20 years and around 25% more than the number in the 20 years following 1965. Since their arrival, this generation has placed enormous strains on the institutions of American society and will continue to do so.

The Middle Aging of the U.S. Work Force



Source: Workforce 2000, 1987
Figure 3.2

Today the peak of the baby boomers is well into middle age. Right on the heels of the baby boom bulge is a much smaller generation sometimes referred to as the "baby bust." In this population lies the impending deficits in our work force.

This shortage will be with us during most of the '90s. To add to the problem, many of the workers entering the labor force have a deficit in their basic skills. This will affect the labor market in several ways. There will be a greater need for training and retraining and new sources of entry level workers will come from segments of the population such as young minorities, older people, and persons with disabilities. Some say this labor shortage will be the number one factor guiding business decisions in the near future.

Demographic Trend #2: The Increasing Diversity of Our Population

Not only is the work force older, but its composition is changing. Blacks, Hispanics and other minorities will make up a larger share of the expansion of the labor force.

**NON-WHITES ARE A GROWING SHARE
OF THE WORKFORCE**
(numbers in millions)

	1970	1985	2000
Working Age Population (16+)	137.1	184.1	213.7
Non-White Share	10.9%	13.6%	15.7%
Labor Force	82.9	115.5	140.4
Non-White Share	11.1%	13.1%	15.5%
Labor Force Increase (Over Previous Period)	X	32.7	25.0
Non-White Share	X	18.4%	29.0%

Source: Workforce 2000, 1987

Figure 3.3

The small net growth of workers will be dominated by women, blacks and immigrants.

**Most New Entrants to the U.S. Labor Force will be
Non-White, Female or Immigrants**

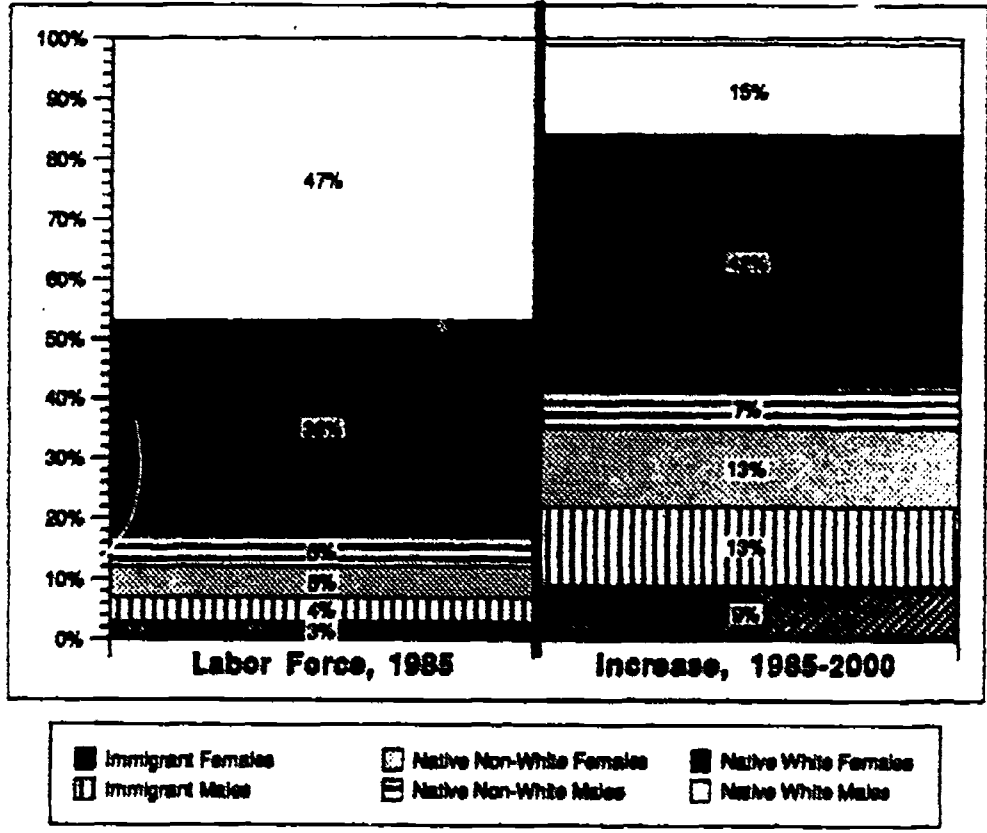


Figure 3.4

At the same time, it is expected that the passage of the Americans with Disabilities Act will result in an increased number of persons with disabilities in the work force.

By almost every measure of employment, i.e., participation rates, earnings, and education, blacks and Hispanics suffer great disadvantages. Of particular concern is the decline in labor force participation rates among minority males.

Smart managers who want to maintain a talented work force are beginning to court and train qualified but underutilized blacks, Hispanics, Asians, women and others who have often been discounted because of stereotyping or occupational segregation.

Demographic Trend #3: The Increasing Number of Women in the Labor Force

The last demographic trend discussed in this module is the increasing number of women in the labor force. By the year 2000, approximately 47% of the work force will be women. It should be noted that labor market activity has become the norm rather than the exception for most women today, and this is true for all colors and all marital statuses.

Women are a Growing Share of the Workforce (number in thousands, except percent)						
	1980	1982	1983	1988	1992	2000
Women in the Workforce	18,388	23,240	31,543	45,487	57,220	68,670
Female Labor Force Participation Rate	33.9	37.7	43.3	51.5	57.5	61.1
Female Share of the Workforce	29.6	33.4	38.1	42.5	46.8	47.5

Figure 3.5

Changes in women's work patterns have increased attention to issues such as dual career families, adequate child care and caring for aging parents. Despite the improved status of women in the work force, barriers still exist. For a discussion of these issues, see Module 8.

Summary

We live in a changing labor market. In order to make sense of the many changes, we need some "handles" to grasp. One of these handles is the

body of information gleaned from a number of relatively predictable trends in our population. By understanding demographics, we can understand some of our labor force needs.

The trends discussed in this module are national in scope. Local trends may or may not follow these patterns. Understanding these trends and how they appear in a local, regional or state labor market is valuable when making career decisions.

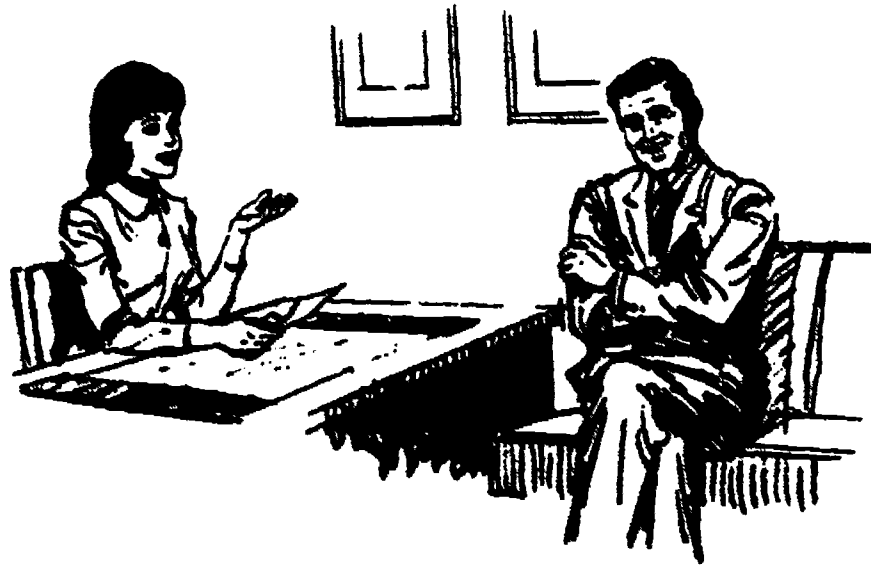
Demographic Trends That Impact Career Decision Making
Module 3
References

Johnston, W. B., & Packer, A. H. (1987). *Workforce 2000*. Indianapolis: Hudson Institute.

Notes

Module 4

Theories of Career Development and Decision Making



National Career Development Guidelines-Counselor Competencies

Knowledge of developmental issues individuals address throughout the life span.

Knowledge of counseling and career development theories and techniques.

Knowledge of decision making and transition models.

Skills to use appropriate individual and group counseling techniques to assist individuals with career decision and career development concerns.

Knowledge of basic concepts related to career counseling, such as career development, career progressions, and career patterns.

Theories of Career Development and Decision Making

Module 4

Goal, Purpose and Scope

This module focuses on theories of career development and career choice, with special attention to information resources, decision making and career counseling. This discussion of theories and their uses for facilitating career development is designed for the purpose of stimulating and refining the knowledge and skill of practicing and aspiring career counselors, other career development professionals, paraprofessionals and their colleagues. In this module, career development and the role of the career development facilitator will be discussed. A rationale for using theories in the career development process will be presented. Highlights of selected theories of career development will be summarized. Finally, a career counseling model will be offered to provide an overview of the career counseling process and to serve as a tool to illustrate how various theories can help in the process of facilitating career development.

Introduction

In the United States and much of Western Society, people are expected and encouraged to work for a living. Substantial resources are directed to making education and work opportunities available and valuable to all citizens. Because numerous individual, social and other barriers may interfere with human and constitutional rights and ideals, people often need various forms of assistance to find work opportunities to enrich their lives.

What Is Career Development?

Career development has been defined as the interaction of psychological, sociological, economic, physical and chance factors that shape the sequence of jobs, occupations or careers that a person may engage in throughout a lifetime. Career development is a major aspect of human development. It includes one's entire life span and concerns the whole person. Career development involves a person's past, present and future work roles. It is linked to a person's self-concept, family life, and all aspects of one's environmental and cultural conditions.

What Is a Career Development Facilitator?

A career development facilitator is a person who is trained to assist people in their career development. Career development facilitators work with people of all ages; from young children, adolescents, their parents and teachers; through young, middle-aged and older adults; to others preparing to retire and retirees seeking vocational and avocational pursuits. To serve these diverse populations, career development facilitators work in a wide range of public and private educational, social and fraternal environments such as schools, Scouting, 4H, Young Men's and Women's Christian Associations, local chapters of the American Association of Retired Persons; in public and private sector agencies and private practices and in business and industry settings.

Career Development Facilitators Need to be Competent in Using Theories

Career development professionals and paraprofessionals have special competencies for planning, organizing, implementing and administering career development programs and services to individuals and groups in a wide variety of settings. Among the most important competencies of career development facilitators are knowledge of and skill in using career development theories.

What Are Career Development Theories?

Counseling theories are conceptual frameworks for describing or understanding complex human developmental processes. Theories describe, explain, generalize and summarize what we do in counseling to help clients make constructive changes that lead to success and satisfaction. Theories of career choice and development are points of view, conceptual tools, or road maps for counselors to use in working to help people choose, create, design, refine, develop and/or manage their careers.

Why Do Career Development Facilitators Use Theories?

The "why" we do something rather than the "how" we do it is explained through the use of theories. The reason we use theories is to help us reduce or manage uncertainty and make more responsible decisions.

In a field such as career development, where the unknown may outweigh the known, theory can help the counselor and client make informed efforts to reduce uncertainty and its impact (Herr, 1977).

How Do Theories Help Career Development Facilitators?

Theories help make sense of experiences; they bridge the gap between knowledge and the unknown. Career development theories offer rationales, guidelines, directions and goals for facilitating career development. While much professional knowledge in the field of counseling has been generated, there remains a great amount of uncertainty and undiscovered knowledge. The most dependable, efficient bridge to that potential knowledge lies in the realm of theory. Career development theory helps to:

- make sense of what we experience and learn;
- bridge gaps between knowledge and the unknown;
- summarize information;
- explain information;
- make predictions;
- point out relations between means and ends;
- formulate goals; and,
- stimulate research aimed at improving the knowledge and skill bases for career counseling.

(Shertzer and Stone, 1974)

What Theories Do Career Development Facilitators Use?

There are many theories of career development and career choice. How does an understanding of career development theories help me as a counselor? How can theories help me use career and labor market information more effectively with individuals and groups? How do theories help me provide career exploration and decision making assistance? How do they help me work with individuals who need help finding a job? To answer these and similar questions, a brief description of some selected theories of career development and a model of the counseling process follow. The model is presented as one example of a structure to help career development facilitators in their work with clients. Additionally, the model provides a format for illustrating how theories can help with various aspects of facilitating career development.

Selected Career Development Theories

While there are many ways to categorize career development theories Jepsen (1984) has constructed a global classification system that will be used in this module. Career development theories can be divided into two major classes: Structural and Developmental. Numerous theories could be included in each area, however, coverage in this module will be abbreviated to highlight some major points of selected theories.

Structural theories focus on individual characteristics and differences among and between persons. The structural theories discussed in this module are: Trait and Factor Theory, Holland's Theory of Vocational Personalities and Environments, and Socioeconomic Theories.

Trait and Factor This theory originated with Parsons (1909) who believed that the best way to choose an occupation was to know one's self and the world of work and make a connection between the two sets of knowledge. Williamson (1939) and others expanded this theory through the use of tests and other assessment tools to measure people's traits and the traits required in certain occupations. Two major assumptions of trait and factor theory are that individual and job traits can be matched, and that close matches are positively correlated with job success and satisfaction.

Holland's Theory of Vocational Personalities and Environments Over a series of years, Holland (1966, 1973, 1985) presented his theory, which is based on assumptions that: people's occupations are extensions or manifestations of their personalities; that people working in an occupation have similar personality characteristics; and that human personalities and work environments can be classified into six categories of vocational personalities and environments. The six personality types and work environments are labeled: realistic, investigative, artistic, social, enterprising and conventional and share the acronym RAISEC. Holland suggests that people can function and develop best and find job satisfaction in work environments that are compatible with their personalities.

Socioeconomic Theory Sociologists and economists provide detailed explanations and descriptions of how one's culture, family background, social and economic conditions and other factors outside an individual's control, strongly influence one's identity, values, and overall human and career development. Socioeconomic theory is also known as the chance or accident theory. This approach to understanding career development suggests that many people follow

the path of least resistance in their career development by simply falling into whatever work opportunities happen to come their way.

Developmental theories focus on intrapersonal differences across the life span of an individual's human development. The developmental theories that will be discussed are: Super's, Krumboltz's, Decision Making and Cognitive.

Super's Theory Super (1957) and other theorists of career development recognize the changes that people go through as they mature. Career patterns are determined by socioeconomic factors, mental and physical abilities, personal characteristics and the opportunities to which persons are exposed. People seek career satisfaction through work roles in which they can express themselves and implement and develop their self-concepts. Career maturity, a main concept in Super's theory, is manifested in the successful accomplishment of age and stage developmental tasks across the life span. Super pays close attention to the interrelationships among and between career stages and life roles, such as child, spouse, and parent.

Krumboltz's Social Learning Theory Krumboltz (1979, developed a theory of career decision making and development based on our social learning, or environmental conditions and events, genetic influences and learning experiences. People choose their careers on the basis of what they have learned. Certain behaviors are modeled, rewarded and reinforced.

Decision Making Theories Some decision making theories hypothesize that there are critical points in our lives when choices are made that greatly influence our career development. These decision making points are such events as educational choices, entry level job positions, changing jobs, etc. Other decision making theories are concerned with ongoing choices across the life span. The decisions that we make are influenced by our awareness of the choices that are available to us and our knowledge of how to evaluate them.

Cognitive Theories These theories of career development are built around how individuals process, integrate and react to information. The ways in which individuals process information are determined by their cognitive structures. These structures influence how individuals see themselves, others and the environment. Cognitive

theories suggest ways to help clients build or refine a hierarchy of thinking skills and decision making skills that influence career development.

The selected theories that have been very briefly highlighted can be seen as representative of the majority of career development theories. At the same time, however, it must be noted that theory development and expansion need to continue to appropriately address the career development needs of specific populations, especially women and minorities.

Emerging Career Development Theories New theories must be developed that address the needs of specific populations, such as females, the gifted and talented, people of color, ethnic minorities, ex-offenders and persons with disabilities. It should be noted that while emerging theories exist and are being developed, they are beyond the scope of this module. Readers are advised to consult the works cited in the References List, most notably works by: Brooks (1990); Atkinson, Morten & Sue (1989); Greeley, (1975); Ivey, (1987); Pedersen, (1988); Gottfredson, (1981, 1984);

Schlossberg, (1984); Gilligan, (1982a, 1982b); Sue (1978, 1981); Heinrich, Corbine and Thomas (1990); and Lea and Richardson (1991); for coverage of these vital developments.

Promoting Decision Making in Life and Career Development

Knowing how to identify opportunities for choice and how to make responsible choices can empower people to enrich their lives and careers. Unfortunately, many people have neither taken the time nor made the efforts to logically think through and plan their career development. An abundance of research (Fredrickson, 1982; Isaacson, 1987; Zunker, 1986) indicates that the socioeconomic "chance" or "accident" theory is the single best descriptor of most people's career development. Many people fail to notice opportunities and responsibilities for choice in life or look to others to choose for them. Career development facilitators need to provide their clients with guidance and assistance in the decision making process.

The career development facilitator is frequently faced with clients who are unaware or ignorant of their career opportunities. Clients often say "tell me what to do" or "I want to take that test that will tel' me what to do." Counselors do not tell their clients what to do. The goal of most counseling is to help clients become aware of opportunities for choice

and to assist them in learning to make important choices. Therefore, most counselors are advocates for decision making; for informed, knowledgeable, responsible and wise choices as a primary means of positive self-governance.

The Process of Career Counseling: A Model

A number of writers have described what is involved in the career counseling process. Building on the work of these authors, especially Gysbers and Moore (1987), an outline of the career counseling process follows that has two major phases:

- identifying the clients goal or problem; and,
- resolving the goal or problem

The Process of Facilitating Career Development and Career Counseling

- I. Client goal or problem identification
 - A. Establishing a client-counselor relationship, including client-counselor responsibilities
 - B. Gathering client self and environmental information to understand the client's goal or problem
 1. Who is the client?
 - a. How does the client view himself/herself, others, and his/her world?
 - b. What language does the client use to represent these views?
 - c. What themes does the client use to organize and direct his/her behavior based on these views?
 2. What are the client's current status and environment?
 - a. Client's life roles, settings, and events
 - b. Relationship to client's goal or problem
 - C. Understanding client self and environmental information by sorting, analyzing, and relating such information to client's goal or problem through the use of:
 1. Career development theories
 2. Counseling theories
 3. Classification systems
 - D. Drawing conclusions-making diagnoses
- II. Client goal or problem resolution
 - A. Taking action with interventions selected based on diagnoses
 1. Counseling techniques
 2. Assessment, personal styles analyses
 3. Career and labor market information

- B. Developing an individual career plan**
- C. Implementing an individual career plan**
- D. Evaluating the impact of the interventions used: Did the client accomplish the goal or resolve the problem?**
 - 1. If goal or problem was not resolved, recycle.**
 - 2. If goal or problem was resolved, close counseling relationship.**

(Adapted from Gysbers, N.C. & Moore, E.J. (1987))

These phases and elements in the career counseling process may take place during one interview or may unfold over two or more sessions. While the steps logically follow one another on paper, in actual practice, they may not. There often is a back-and-forth flow to the process; some clients may only need limited counseling and may choose to terminate it at any point, preferring instead to work alone or with other resources.

Client Debriefing/Processing and Related Concerns

Goal of Problem Identification

Establishing the Client-Counselor Relationship

Gathering Client Self and Environmental Information

Understanding Client Self and Environmental Information

Drawing Conclusions - Making Diagnoses

Client Goal of Problem Resolution

Using Career and Labor Market Information in Career Counseling

In this phase of goal resolution or problem solving, career and labor market information can be used to:

- help clients gain current and accurate information about occupations and the world of work;**
- instruct individuals about the realities of the work world;**
- help clients expand their occupational and career horizons;**
- help clients narrow their range of potential occupations;**
- help clients obtain and interpret subjective career information, such as how it feels to work in career fields and specific occupations;**
- motivate individuals to explore new options; and**
- help individuals develop a balance between their needs and wants and occupational supply and demand in the labor market.**

Developing, Implementing, and Evaluating an Individual Career Plan

When clients begin gathering and organizing information, they can relate and apply it to their career planning and decision making. By putting information together in certain ways and categories, relationships become more apparent. This tight focus can help clients identify and commit to clear career goals with specific objectives, such as the education, skills or training they will need. Clients can then draw up strategies and specific plans for accomplishing their goals.

The final phase of goal or problem resolution is assessing the behavioral changes that may have occurred during counseling and evaluating the impact of the interventions used during the process. One way to accomplish this is to have the client review and summarize what has taken place and generalize beyond the counseling process into the future. This is the point in the counseling process where maximum debriefing is essential, especially to tease out implications for future plans, actions and client success. Was the counseling effective? What steps have we taken toward the goal? Are we on the right track? Have we reached our goal? What steps could be taken in the future? Finally, the counselor and client can mutually review, summarize, and draw conclusions and implications from the counseling relationship and process.

How Do Career Development Theories Help in Making Diagnoses?

Diagnoses are based on all available client data and information, such as achievement tests, interest inventories, etc. In counseling, all available data are analyzed in terms of the models of human behavior, that best help the counselor understand the client's goals or problems.

The career development facilitator and client analyze the data through the lens of career development theory, searching for clues and ideas to help them identify goals or resolve problems. Human beings and their behavior, however, are highly complex. There is no exact science to define them. Nevertheless, theories are guideposts to human behavior.

Socioeconomic theories can also be helpful in making diagnoses. These theories provide ideas concerning what to look for in people's growth, development, and environment that will help in understanding how they discover, refine and maintain their identity. For example, an

understanding of clients' family values could help us understand the value structure underlying their choices in terms of gender stereotyping and occupational selection.

How Do Career Development Theories Help in Setting Goals?

During goal or problem identification, clarification, and specification, Crites (1981a) suggests that "the client and counselor collaboratively identify the attitudes and behaviors in the career problem that are interfering with the decision making process and together they survey the range of possible solutions." During this period, career theories can be helpful.

All career development theories contain ideals and goals that can help to guide career development. For example, decision theories can help a client make a specific choice, such as a short-term goal. Decision theories also can help a client learn a process of decision making, which the client can use to set long-term goals to enrich all aspects of his/her life.

By inference, every career theory can be seen to have some concept of self-actualization, competence or career maturity that can serve as an ideal or long-term goal to aim for in counseling. Holland's concept of congruence, consistency and

identity, Super's concept of career maturity, and Miller-Tiedeman and Tiedeman's concept of being captain of the ship of one's "lifecareer" can serve as long term goals or ideals to aim for in career counseling.

How Do Career Development Theories Help Clients?

Crites (1981a) suggests that there are at least three major outcomes of career counseling - - making a choice, acquiring decision making skills, and enhancing general adjustment. Knowledge gained from theories can be helpful in dealing with each of these outcomes.

To enable counselors to help individuals make career choices, trait and factor theory offers interest, aptitude, values and career maturity assessment. Trait and factor theory helps clients assess their personality traits that might be desirable in certain careers. Personality and developmental theories also suggest possible patterns of previous behaviors that may facilitate or hinder choice making. Socioeconomic theory offers clients an understanding of possible environmental pressures (parents, peers, spouses) and how they affect career

development. Cognitive theories provide insight into how individuals process and use information in choice making. Cognitive theories can illustrate the need for clients to develop skills in processing the information that is available to them. Decision theories and strategies provide clients with specific and general approaches to making choices and to overall decision making ability and responsibility.

The second outcome of the counseling process is acquiring decision skills. Counselors' abilities to assist individuals in acquiring decision making skills can be increased by the knowledge provided by career development theories. Decision making theory provides possible models to use and outlines and explains the decision making process so counselors can use and share this knowledge with their clients. While some clients may need direct help in seeing how to go about making a decision, others may need help in how they process information as they make decisions. In the latter cases, cognitive theories may provide some answers concerning how to help work with the problems clients may have in processing information.

The third outcome is general adjustment. Because work roles, work settings, and work-linked events play a substantial part in people's lives, attention to adjustment is crucial. A number of theories provide good insights into this issue. Holland's theory, especially his concept of congruence, can help one understand and assess relationships between personality and work environments. Developmental theories, such as Super's, can also be helpful, particularly the concept of developmental tasks at certain stages of life, such as selecting a mate, rearing children, etc. Understanding developmental tasks to be mastered at different ages and stages across the life span and how the person has performed them can provide insight into the nature and quality of a person's adjustment. A related developmental concept is career maturity, or, for adults, career adaptability. Instruments are now available to help obtain measures of career maturity or of the general adjustment and adaptability of individuals to their work roles.

Decision making theory can be helpful in promoting a person's general adjustment. Tiedeman and O'Hara's model examines the processes that lead up to choice as well as what happens once a person is on the job. Tiedeman and O'Hara use such terms as **induction, reformation, and integration** to describe the phases a worker may go through as he/she deals with job adjustment and advancement. Similarly, the concept of life career roles and role conflict can be useful to help explain and remedy life and job adjustment problems and issues.

Conclusion

In this module, discussion has focused on career development theories and their importance in facilitating career development. Career development theories were classified into structural and developmental categories. Highlights of selected theories from each classification scheme were briefly described. A model of career development was presented to offer some guidelines and structure for the process of career development facilitation. Illustrations of how career development theories fit into the counseling model were presented. Special attention was paid to decision making and career and labor market information as major aspects and tools in facilitating life career development.

Theories of Career Development and Decision Making
Module 4
Resources

Trait-Factor Theory

- Brown, D. (1984). Trait and factor theory. In D. Brown & L. Brooks & Associates. *Career choice and development* 2nd ed. (pp. 13-36). San Francisco: Jossey-Bass.
- Crites, J. O. (1981). Comprehensive career counseling: Model, methods & materials. In P.A. Butcher (Ed.), *Career counseling: Models, methods, and materials*. New York: McGraw-Hill Book Company.
- Crites, J. O. (1981). Trait-and-factor career counseling. In P.A. Butcher (Ed.), *Career counseling: Models, methods, and materials*. New York: McGraw-Hill Book Company.
- Kapes, J. T., & Mastie, M. M. (Eds.). (1988). *A counselor's guide to vocational guidance instruments* 2nd ed. Alexandria, VA: The National Career Development Association.
- Osipow, S. H. (1983). Personality traits and career. *Theories of career development* (3rd ed.). Englewood Cliffs, NJ: Prentice-Hall, Inc.
- Osipow, S. H. (1983). The work-adjustment theory-Loftquist and Dawis. *Theories of career development* (3rd ed.). Englewood Cliffs, NJ: Prentice-Hall, Inc.
- Parsons, F. (1909). *Choosing a Vocation*. (Reprinted 1988). Garrett Park, MD: Garrett Park Press.

Holland's Theory of Vocational Personalities and Work Environments

- Holland, J. L. (1985). *Making vocational choices: A theory of vocational personalities and work environments* (2nd ed.). Englewood Cliffs: Prentice-Hall, Inc.
- Weinrach, S. G. & Srebalus, D. J. (1990). Holland's Theory of Careers. In D. Brown, L. Brooks & Associates (1990) *Career choice and development*, 2nd.ed. San Francisco: Jossey Bass.

Socioeconomic Systems

- Borow, H. (1984). Occupational socialization: Acquiring a sense of work. In N.C. Gysbers (Ed.), *Designing careers* (160-189). San Francisco: Jossey-Bass.
- Herr, E. L. (1984). Links among training, employability, and employment. In N.C. Gysbers (Ed.), *Designing careers* (160-189). San Francisco: Jossey-Bass.
- Hotchkiss, L., & Borow, H. (1990). Sociological perspectives on work and career development. In D. Brown, L. Brooks & Associates, *Career choice and development* 2nd ed. (262-307). San Francisco: Jossey-Bass.
- Super, D. E. (1984). Perspectives on the meaning and value of work. In N.C. Gysbers (Ed.), *Designing careers* (27-53). San Francisco: Jossey-Bass.

Roe's Theory of Personality and Occupational Behavior

- Osipow, S. H. (1983). Roe's personality theory of career choice. *Theories of career development* (3rd ed.). Englewood Cliffs, NJ: Prentice-Hall, Inc.
- Roe, A. (1972). Perspectives on vocational development. In J.M. Whiteley & A. Resnikoff (Eds.). *Perspectives on vocational development* (66-82). Washington, DC: American Personnel and Guidance Association.
- Roe, A., & Lunneborg, P. W. (1990). Personality development and career choice. In D. Brown, L. Brooks & Associates. *Career choice and development* 2nd ed. (68-101). San Francisco: Jossey-Bass.

Ginzberg's Theory of Occupational Choice

- Ginzberg, E. (1984). Career development. In D. Brown & L. Brooks (Eds.), *Career choice and development* (169-191). San Francisco: Jossey-Bass Publishers.

Osipow, S. H. (1983). The Ginzberg-Ginzberg-Axelrad and Herma theory. *Theories of career development* (3rd ed.). Englewood Cliffs, NJ: Prentice-Hall, Inc.

Super's Theory of Career Development

Osipow, S. H. (1983). Super's developmental self-concept theory of vocational behavior. *Theories of career development* (3rd ed.). Englewood Cliffs, NJ: Prentice-Hall, Inc.

Super, D. E. (1990). A life-span, life-space approach to career development. In D. Brown, L. Brooks & Associates. *Career choice and development* 2nd ed. (197-261). San Francisco: Jossey-Bass.

Super, D. E. (1985). Coming of age in Middletown: Careers in the making. *American Psychologist*, 40, 405-414.

Adult Career Development

Levinson, D. J., Darrow, C. N., Klein, E. B., Levinson, M. G., & McKee, B. (1978). *The seasons of a man's life*. New York: Alfred A. Knopf.

Neugarten, B. L. (1979). Time, age, and the life cycle. *American Journal of Psychiatry*, 136, 887-894.

Rodgers, R. F. (1984). Theories of adult development: Research status and counseling implications. In S.D. Brown & R.W. Lent (Eds.), *Handbook of counseling psychology* (pp. 479-519). New York: John Wiley & Sons.

Schlossberg, N. K. (1984). *Counseling adults in transition*. New York: Springer Publishing Company.

Sheehy, G. (1974). *Passages: Predictable crises of adult life*. New York: E.P. Dutton & Company.

Vaillant, G. E. (1977). *Adaptation to life*. Boston: Little, Brown & Co.

Decision Making

Miller-Tiedeman, A. & Tiedeman, D. V. (1990). Career decision making: An individualistic perspective. In D. Brown, L. Brooks & Associates, *Career choice and development* 2nd ed. (pp. 308-337). San Francisco: Jossey-Bass.

Mitchell, L. K., & Krumboltz, J. D. (1984). Research on human decision making: Implications for career decision making and counseling. In S.D. Brown & R.W. Lent (Eds.), *Handbook of counseling psychology* (pp. 238-280). New York: John Wiley & Sons.

Osipow, S. H. (1983). Tiedeman's developmental theory. *Theories of career development* (3rd ed.). Englewood Cliffs, NJ: Prentice-Hall, Inc.

Krumboltz's Theory of Social Learning

Mitchell, L. K., & Krumboltz, J. D. Social learning approach to career decision making: Krumboltz's theory. In D. Brown L. Brooks & Associates, *Career choice and development* 2nd ed. (pp. 145-196). San Francisco: Jossey-Bass.

Cognitive-Behavioral Theory

Gysbers, N. C., & Moore, E. J. (in press). *Career assessment and counseling: Skills and techniques for practitioners*. Englewood Cliffs, NJ: Prentice-Hall.

Keller, K. E., Biggs, D. A., & Gysbers, N. C. (1982). Career counseling from a cognitive perspective. *The Personnel and Guidance Journal*, 59, 367-371.

Kinnier, R. T., & Krumboltz, J. D. (1984). Procedures for successful career counseling. In N.C. Gysbers (Ed.), *Designing careers* (pp. 307-335). San Francisco: Jossey-Bass Publishers.

Krumboltz, J. D. (1983). *Private rules in career decision making*. Columbus, Ohio: The National Center for Research in Vocational Education.

Peterson, G. W., Sampson, J. P. & Reardon, R. C. (1991). *Career Development and Services: A cognitive Approach*. Pacific Grove, CA: Brooks/Cole.

New and Emerging Theories & Issues

- Astin, H. S. (1984). The meaning of work in women's lives: A sociopsychological model of career choice and work behavior. *Counseling Psychologist*, 12, 117-126.
- Atkinson, D. R., Morten, G., & Sue, D. W. (1989). *Counseling American minorities*. Dubuque, IA: Wm. C. Brown.
- Betz, N. E. & Fitzgerald, L. F. (1987). *The Career Psychology of Women*. Orlando, FL: Academic Press.
- Brooks, L. (1990). Recent developments in theory building. In D. Brown, L. Brooks & Associates, *Career choice and development*, 2nd. ed. San Francisco: Jossey-Bass.
- Carlos Poston, W. S. (1990). The biracial identity development model: A needed addition. *Journal of counseling and development*, 69, 152-155.
- Engels, D. W. & Dameron, J. D.(eds.). (1990). *The professional counselor: competencies, performance guidelines and assessment*. Alexandria, VA: American Association for Counseling and Development.
- Farmer, H. S. (1985). Model of career and achievement motivation for women and men. *Journal of Counseling Psychology*, 32, 363-390.
- Gilligan, C. (1982a). *In a different voice*. Cambridge, MA: Harvard University Press.
- Gilligan, C. (1982b). Why should a woman be more like a man? *Psychology Today*. June, 68-77.
- Gottfredson, L. S. (1981). Circumscription and compromise: A developmental theory of occupational aspirations. *Journal of Counseling Psychology*, 28, 545-579.
- Greeley, A. M. (1975). *Why can't they be like us? America's white ethnic groups*. New York: Dutton.
- Hackett, G. & Betz, N. E. (1981). A self-efficacy approach to the career development of women. *Journal of Vocational Behavior*, 18, 326-339.
- Hackett, G. & Campbell, N. K. (1988). Task self-efficacy and task interest as a function of performance on a gender-neutral task. *Journal of Vocational Behavior*, 30, 203-215.
- Hansen, L. S. & Rapoza, R. S. (eds.). (1978). *Career development and counseling of women*. Springfield IL: Charles C. Thomas.
- Heinrich, R. K., Corbine, J. L. & Thomas, K.R. (1990). Counseling Native Americans. *Journal of Counseling and Development*, 69, 128-133.
- Ivey, A. E. (1987). Cultural intentionality: The core of effective helping. *Counselor Education and Supervision*, 26, 168-172.
- Lea, D. & Liebowitz, Z. (1991). *Adult career development*, 2nd ed. Alexandria, VA: National Career Development Association.
- Lee, C. C. & Richardson, B. L. (1991). *Multicultural issues in counseling*. Alexandria, VA: American Association for Counseling and Development.
- Myers, J. E. (1989). *Adult children and aging parents*. Alexandria, VA: American Association for Counseling and Development.
- Pederson, P. B. (1988). *A handbook for developing multicultural awareness*. Alexandria, VA: American Association for Counseling and Development.
- Schlossberg, N. K. (1984). *Counseling adults in transition*. New York: Springer.
- Sue, D. W. (1978). Counseling across cultures. *Personnel and Guidance Journal*, 56, 451.
- Sue, D. W. (1973). Ethnic identity: The impact of two cultures on the psychological development of Asians in America. In S. Sue & N.N. Wagner (eds), *Asian Americans: Psychological perspectives*. Palo Alto, CA: Science and Behavior Books.
- Sue, D. W. (1981). *Counseling the culturally different: Theory and practice*. John Wiley & Sons.

Theories of Career Development and Decision Making
Module 4
References

- Abeles, R. P., & Riley, M. W. (1976-1977). A life-course perspective on the later years of life: Some implications for research. *Social Science Research Council Annual Report*, pp. 1-16.
- Adler, A. (1929). *The practice and theory of individual psychology*. New York: Harcourt, Brace & World.
- Bandura, A. (1977). *Social learning theory*. Englewood Cliffs, NJ: Prentice-Hall.
- Borow, H. (Ed.). (1973). *Career guidance for a new age*. Boston: Houghton Mifflin.
- Brim, O. G., Jr., & Kagan, J. (1980). "Constancy and change: A view of the issues." In O.G. Brim, Jr. & Kagan (Eds.), *Constancy and change in human development*. Cambridge, MA: Harvard University Press.
- Brooks, L. (1984). Career counseling methods and practice. In D. Brown & L. Brooks (Eds.), *Career choice and development* (pp. 337-354). San Francisco: Jossey-Bass Publishers.
- Brown, D. (1984). Trait and factor theory. In D. Brown & L. Brooks (Eds.), *Career choice and development* (pp. 8-30). San Francisco: Jossey-Bass Publishers.
- Brown, D. & Brooks, L. (Eds.). (1990). *Career choice and development*. 2nd ed. San Francisco: Jossey-Bass.
- Caplow, T. (1954). *The sociology of work*. New York: McGraw-Hill.
- Career Skills Assessment Program. (1977). *Career decision-making skills, exercise booklet*. Princeton, NJ: Education Testing Service.
- Center for Policy Research and Analysis, National Governors Association. (1985, May). *Using labor market and occupational information in human resource program planning* (Vol. 1). Washington, DC: National Governors Association.
- Crites, J. O. (1969). *Vocational psychology: The study of vocational behavior and development*. New York: McGraw-Hill.
- Crites, J. O. (1981). *Career counseling: Models, methods, and materials*. New York: McGraw-Hill.
- Dickens, C. (1852). London: Bradbury and Evans.
- Dudley, G., & Tiedeman, D. V. (1977). *Career development: Exploration and commitment*. Muncie, IN: Accelerated Development.
- Erikson, Erik. (1950). *Childhood and society*. New York: W.W. Norton and Co.
- Frederickson, R. H. (1982). *Career information*. Englewood Cliffs, NJ: Prentice-Hall.
- Freud, S. (1953). *The standard edition of the complete psychological works* (J. Strachey, Trans.). London: Hogarth.
- Gelatt, H. B., Varenhorst, B., Carey, R., & Miller, G. P. (1973). *Decisions and outcomes: A leader's guide*. New York: College Entrance Examination Board.
- Gilligan, C. (1977). In a different voice: Women's conceptions of self and morality. *Harvard Educational Review*, 47, 481-517.
- Gilligan, C. (1982). *In a different voice: Psychological theory and women's development*. Cambridge, Mass.: Harvard University Press.
- Gilligan, C. (1982a). *In a different voice*. Cambridge, MA: Harvard University Press.
- Gilligan, C. (1982b). Why should a woman be more like a man? *Psychology Today*. June, 68-77.
- Ginzberg, E. (1972). Toward a theory of occupational choice: A restatement. *Vocational Guidance Quarterly*, 20 (3), 169-176.
- Ginzberg, E. (1984). Career development. In D. Brown & L. Brooks (Eds.), *Career choice and development* (pp. 169-191). San Francisco: Jossey-Bass Publishers.
- Ginzberg, E., Ginsburg, S., Axelrad, S., and Herma, J. (1951). *Occupational choice: An approach to a general theory*. New York: Columbia University Press.
- Gordon, V. N. (1981). The undecided student: A developmental perspective. *The Personnel and Guidance Journal*, 59, 433-438.

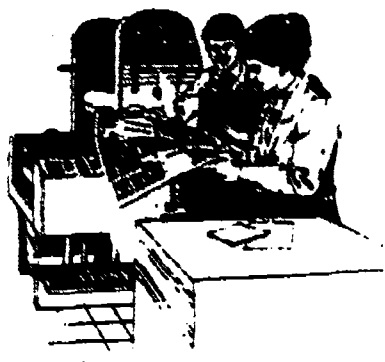
- Gottfredson, G. D., Holland, J. L., & Ogawa, D. K. (1982). *Dictionary of Holland Occupational Codes*. Palo Alto, CA: Consulting Psychologists Press, Inc.
- Gottfredson, G. D. (1977). Career stability and redirection in adulthood. *Journal of College Student Personnel*, 25(4), 315-320.
- Gottfredson, L. S. (1981). Circumscription and compromise: A developmental theory of occupational aspirations. *Journal of Counseling Psychology*, 28(6), 545-579.
- Gottfredson, L. S. (1978). Providing black youth more access to enterprising work." *Vocational Guidance Quarterly*, 27(2), 114-123.
- Gottfredson, L. S., & Becker, H. J. (1981). A challenge to vocational psychology: How important are aspirations in determining male career development? *Journal of Vocational Behavior*, 18, 121.
- Gottfredson, L. S., Finucci, J. M., & Childs, B. (1984). Explaining the adult careers of dyslexic boys: Variations in critical skills for high-level jobs. *Journal of Vocational Behavior*, 24, 355-373.
- Gysbers, N. C. (1983). *Create and use an individual career development plan*. Columbus, Ohio: The National Center for Research in Vocational Education.
- Gysbers, N. C., & Moore, E. J. (1975). *Beyond career development - Life career development*. *Personnel and Guidance Journal*, 53 (9), 647-652.
- Gysbers, N. C., & Moore, E. J. (in press). *Career assessment and counseling: skills and techniques for practitioners*. Englewood Cliffs, NJ: Prentice-Hall.
- Hansen, L. S. (1978). Promoting female growth through a career development curriculum. In L.S. Hansen & R. S. Rapoza (Eds.), *Career development and counseling of women*. Springfield, IL: Charles C. Thomas.
- Hansen, L. S. "Promoting Female Growth Through a Career Development Curriculum." In L.S. Hansen & R.S. Rapoza (eds.), *Career Development and Counseling of Women*. Springfield, Ill.: Thomas, 1978.
- Hansen, L. S., & Leierleber, D. L. (1978). Born free: A collaborative consultation model for career development and sex-role stereotyping. *Personnel and Guidance Journal*, 56(7), 395-399.
- Hartz, J. D. (1977). *Career Program Resources*. Madison, WI: University of Wisconsin Vocational Studies Center.
- Havighurst, R. (1952). *Developmental tasks and education*. New York: David McKay Co.
- Heinrich, R. K., Corbine, J. L. & Thomas, K. R. (1990). Counseling native americans. *Journal of Counseling and Development*, 69, 128-133.
- Herr, E. L., & Cramer, S. H. (1988). *Career guidance through the life span* (3rd ed.). Boston: Little, Brown.
- Herr, E. L., & Cramer, S. H. (1988). *Career Guidance and Counseling Through the Life Span*. (3rd ed.). Glenview, Ill.: Harper-Collins.
- Holland, J. L. (1985). *Making vocational choices: A theory of vocational personalities and work environments* (2nd ed.). Englewood Cliffs, NJ: Prentice-Hall.
- Holland, J. L. (1966). *The psychology of vocational choice*. Waltham, MA: Blaisdell.
- Holland, J. L. (1973). *Making vocational choices: A theory of careers*. Englewood Cliffs, NJ: Prentice-Hall.
- Holland, J. L. (1974). *Self-directed search*. Palo Alto, CA: Consulting Psychologists Press.
- Hoppock, R. (1967). *Occupational information*. (3rd ed.). New York: McGraw-Hill.
- Hotchkiss, L., & Borow, H. (1984). Sociological perspectives on career choice and attainment. In D. Brown & L. Brooks (Eds.), *Career choice and development: Applying contemporary theories to practice* (Chap. 6). San Francisco: Jossey-Bass.
- Hoyt, K. B. (1972). *Career education: What it is and how to do it*. Salt Lake City: Olympus.
- Isaacson, L. E. (1985). *Basics of career counseling*. Boston: Allyn & Bacon.
- Ivey, A. E. (1987). Cultural intentionality: The core of effective helping. *Counselor Education and Supervision*, 26, 168-172.

- Janis, I., & Mann, L. (1977). *Decision-making: A psychological analysis of conflict, choice, and commitment*. New York: The Free Press.
- Jaramillo, P. T., Zapata, J. T., & MacPherson, R. (1982). Concerns of college-bound Mexican-American students. *The School Counselor*, 29(5), 375-380.
- Jepsen, D. A. (1984). Relationship between career development theory and practice. In N.C. Gysbers (Ed.), *Designing careers: Counseling to enhance education, work, and leisure* (pp. 135-159). San Francisco: Jossey-Bass Publishers.
- Jones, G. B., Hamilton, J. A., Ganschow, L. H., Helliwell, C. B., & Wolff, J. M. (1972). *Planning, developing, and field testing career guidance programs*. Palo Alto, CA: American Institutes for Research.
- Jordaan, J. P. (1974). Life stages as organizing models of career development. In E.L.Herr (Ed.), *Vocational guidance and human development*. Boston: Houghton Mifflin.
- Jordaan, J. P., & Heyde, M. B. (1979). *Vocational maturity during the high-school years*. New York: Teachers College Press.
- Kapes, J. T., & Mastie, M. M. (1982). *A counselors guide to occupational guidance instruments*. Washington, DC: National Vocational Guidance Association.
- Keller, K. E., Biggs, D. A., & Gysbers, N. C. (1982). Career counseling from a cognitive perspective. *The Personnel and Guidance Journal*, 60 (6), 367-371.
- Kinnier, R. T., & Krumboltz, J. D. (1984). Procedures for successful career counseling. In N.C. Gysbers (Ed.), *Designing careers: Counseling to enhance education, work and leisure* (pp.307-335). San Francisco: Jossey-Bass Publishers.
- Knefelkamp, L. L., & Sleptitza, R. (1976). A cognitive-developmental model of career development: An adaptation of the Perry scheme. *The Counseling Psychologist*, 5, 53-58.
- Krumboltz, J., & Baker, R. (1973). Behavioral counseling for vocational decisions. In H. Borrow (Ed.), *Career guidance for a new age* (pp. 235-284). Boston: Houghton Mifflin, pp. 235-284.
- Krumboltz, J. D., Mitchell, A. M., & Jones, G. B. (1979). A social learning theory of career selection. *The Counseling Psychologist*, 6, 71-81.
- Lee, C. C. & Richardson, B. L. (1991). *Multicultural issues in counseling*. Alexandria, VA: American Association for Counseling & Development.
- Levinson, D. J., Darrow, C. N., Klein, E. B., Levinson, M. G., & McKee, B. (1978). *The seasons of a man's life*. New York: Alfred A. Knopf.
- Lewis, R. A., & Gilhousen, M. R. (1981). Myths of career development: A cognitive approach to vocational counseling. *The Personnel and Guidance Journal*, 59 (5), 269-299.
- Maslow, A. H. (1954). *Motivation and personality*. New York: Harper and Row.
- Miller, D., & Form, W. (1951). *Industrial sociology*. New York: Harper and Row.
- Myers, J. E. (1989). *Adult children and aging parents*. Alexandria, VA: American Association for Counseling and Development.
- Naisbitt, J. (1982). *Megatrends*. New York: Warner Books.
- National Career Development Association. (1991). The vocational/career counseling competencies, draft approved, January. Alexandria, VA: Author.
- National Career Development Association. (1988). *Ethical Standards*. Alexandria, VA: Author.
- National Occupational Information Coordinating Committees (1989). *The national career development guidelines*. Washington, DC: U.S. Department of Labor.
- National Vocational Guidance Association. (1973). *Position paper on career development*. Washington, DC: National Vocational Guidance Association.
- Neugarten, B. L. (1968). *Middle age and aging*. Chicago: University of Chicago Press.
- Neugarten, B. L. (1979). Time, age, and the life cycle. *American Journal of Psychiatry*, 136 (7), 889-894.
- Osipow, S. (1969). What do we really know about career development? In N.C. Gysbers & D. Pritchard (Eds.), *National conference on guidance, counseling, and placement in career*

- development and educational-occupational decision-making*. Columbia: University of Missouri. (ERIC Document Reproduction Service No. ED 041 143)
- Osipow, S. (1983). *Theories of career development*. (3rd ed.). Englewood Cliffs, NJ: Prentice-Hall.
- Osipow, S. (1983). *Theories of career development*. (3rd ed.). New York: Appleton-Century-Crofts.
- Parsons, F. (1909). *Choosing a vocation*. Boston: Houghton Mifflin.
- Pedersen, P. B. (1988). *A handbook for developing multicultural awareness*. Alexandria, VA: American Association for Counseling and Development.
- Pedro, J. D., Wolleat, P., & Fennema, E. (1980). Sex differences in the relationship of career interests and mathematics plans. *Vocational Guidance Quarterly*, 29(1), 25-34.
- Perry, W., Jr. (1970) *Intellectual and ethical development in the college years*. New York: Holt, Rinehart and Winston.
- Reardon, R. C. (1984) Use of information in career counseling. In H.D. Burck & R.C. Reardon (Eds.), *Career development interventions*. Springfield, IL: Charles C. Thomas.
- Rest, J. R. (1974). Developmental psychology as a guide to value education: A review of "Kohlbergian" Programs. *Review of Educational Research*, 44, 241-259.
- Roe, A. (1957). early determinants of vocational choice. *Journal of Counseling Psychology*, 4, 212-217.
- Roe, A. (1972). Perspectives on vocational development. In J.M. Whiteley & A. Resnikoff (Eds.), *Perspectives on vocational development* (pp. 66-82). Washington, DC: American Personnel and Guidance Association.
- Schlossberg, N. K. (1984). *Counseling adults in transition*. New York: Springer.
- Schlossberg, N. K., & Pietrofesa, J. J. (1978). Perspectives on counseling bias: Implications for counselor education. In L. S. Hansen & R. S. Rapoza (Eds.), *Career development and counseling of women*. Springfield, IL: Charles C. Thomas.
- Sue, D. W. (1978). Counseling across cultures. *Personnel and Guidance Journal*, 56, 451.
- Sue, D. W. (1981). *Counseling the culturally different*. New York: Wiley.
- Sue, D. W. (1978). "Counseling the culturally Different: A Conceptual Analysis." *Personnel and Guidance Journal*, 1977,55, 422-425.
- Sue, D. W., and others. (1982). "Position Paper: Cross-Cultural Counseling Competencies." *Counseling Psychologist*, 10, 45-52.
- Sue, D. W. (1981). *Counseling the culturally different: Theory and practice*. New York: John Wiley & Sons.
- Super, D. E. (1949). *Appraising vocational fitness*. New York: Harper & Brothers.
- Super, D. E. (1957). *The psychology of careers*. New York: Harper & Row.
- Tiedeman, D. V., & O'Hara, R. P. (1963). *Career development: Choice and adjustment*. Princeton, NJ: College Entrance Examination Board.
- Vaillant, G. E. (1977). *Adaptation to life*. Boston: Little, Brown.
- Wolfe, D. M., & Kolb, D. A. (1980). Career development, personal growth, and experimental learning. In J. W. Springer (Ed.), *Issues in career and human resource development*. Madison, WI: American Society for Training and Development.
- Zingaro, J. C. (1983). A family system approach for the career counselor. *The Personnel and Guidance Journal*, 62, 24-27.
- Zunker, V. G. (1986). *Career counseling: Applied concepts of life planning*. Monterey, CA: Brooks/Cole.
- Zytowski, D. G. (1969). Toward a theory of career development for women. *Personnel and Guidance Journal*, 47, 660-664.

Module 5

What Is Information?
How Can It Be Accessed?
How Can It Be Used?



National Career Development Guidelines-Counselor Competencies

Skills to assist individuals in setting goals and identifying strategies for reaching goals.

Knowledge of changes taking place in the economy, society, and job market.

Knowledge of education, training, employment trends, labor market, and career resources.

Knowledge of basic concepts related to career counseling, such as career development, career progressions, and career patterns.

Knowledge of employment information and career planning materials.

Skills to use career development resources and techniques designed for specific groups.

Skills to use computer-based career information systems.

What Is Information? How Can It Be Accessed? How Can It Be Used?

Module 5

Introduction

Career decision making is a complex process. One step in the process is to relate self-knowledge to the available opportunities in the world of work. To do this successfully, one must be able to locate, access, evaluate and use information that defines options and opportunities. Career decision making using labor market information is based on the assumption that the more knowledge one can obtain about themselves and the world of work, the better the career choice.

We are surrounded by career and labor market information. Our challenge is to understand the information, help others understand their information needs, and integrate that information into the process of career decision making. In this module career and labor market information will be defined. Then the questions, how can it be accessed? and how can it be used? will be answered. At the end of the module, one kind of career and labor market information will be examined: labor force, industry, and occupational projections.

What Is Career and Labor Market Information?

In a very narrow sense, labor market information refers to data about people, jobs and employers. It can also include demographic, economic and educational data. It provides us with an understanding of the labor market and the economy.

Two Examples of Information

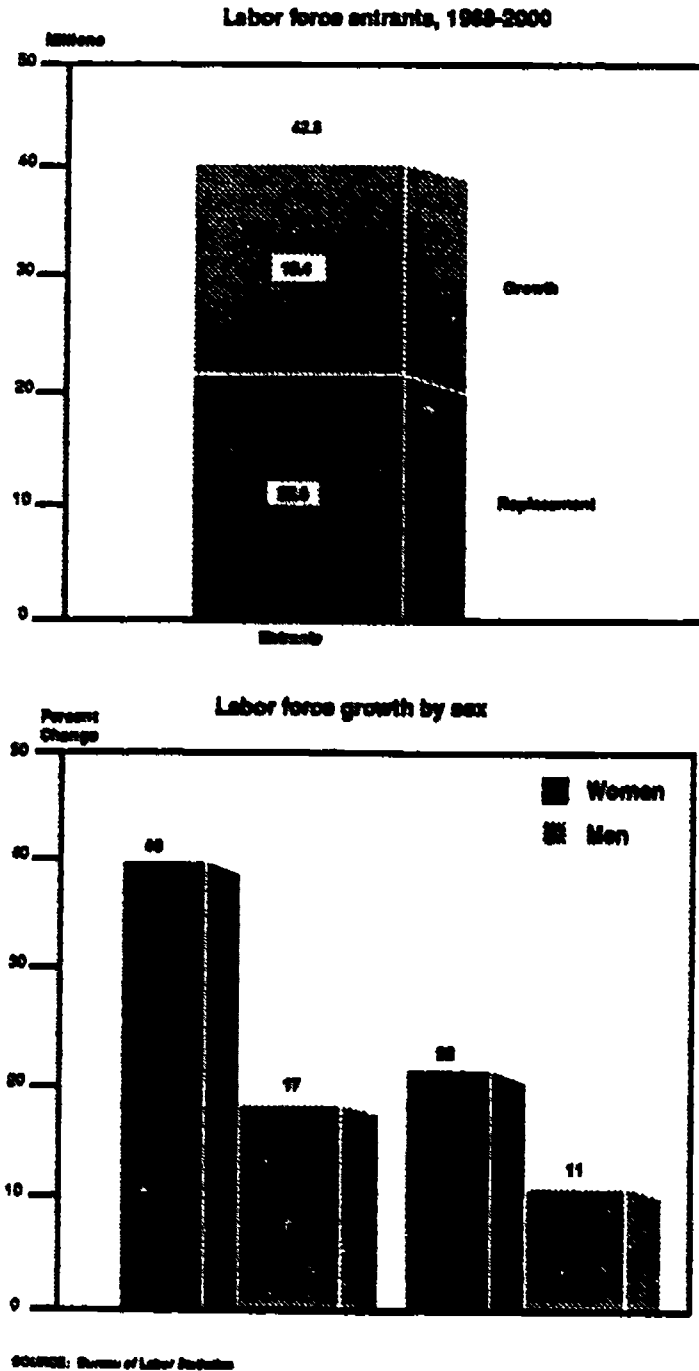
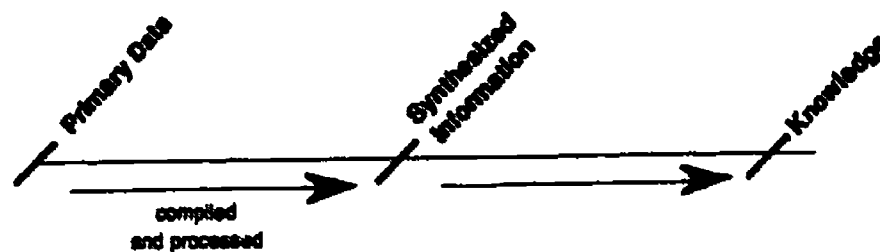


Figure 5.1

Career information and occupational information is synthesized labor market information. Most published sources of career and labor market information can be characterized as containing numbers, words, graphs and/or pictures. It also can be described as existing on a continuum from primary data, to synthesized information, to knowledge.



A Continuum from Primary Data to Knowledge

Figure 5.2

As analysis and synthesis are added to primary data, it becomes easier to understand and integrate into the process of career decision making.

How Can Career and Labor Market Information Be Accessed? How Can It Be Used?

When we talk about "access" we are talking about information delivery systems. When we talk about "using" information, we are referring to the process of integrating information into career decision making.

To be effective, the career decision making process must be client centered. A client's interest in labor market information frequently begins with personal interests, experience and aptitudes. The goal is to help a student or client achieve a better understanding of his/her abilities, experiences and interests as they relate to occupations. Following a better understanding of self, the client can begin the process of occupational and job exploration.

There are three key decision areas that use information in the career development process. They represent ports of entry into a wide variety of information resources. The decision areas are:

- Choice of an occupation
- Choice of a work setting (Business or industry)
- Choice of a geographic area

Decision Area: An Occupation

Career and labor market information helps people explore a variety of occupational opportunities. The information is used to:

- analyze the tasks completed by people in the occupation;
- examine projected employment opportunities;

- learn about job openings;
- become informed about preparation and training requirements;
- discover advancement opportunities and career ladders;
- determine wage levels within an occupation; and
- find out where and how to locate more information.

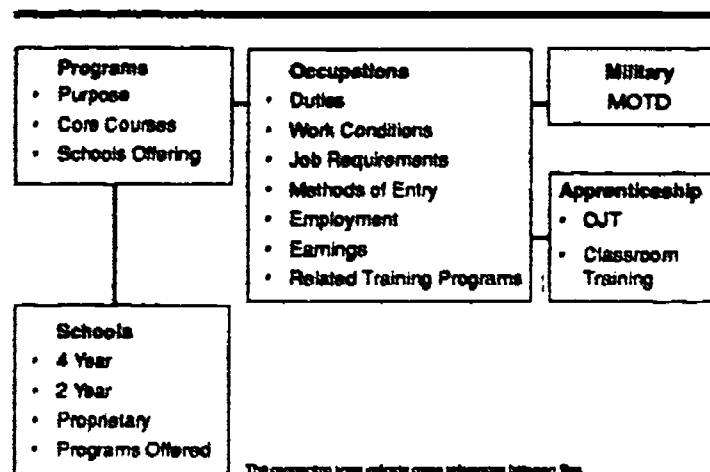
Resources for occupational information include:

- Career Information Delivery Systems (CIDS)
- Occupational Outlook Handbook (OOH)
- Dictionary of Occupational Titles (DOT)
- Guide to Occupational Exploration (GOE)
- Military Career Guide, and
- Standard Occupational Classification System (SOC)

Career Information Delivery Systems (CIDS)

CIDS are systems that provide individuals with current, accurate and locally relevant occupational and educational information. CIDS use computer programs, print materials and videos that allow individuals to search for and access information about themselves and career options. Figure 5.3 and 5.4 illustrate the type of information found in CIDS.

CIDS Files and File Cross References
(Example)



This chart illustrates the type of information found in CIDS programs.

Figure 5.3

Example from a CIDS Printed Resource

3620.2

Ultrasound Technologists

Work Description

Ultrasound technologists use special kinds of sound waves to help people who are ill. They are also known as diagnostic medical sonographers. They use machines known as ultrasound scanners to find medical problems in patients.

A technologist carefully places a patient against the machine. Only the area of the body that must be tested is put against the machine. A technologist then starts the scanner. This points high frequency sound waves at the correct part of the patient's body. Sound waves go through the outside of the body and bounce off the patient's body organs and tissues. Shadowy pictures, called images, can be recorded on a screen or film. The images show the shape and position of body parts such as the heart, kidneys, or muscle and tissue masses. These images can show places where liquids, called fluids, are building up in the body. They can also show the rate of growth of a baby while it is inside of its mother. Then doctors study these images to find out what kind of treatment the patient needs.

An ultrasound technologist must first study the results of other medical tests, called diagnostic tests, that have been done on the patient. They look for information that will help them choose the right ultrasound equipment. This information also helps them find which area of the patient's body to treat. Technologists explain to patients how each test works and what it is for. They make sure that the images the machine makes can be read and understood clearly. Only then do they record the test results.

Some ultrasound technologists specialize in brain testing, heart testing, eye testing or testing how babies develop in the womb. To become certified to give a special type of test, an individual must pass a national exam in each specialty area.

Working Conditions

Ultrasound technologists generally work 40 hours per week. Some work rotating shifts. Others must be ready to go to work at any time.

Work Places

Ultrasound technologists work in hospitals and clinics. They may also work in some doctor's offices.

Workers' Comments

Ultrasound technologists like working with patients. They like giving ultrasound tests because the tests are painless and do not expose patients or themselves to any harmful effects. Ultrasound tech-

nologists like being members of health care teams. They think doctors respect them and the work that they do.

Getting the Job

Some hospitals have training programs in ultrasound technology. Training programs generally last one year. To get into one of these programs, ultrasound technicians must finish two years of college or a two-year vocational school program in allied health. After finishing the one-year training program, an ultrasound technologist may become certified by taking an exam. The American Registry of Diagnostic Medical Sonographers gives this exam. Technicians may be certified in one or more specialties and are then known as registered diagnostic medical sonographers.

Applicants must have good grades in math, physics, biology, sociology, and English. Some understanding of how to use computers may be valuable in the future.

Pay and Employment

Typical salaries range from about \$19,700 to \$32,900 per year.

Salaries vary a great deal from hospital to hospital. Ultrasound technologists are often paid on the same salary scale as X-ray technicians.

The national outlook for this occupation is good. Job openings may exceed the number of qualified applicants throughout the 1980's.

Moving Up

Ultrasound technologists may be promoted by becoming certified to give more than one kind of ultrasound test. With more work experience, a technologist may be promoted to a supervisor or educational coordinator. Some technologists earn college degrees so they can teach ultrasound technology to others.

Where to Write

You may be able to get more information about this occupation by writing to:

American Soc of Radiologic Technicians
15000 Central Avenue, S.E.
Albuquerque, NM 87123

Figure 5.4

A typical CIDS describes 250 or more occupations. They are designed to digest a multitude of local, state and national career and labor market information. Each state has its own program of collection, analysis, synthesis, organization and linkage of data. The following types of information are included in a CIDS.

- Occupational Descriptions
- Wages, Hours, and Fringe Benefits
 - Local
 - State
 - National
- Employment Trends and Outlook
 - Local
 - State
 - National
- Method of Entry, Qualifications
- Advancement Opportunities
- Educational/Training Programs
- Military Training and Employment
- Type of Industry or Business
- Educational Program
- Financial Aid Packages
- Occupational Classification Systems Based on Similarities in Work Performed Interests
- Occupational Characteristics
 - Aptitudes
 - Industry Designation
 - Environmental Conditions
 - General Educational Development (GED)
 - Reasoning
 - Mathematics
 - Language
 - Physical Demands
 - Specific Vocational Preparation (SVP)
 - Temperaments
 - Work Fields (Work Methods)
 - Worker Functions (Data-People-Things)

Many CIDS also have developed print, computer and video materials to supplement the occupational and educational data files. These might include computer programs that teach the user how to write a resume, career tabloids, and videotapes on subjects such as career exploration, career planning and decision making.

CIDS implements a significant number of the competencies in the National Career Development Guidelines (See Figure 1.4). Each state has its own plan for adopting the Guidelines and using the CIDS to interface with the Guidelines. Some materials have been developed for classroom use that are keyed directly to the national guidelines and can be used in any state. Examples are include in Figures 5.5 and 5.6

Sample Classroom Activities

INTERVIEW A WORKER

<p>OBJECTIVE: Students will obtain information about careers they are interested in.</p>	<table border="1"> <tr> <th colspan="6">Grade</th> </tr> <tr> <td>7</td> <td>8</td> <td>9</td> <td>10</td> <td>11</td> <td>12</td> </tr> </table>	Grade						7	8	9	10	11	12				
Grade																	
7	8	9	10	11	12												
<p>MATERIALS</p> <ul style="list-style-type: none"> • chalkboard • chalk 	<table border="1"> <tr> <th colspan="2">Curriculum Area</th> </tr> <tr> <td>Lang. Arts</td> <td>•</td> </tr> <tr> <td>Math</td> <td></td> </tr> <tr> <td>Health/Science</td> <td></td> </tr> <tr> <td>Social Studies</td> <td>•</td> </tr> <tr> <td>Family/Cons. Sci.</td> <td></td> </tr> <tr> <td>Art/Music</td> <td></td> </tr> <tr> <td>Tech/Voc. Education</td> <td>•</td> </tr> </table>	Curriculum Area		Lang. Arts	•	Math		Health/Science		Social Studies	•	Family/Cons. Sci.		Art/Music		Tech/Voc. Education	•
Curriculum Area																	
Lang. Arts	•																
Math																	
Health/Science																	
Social Studies	•																
Family/Cons. Sci.																	
Art/Music																	
Tech/Voc. Education	•																
<p>ACTIVITY</p> <ol style="list-style-type: none"> 1. Ask each student to identify a career that they would like to know more about. Record their answers on the chalkboard. 2. Ask the class if they know anyone who works in any of these careers. 3. Have students interview someone who is in the career that they are interested in. <ol style="list-style-type: none"> a. What do they do on their job? b. What education/training is needed? c. How did they find this job? d. Other questions suggested by class 4. Have students report the results of their interview back to the class. 5. Discuss with the class, "Are you more or less interested in this career as a result of this interview?" 	<table border="1"> <tr> <th colspan="2">Personal Growth</th> </tr> <tr> <td>Positive Self-Concept</td> <td>•</td> </tr> <tr> <td>Interaction Skills</td> <td>•</td> </tr> <tr> <td>Growth and Change</td> <td></td> </tr> </table>	Personal Growth		Positive Self-Concept	•	Interaction Skills	•	Growth and Change									
Personal Growth																	
Positive Self-Concept	•																
Interaction Skills	•																
Growth and Change																	
<p>COMMENTS This exercise may be repeated a number of times throughout the year.</p>	<table border="1"> <tr> <th colspan="2">Experiences</th> </tr> <tr> <td>Achievement</td> <td>•</td> </tr> <tr> <td>Work and Learning</td> <td></td> </tr> <tr> <td>Career Information</td> <td>•</td> </tr> <tr> <td>Job-Seeking Skills</td> <td></td> </tr> <tr> <td>Needs of Society</td> <td></td> </tr> </table>	Experiences		Achievement	•	Work and Learning		Career Information	•	Job-Seeking Skills		Needs of Society					
Experiences																	
Achievement	•																
Work and Learning																	
Career Information	•																
Job-Seeking Skills																	
Needs of Society																	
<p>PERFORMANCE INDICATORS The middle/junior high school student will be able to: 12.4: Describe skills needed in a variety of occupations, including self-employment.</p>	<table border="1"> <tr> <th colspan="2">Career Planning</th> </tr> <tr> <td>Decision Making</td> <td></td> </tr> <tr> <td>Life Roles</td> <td></td> </tr> <tr> <td>Occupational Roles</td> <td></td> </tr> <tr> <td>Career Planning</td> <td>•</td> </tr> </table>	Career Planning		Decision Making		Life Roles		Occupational Roles		Career Planning	•						
Career Planning																	
Decision Making																	
Life Roles																	
Occupational Roles																	
Career Planning	•																
<p>EVALUATION Each student has personally interviewed someone engaged in a career of interest to the student.</p>																	
<p>RESOURCES <i>Career Exploration Workbook</i>. (VSC) Schrunk, Louise. <i>Lifeplan: A Practical Guide to Successful Career Planning</i>. (Workbook)</p>																	

DG Activity 35

Figure 5.5

Sample Index

NATIONAL CAREER DEVELOPMENT GUIDELINES COMPETENCIES AND STUDENT PERFORMANCE INDICATORS

Each competency is broken down into its corresponding student performance indicators. The number(s) in parentheses following each performance indicator denote the activities in this book (for grades 7-9) that address that specific performance indicator. Note: while each activity addresses several performance indicators only the key indicators are listed on the activity page under "Performance Indicators."

NATIONAL STUDENT PERFORMANCE INDICATORS FOR MIDDLE/JUNIOR HIGH SCHOOL

Self-Knowledge

1. Knowledge of the influence of a positive self-concept.
 - 1.1 Describe personal likes and dislikes.
(5, 6, 8, 15, 16, 17, 18, 22, 30, 34, 35, 44, 45, 53, 54, 58, 60, 66, 69, 70, 71, 72, 79, 83, 86, 87, 90, 93, 95, 100, 109, 109, 114, 115, 117, 120, 121, 132, 134, 137, 139, 141)
 - 1.2 Describe individual skills required to fulfill different life roles.
(6, 13, 19, 22, 27, 30, 38, 54, 56, 58, 60, 61, 62, 64, 65, 66, 67, 68, 69, 71, 75, 82, 83, 85, 86, 91, 93, 94, 97, 100, 103, 105, 108, 109, 110, 114, 115, 116, 117, 118, 120, 121, 123, 124, 125, 126, 127, 128, 129, 130, 134, 135, 138, 140)
 - 1.3 Describe how one's behavior influences the feelings and actions of others.
(9, 23, 24, 50, 54, 55, 61, 62, 79, 80, 84, 85, 86, 87, 89, 90, 91, 94, 97, 98, 101, 103, 105, 108, 111, 114, 115, 116, 117, 120, 122, 124, 126, 128, 129, 130)
 - 1.4 Identify environmental influences on attitudes, behaviors, and aptitudes.
(18, 38, 57, 78, 80, 81, 82, 84, 90, 92, 94, 96, 97, 99, 101, 102, 103, 106, 107, 108, 110, 112, 114, 118, 119, 122, 123, 125, 127, 133, 134)
2. Skills to interact with others.
 - 2.1 Demonstrate respect for the feelings and beliefs of others.
(14, 17, 29, 41, 54, 59, 62, 63, 70, 72, 79, 80, 84, 85, 86, 87, 91, 93, 96, 97, 99, 100, 101, 102, 103, 105, 111, 112, 114, 115, 117, 120, 122, 123, 124, 125, 126, 127, 128, 137, 139)
 - 2.2 Demonstrate an appreciation for the similarities and differences among people.
(17, 23, 24, 54, 61, 62, 63, 71, 79, 86, 87, 88, 93, 95, 97, 99, 100, 101, 103, 109, 110, 112, 113, 114, 117, 121, 123, 127, 139)
 - 2.3 Demonstrate tolerance and flexibility in interpersonal and group situations.
(9, 14, 23, 29, 38, 39, 41, 61, 62, 63, 69, 71, 72, 79, 85, 87, 91, 92, 93, 95, 99, 102, 103, 105, 108, 110, 111, 112, 113, 114, 115, 117, 120, 122, 125, 126, 127, 128, 130, 131, 137, 139)
 - 2.4 Demonstrate skills in responding to criticism.
(69, 80, 84, 91, 100, 103, 111, 122, 131, 134)
 - 2.5 Demonstrate effective group membership skills.
(9, 14, 23, 27, 36, 39, 41, 50, 51, 54, 56, 59, 61, 62, 63, 69, 70, 71, 72, 74, 76, 79, 83, 84, 85, 86, 88, 89, 91, 92, 93, 95, 96, 97, 98, 99, 101, 102, 103, 104, 105, 106, 107, 108, 114, 115, 116, 117, 119, 120, 122, 122, 124, 126, 127, 128, 129, 130, 134, 137, 138, 139, 140)
 - 2.6 Demonstrate effective social skills.
(9, 21, 35, 36, 44, 54, 62, 72, 84, 88, 89, 93, 97, 98, 103, 113, 114, 115, 116, 117, 120, 123, 124, 126, 129, 137, 139)
 - 2.7 Demonstrate understanding of different cultures, lifestyles, attitudes, and abilities.
(2, 18, 38, 39, 54, 70, 72, 74, 79, 86, 93, 95, 100, 103, 109, 110, 112, 115, 119, 123, 127, 132, 133, 139, 141)

Figure 5.6

Occupational Outlook Handbook (OOH)

The *Occupational Outlook Handbook* is an affordable reference on current and future occupational prospects. It gives greatest attention to those occupations that are projected to grow the most rapidly or require lengthy training and/or education. In addition, a major section discusses employment trends and projections. The remainder of the book describes the nature of work; working conditions; employment, training, and advancement opportunities; job outlook; earnings; and sources of additional information. The information is nontechnical, and easily accessed.

This reference will answer many general questions about occupations. It describes what workers do, the training and education they need, earnings, working conditions and expected job prospects.

Example from the OOH

Teacher Aides

(DOT 099 327-010; 219 467-010, and 249 367-074, and -086)

Nature of the Work

Teacher aides help classroom teachers in a variety of ways to give them more time for teaching. They help and supervise students in the classroom, cafeteria, school yard, or on field trips. They record grades, set up equipment, or help prepare materials for instruction. They may also tutor and assist children in learning class material.

Aides' responsibilities vary greatly by school district. In some districts, teacher aides just handle routine nonteaching and clerical tasks. They grade tests and papers, check homework, keep health and attendance records, type, file, and duplicate materials. They may also stock supplies, operate audiovisual equipment, and keep classroom equipment in order. In other districts, aides also help instruct children, under the supervision and guidance of teachers. They work with students individually or in small groups—listening while students read, reviewing class work, or helping them find information for reports. Sometimes, aides take charge of special projects and prepare equipment or exhibits—for a science demonstration, for example.

Working Conditions

About half of all teacher aides work part time during the school year. Most work the traditional 9- to 10-month school year. They may work



Teacher aides help children review and understand their lessons.

outdoors supervising recess when weather allows and spend much of their time standing, walking, or kneeling. Working closely with the students can be both physically and emotionally tiring.

Employment

Teacher aides held about 682,000 jobs in 1988. About 8 out of 10 worked in elementary and secondary schools, with many concentrated in the lower grades. Some assisted special education teachers with physically, mentally, or emotionally handicapped children. Most of the others worked in child daycare centers. Employment was distributed geographically much the same as the population.

Training, Other Qualifications, and Advancement

Educational requirements for teacher aides range from less than a high school diploma to some college training. Districts that give aides some teaching responsibilities usually require more training than those that don't assign teaching tasks.

A number of 2-year and community colleges offer associate degree programs that prepare graduates to work as teacher aides. However, most teacher aides receive on-the-job training. Aides are taught how to operate audiovisual equipment, keep records, and prepare instructional materials. In addition, they are made familiar with the organization and operation of a school and with teaching methods.

Teacher aides should enjoy working with children and be able to handle classroom situations with fairness and patience. Preference in hiring may be given to those with previous experience in working with children. Aides also must demonstrate initiative and a willingness to follow a teacher's directions. They must have good oral and writing skills and be able to communicate effectively with students and teachers. Clerical skills may also be necessary.

Some States have voluntary certification for general teacher aides. To qualify, an individual may need a high school diploma or general equivalency degree (G.E.D.), or even some college training. Kansas, Louisiana, Texas, and Wisconsin grant permits for paraprofessionals, as some aides are called, in special education.

Advancement for teacher aides, usually in the form of higher earnings or increased responsibility, comes primarily with experience or additional education. Some school districts provide release time so that aides may take college courses. Aides who earn bachelor's degrees may become certified teachers.

Job Outlook

Employment of teacher aides is expected to increase faster than the average for all occupations through the year 2000, primarily reflecting rising enrollments and increases in the ratio of teacher aides to teachers. Enrollment growth will not occur at the same rate in all parts of the country. Largely because of migration to the South and West, enrollment increases are expected to be greater in those regions than in the Northeast and Midwest.

Teacher aide employment is sensitive to changes in State and local expenditures for education. Pressures on education budgets are greater in some States and localities than in others. A number of teacher aide positions are financed through Federal programs. For example, a 1986 law requires that public schools provide special education services to all children between the ages of 3 and 6 who need it. This will stimulate the demand for teacher aides who work with special education teachers.

Because of a relatively high turnover in the occupation, most openings for teacher aides are expected to occur as a result of the need to replace workers who transfer to other occupations or who leave the labor force to assume full-time housekeeping responsibilities, return to school, or for other reasons.

Earnings

In 1988-89, aides involved in teaching activities earned an average of \$7.05 an hour; those performing only nonteaching activities averaged \$6.14 an hour. Earnings varied by region and also by work experience and academic qualifications. Many aides are covered by collective bargaining agreements and have health and pension benefits similar to those of the teachers in their schools.

Related Occupations

The educational support activities that teacher aides perform demand organizational skills, cooperativeness, recordkeeping ability, and a talent for getting along with people. Other occupations requiring some or all of these skills include childcare workers, career guidance technicians, home health aides, library assistants, medical record technicians, nursing aides, receptionists, and retail sales clerks.

Sources of Additional Information

Information on teacher aides as well as on a wide range of education-related subjects, including teacher aide unionization, can be obtained from:

American Federation of Teachers, 355 New Jersey Ave. NW., Washington, DC 20001.

School superintendents and State departments of education can provide details about employment requirements.

Figure 5.7

The Dictionary of Occupational Titles (DOT)

The *Dictionary of Occupational Titles (DOT)* is the most comprehensive document containing occupational information. It not only contains descriptions of over 20,000 occupations, but also has a unique coding number that is indexed, or cross classified, with many other frequently used sources, such as the *Standard Occupational Classification*, the *Guide for Occupational Exploration (GOE)* and the *Military Career Guide*.

The DOT provides information on the structure of work, particularly the data-people-things functions of an occupation. It describes the relationships among occupations and gives a summary of what particular workers do. A companion publication, *Selected Characteristics of Occupations Defined in the Dictionary of Occupational Titles*, provides detailed supplementary information about occupations in the DOT. It describes physical demands, environmental working conditions, and the amount of training time required. Many find the DOT overwhelming and difficult to manage.

Because of the technical style used to describe occupations, the voluminous amounts of information, and the complexity of accessing the information, the DOT is not used as frequently as the OOH.

The DOT enables the user to learn facts about occupations to incorporate into the decision making process. It can be used most effectively to determine the following:

- **specific tasks and skills required of occupations;**
- **purpose of the occupation;**
- **the machine, tools, equipment or work aids used;**
- **service, products, materials and academic subject matter included;**
- **industries with which the occupation is typically identified;**
- **worker/function requirements; and**
- **location of work for each occupation.**

The following are examples of key questions about the occupation, Recording Engineer.

Question	Answer
What are the typical work activities performed?	Operates recording machine Listens for imperfections Keeps record of recordings Services and repairs machines
What skills are needed to perform the required work?	Listening, recording, observing, manipulating equipment, repairing and servicing
What is the typical industry where the job is performed?	Radio and TV Broadcast
What are the work aids typically used?	Recording machines, microphones, earphone machines to adjust volume, log book

Example from the DOT

526.685-014

526.685-014 COOK, FRY, DEEP FAT (can. & preserv.; hotel & rest.)
Tends deep-fat cookers to fry meats, vegetables, or fish in cooking oil: Empties containers or opens valves to fill cookers with oil. Sets thermostat to heat oil to specified temperature. Empties containers of meat, vegetable, or fish into metal basket and immerses basket into vat manually or by hoist. Sets timer. Observes color at end of frying time to determine conformity to standards and extends frying time accordingly. Removes basket from cooker, drains it, and dumps contents onto tray. May dip foods into batter or dye before frying. May specialize in a particular food product for canning or freezing or may fry variety of foods for immediate consumption.

526.685-018 COOK, VACUUM KETTLE

(can. & preserv.)
Tends vacuum cooker and open kettle to cook fruit and berries preparatory to making jams and jellies: Observes thermometer, turns rheostat and steam valve, or pushes switch or lights burner to heat vacuum cooker and open kettle to specified temperature. Turns valve to transfer contents of kettle into vacuum cooker. Observes *refractometer* on vacuum cooker to determine sugar content and adds ingredients according to formula. Places container under discharge outlet of distillation jacket of cooker to reclaim esters. Opens valve or starts pump to transfer contents of vacuum cooker to holding tank or filling machine.

526.685-022 COOKER (cereal)

Tends steam-heated pressure cookers to cook cracked and tempered grain for further processing into cereal products: Presses button to load first cooker with measured amount of grain and liquid flavor. Clamps lid of cooker in place, using wrench. Moves dials and turns valves to attain specified temperature and pressure in cooker. Removes lid of cooker and dumps cooked grain onto conveyor after determining that grain has reached specified color and consistency. Records cooking time and number of batches prepared. May start automatic equipment that admits steam, rotates cooker, and stops cooker after specified time.

Figure 5.8

The Guide for Occupational Exploration (GOE)

The *Guide for Occupational Exploration (GOE)* is designed to assist job seekers find occupations that are in accord with their interests, skills, values and abilities. Information is presented to assist users in evaluating their own interests and potential.

The GOE is a rich source of material for career exploration and decision making. The authors identify a five step process for using the GOE. The first step directs the individual to relate their interests to job titles. In the second step, one or more work groups are chosen to explore and investigate. Step three focuses attention and information on the most interesting work group. Step four involves exploring subgroups in specific occupations. Step five involves the process of integrating the information into the decision making process. Details on the most effective way of using the GOE are included in the preface of the book.



Example from the GOE

Safety and Law Enforcement 04.01

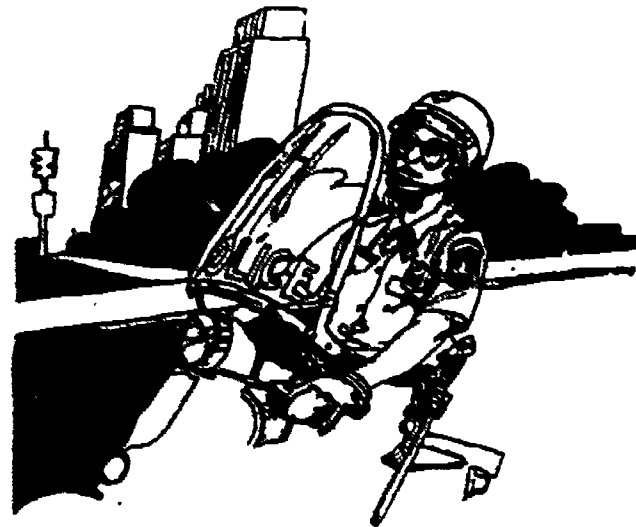
04.01 Safety and Law Enforcement

Workers in this group are in charge of enforcing laws and regulations. Some investigate crimes, while others supervise workers who stop or arrest lawbreakers. Others make inspections to be sure that the laws are not broken. Most jobs are found in the Federal, State, or local governments, such as the Police and Fire Departments. Some are found in private businesses, such as factories, stores, and similar places.

What kind of work would you do?

Your work activities would depend upon your specific job. For example, you might

- set procedures, prepare work schedules, and assign duties for jailers.
- direct and coordinate daily activities of a police force.
- direct and coordinate activities of a fire department.
- hire, assign, and supervise store detectives.
- investigate and arrest persons suspected of the illegal sale or use of drugs.
- patrol an assigned area in a vehicle or on foot and issue tickets, investigate disturbances, render first aid, and arrest suspects.
- patrol an assigned area to observe hunting and fishing activities and warn or arrest persons violating fish and game laws.



What skills and abilities do you need for this kind of work?

To do this kind of work you must be able to:

- work with laws and regulations, sometimes written in legal language.
- use practical thinking to conduct or supervise investigations.
- supervise other workers.
- plan the work of a department or activity.
- deal with various kinds of people.
- work under pressure or in the face of danger.
- patrol an assigned area to observe hunting and fishing activities and warn or arrest persons violating fish and game laws.
- keep physically fit.
- use guns, fire-fighting equipment, and other safety devices.

How do you know if you would like or could learn to do this kind of work?

The following questions may give you clues about yourself as you consider this group of jobs.

- Have you had courses in government, civics, or criminology? Did you find these subjects interesting?
- Have you been a member of a volunteer fire department or emergency rescue squad? Were you given training for this work?

- Have you watched detective television shows? Do you read detective stories? Do you try to solve mysteries?
- Have you been an officer of a school safety patrol? Do you like being responsible for the work of others?
- Have you used a gun for hunting or in target practice? Are you a good shot?
- Have you spoken at a civic or community organization? Do you like work that requires frequent public speaking?
- Have you been a military officer?

How can you prepare for and enter this kind of work?

Occupations in this group usually require education and/or training extending from one to over ten years, depending upon the specific kind of work. Local civil service regulations usually control the selection of police officers. People who want to do this kind of work must meet certain requirements. They must be U. S. citizens and be within certain height and weight ranges. In addition, they may be required to take written, oral, and physical examinations. The physical examinations often include tests of physical strength and the ability to move quickly and easily. To work in these jobs, persons should

Figure 5.9

Example from the GOE continued

04.01

have the physical condition to use firearms or work on dangerous missions. Personal investigations are made of all applicants.

Most police departments prefer to hire people who have a high school education or its equal. However, some departments hire people if they have worked in related activities, such as guarding or volunteer police work.

Jobs with federal law enforcement agencies usually require a college degree. For example, to be hired as customs enforcement officer, a degree or three years of related work experience is required. FBI Special Agents are required to have a degree in law or accounting. Accounting degrees should be coupled with at least one year of related work experience.

Most management or supervisory jobs in this group are filled from within the ranks. Promotions are usually based on written examinations and job performance and are usually subject to civil service laws.

What else should you consider about these jobs?

Most workers in these jobs are on call any time their services are needed. They may work overtime during emergencies. Many of these jobs expose workers to great physical danger.

If you think you would like to do this kind of work, look at the job titles listed on the following pages. Select those that interest you and read their definitions in the Dictionary of Occupational Titles.

Safety and Law Enforcement

04.01.01 Managing

Fire Marshal (any ind.) 373.167-018

Guard, Chief (any ind.) 372.167-014

Manager, Internal Security (bus. ser.) 376.137-010

Battalion Chief (gov. ser.) 373.167-010

Captain, Fire-Prevention Bureau (gov. ser.) 373.167-014

Commanding Officer, Homicide Squad (gov. ser.) 375.167-010

Commanding Officer, Investigation Division (gov. ser.) 375.167-014

Commanding Officer, Motorized Squad (gov. ser.) 375.163-010

Correction Officer, Head (gov. ser.) 372.137-010

Deputy, Court (gov. ser.) 377.137-018

Deputy Sheriff, Chief (gov. ser.) 377.167-010

Deputy Sheriff, Commander, Civil Division (gov. ser.) 377.137-010

Deputy Sheriff, Commander, Criminal and Patrol Division (gov. ser.) 377.137-014

Desk Officer (gov. ser.) 375.137-014

Detective Chief (gov. ser.) 375.167-022

Fire Assistant (gov. ser.) 169.167-022

Fire Captain (gov. ser.) 373.134-010

Fire Chief (gov. ser.) 373.117-010

Harbor Master (gov. ser.) 375.167-026

Jailer, Chief (gov. ser.) 372.167-018

Launch Commander, Harbor Police (gov. ser.) 375.167-030

Park Superintendent (gov. ser.) 188.167-062

Police-Academy Instructor (gov. ser.) 375.227-010

Police Captain, Precinct (gov. ser.) 375.167-034

Police Chief (gov. ser.) 375.117-010

Police Commissioner (gov. ser.) 188.117-118

Police Inspector (gov. ser.) 1375.267-026

Police Lieutenant, Patrol (gov. ser.) 375.167-038

Police Sergeant, Precinct (gov. ser.) 1375.133-010

Sheriff, Deputy, Chief (gov. ser.) 377.117-010

Traffic Lieutenant (gov. ser.) 375.167-046

Traffic Sergeant (gov. ser.) 375.137-026

Special Agent-in-Charge (r.r. trans.) 376.167-010

04.01.02 Investigating

Investigator, Private (bus. ser.) 376.267-018

Fire Warden (forestry) 452.167-010

Accident-Prevention-Squad Police Officer (gov. ser.) 375.263-010

Customs Patrol Officer (gov. ser.) 168.167-010

Deputy Sheriff, Civil Division (gov. ser.) 377.667-018

Detective (gov. ser.) 375.267-010

Detective, Narcotics and Vice (gov. ser.) 375.267-014

Fire Marshal (gov. ser.) 373.267-014

Fish and Game Warden (gov. ser.) 379.167-010

Investigator, Narcotics (gov. ser.) 375.267-018

Investigator, Vice (gov. ser.) 375.267-022

Pilot, Highway Patrol (gov. ser.) 375.163-014

Police Inspector (gov. ser.) 1375.267-030

Police Officer (gov. ser.) 1375.263-014

Sheriff, Deputy (gov. ser.) 377.263-010

Special Agent (gov. ser.) 375.167-042

Special Agent, Customs (gov. ser.) 188.167-090

State-Highway Police Officer (gov. ser.) 375.263-018

Wildlife Agent, Regional (gov. ser.) 379.137-018

Investigator (light, heat, & power) 376.367-022

Figure 5.9 continued

The Military Career Guide

The *Military Career Guide* provides descriptive information on various military jobs. It is a compendium of military occupational and training information. It is a single reference source for the diverse employment and training opportunities in the Army, Navy, Air Force, Marine Corps and Coast Guard. It contains descriptions of 134 enlisted and officer military occupations arranged in 12 broad career groups.

This resource cross references occupations with DOT codes so information on related civilian occupations in the DOT can be accessed. Also, if a student has taken the Armed Services Vocational Aptitude Battery (ASVAB), they can identify military careers related to the highest composite scores.

Example from the *Military Career Guide*

RESPIRATORY THERAPISTS

Army
Navy
Air Force

Asthma and emphysema (lung disease) patients suffer from breathing difficulties. Victims of heart failure, stroke, or near drowning may also have long-term breathing problems. Respiratory therapy is provided to patients with breathing problems. Respiratory therapists help patients regain breathing functions through therapy, exercise, and medication.

What They Do

Respiratory therapists in the military perform some or all of the following duties:

- Assist in reviving patients who are no longer breathing or whose hearts have stopped
- Operate and monitor respiratory therapy equipment during treatment
- Observe and record patient response to respiratory therapy
- Clean, sterilize, and maintain respiratory therapy equipment
- Instruct patients in breathing exercises to help clear lungs of fluids
- Instruct patients on how to operate home respiratory therapy equipment

Physical Demands

Respiratory therapists may have to lift and position patients for treatment.

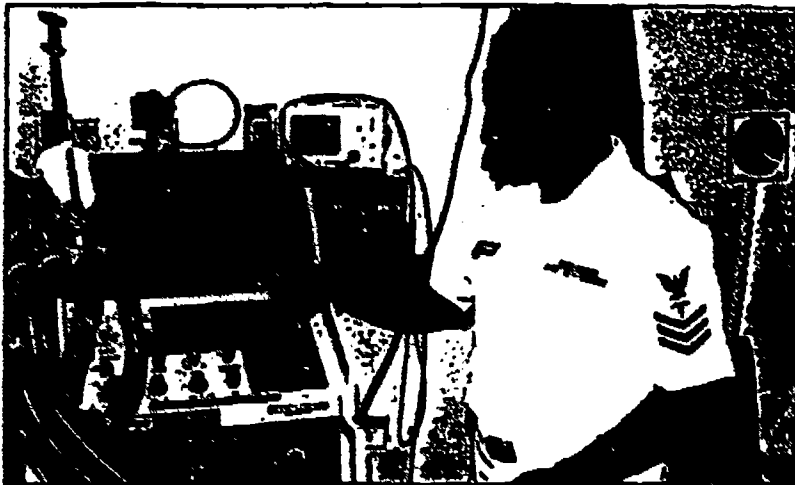
Helpful Attributes

Helpful school subjects include general science, chemistry, and biology. Helpful attributes include:

- Ability to deal with stressful situations
- Ability to respond quickly to emergencies
- Interest in helping others

Work Environment

Respiratory therapists usually work in hospitals or clinics. In combat situations, they may work in mobile field hospitals.



Training Provided

Job training consists of between 32 and 41 weeks of classroom instruction, including practice in providing respiratory therapy. Course content typically includes:

- Procedures for operating respiratory therapy equipment
- Methods for providing emergency care
- Techniques of respiratory therapy

Further training occurs on the job and through advanced courses.

Civilian Counterparts

Civilian respiratory therapists work in hospitals and clinics and for ambulance services. Their duties are similar to those of military respiratory therapists. Civilian respiratory therapists may be called inhalation therapists or pulmonary therapists.

Opportunities

The military has about 310 respiratory therapists. On average, the services need about 30 new therapists each year. After job training, therapists provide treatment under the direction of a supervisor. With experience, they advance from caring for patients with minor respiratory problems to caring for patients with more serious problems. They may also supervise and direct the work of other respiratory therapists.

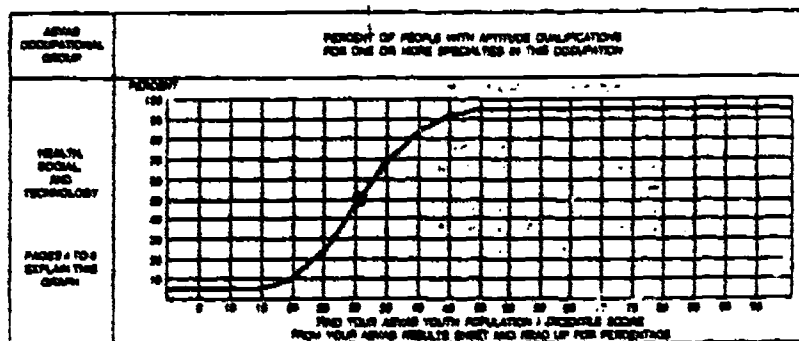


Figure 5.10

Standard Occupational Classification (SOC)

Since 1982, many federal government occupational publications have been organized and cross referenced by the *Standard Occupational Classification (SOC)* codes. Aside from the SOC's value as a classification system, the SOC groups occupations on the basis of the type of work performed. Therefore, it is a valuable reference for identifying occupations related to each other.

If a client is interested in a particular occupation, but finds the industry or work setting in that locale is undesirable, he or she can identify occupations that are similar in nature, but may cross into other industry settings through the SOC. The SOC has been particularly useful for research and classification purposes but its value in practical applications is unclear.

5233 Health Aides, Except Nursing

This unit group includes occupations involving performing various duties under the direction of trained medical practitioners, such as mixing pharmaceutical preparations, issuing medicines, labeling and storing supplies; assisting during physical examination of patients, giving specified office treatments, and keeping patients' records; preparing treatment room, inventory of supplies and instruments; preparing, bottling and sterilizing infant formulas. May also assist in physical and other therapy treatment.

Pharmacy helper.....	573.....	074387010
Physical therapist assistant.....	573.....	076224010
Occupational therapy assistant.....	573.....	076364010
Laboratory assistant, blood and plasma.....	323-573.....	078687010
Chiropractor assistant.....	573.....	079364010
Medical assistant.....	573.....	079367010
Podiatric assistant.....	573.....	079374018
Physical therapy aide.....	573.....	355354010
Ambulance attendant.....	573.....	355374010
Occupational therapy aide.....	573.....	355377010
Morgue attendant.....	573.....	355667010
Graves registration specialist.....	574.....	355687014
Formula-room worker.....	313-573.....	520487014
Ambulance driver.....	573.....	913683010

Note. See page 9 for explanation of job title codes.

Figure 5.11

Decision Area: A Work Setting (Business or Industry)

Information about a work setting is commonly referred to as information about an industry. It is another dimension of career decision making. Clients and students need some understanding of the environment in which occupations exist. Each type of industry or business has a different working environment even though they may employ persons in similar occupations. For example, a truck driver who works for a moving and storage company will usually have to load and unload the trucks by hand whereas an over-the-road driver may not touch the freight. Likewise, the skills and work of a plumber will vary considerably between residential and industrial work settings. The type of industry or business is a major influence on the specific job conditions, pay, benefits and numerous other conditions of employment.

Students or clients making career decisions who have seriously considered a specific occupational area may be more interested in certain industrial sectors. They may be interested in working at a particular local firm, such as a health care facility or a local bank. To assist, the career development facilitator needs to identify the industry and help research its occupational staffing pattern. This process will reveal the types of occupations employed in that industry, giving the client a choice of occupations to investigate.

Two references can be used to collect this information: *The Standard Industrial Classification (SIC) Manual* and *Occupational Information Systems (OIS)*.

Standard Industrial Classification (SIC)

The SIC can help identify industries and places of employment. It is a system by which an industry, or work setting, is classified. It gives a detailed description of the industrial division and major groups classified within each industrial division.

The manual does not list specific companies by name but it is an excellent resource for understanding the industrial makeup of a city, community or state. Similar industries are listed together, which makes it helpful when determining which firms might employ people with skills or work experiences obtained from a similar industry.

Example from the SIC

319

Major Group 54.—FOOD STORES

The Major Group as a Whole

This major group includes retail stores primarily engaged in selling food for home preparation and consumption. Establishments primarily engaged in selling prepared foods and drinks for consumption on the premises are classified in Major Group 53, and stores primarily engaged in selling packaged beers and liquors are classified in Industry 5921.

Industry Group No.	Industry No.			
541	GROCERY STORES			
	5411	Grocery Stores		
		Stores, commonly known as supermarkets, food stores, and grocery stores, primarily engaged in the retail sale of all sorts of canned foods and dry goods, such as tea, coffee, spices, sugar, and flour; fresh fruits and vegetables; and fresh and prepared meats, fish, and poultry.		
		<table border="0" style="width: 100%;"> <tr> <td style="width: 50%; vertical-align: top;"> Convenience food stores—retail Food markets—retail Frozen food and freezer plants, except meat—retail </td> <td style="width: 50%; vertical-align: top;"> Grocery stores, with or without fresh meat—retail Supermarkets, grocery—retail </td> </tr> </table>	Convenience food stores—retail Food markets—retail Frozen food and freezer plants, except meat—retail	Grocery stores, with or without fresh meat—retail Supermarkets, grocery—retail
Convenience food stores—retail Food markets—retail Frozen food and freezer plants, except meat—retail	Grocery stores, with or without fresh meat—retail Supermarkets, grocery—retail			
542	MEAT AND FISH (SEAFOOD) MARKETS, INCLUDING FREEZER PROVISIONERS			
	5421	Meat and Fish (Seafood) Markets, Including Freezer Provisioners		
		Establishments primarily engaged in the retail sale of fresh, frozen, or cured meats, fish, shellfish, and other seafoods. This industry includes establishments primarily engaged in the retail sale, on a bulk basis, of meat for freezer storage and in providing home freezer plans. Meat markets may butcher animals on their own account, or they may buy from others. Food locker plants primarily engaged in renting locker space for the storage of food products for individual households are classified in Industry 4222. Establishments primarily engaged in the retail sale of poultry are classified in Industry 5499.		
		<table border="0" style="width: 100%;"> <tr> <td style="width: 50%; vertical-align: top;"> Fish markets—retail Frozen food plants, meat—retail Freezer provisioners, meat—retail Frozen food and freezer plants, meat—retail </td> <td style="width: 50%; vertical-align: top;"> Meat markets—retail Seafood markets—retail </td> </tr> </table>	Fish markets—retail Frozen food plants, meat—retail Freezer provisioners, meat—retail Frozen food and freezer plants, meat—retail	Meat markets—retail Seafood markets—retail
Fish markets—retail Frozen food plants, meat—retail Freezer provisioners, meat—retail Frozen food and freezer plants, meat—retail	Meat markets—retail Seafood markets—retail			
543	FRUIT AND VEGETABLE MARKETS			
	5431	Fruit and Vegetable Markets		
		Establishments primarily engaged in the retail sale of fresh fruits and vegetables. They are frequently found in public or municipal markets or as roadside stands. However, establishments which grow fruits and vegetables and sell them at roadside stands are classified in Agriculture, Major Group 01.		
		<table border="0" style="width: 100%;"> <tr> <td style="width: 50%; vertical-align: top;"> Fruit markets and stands—retail Produce markets and stands—retail </td> <td style="width: 50%; vertical-align: top;"> Vegetable markets and stands—retail </td> </tr> </table>	Fruit markets and stands—retail Produce markets and stands—retail	Vegetable markets and stands—retail
Fruit markets and stands—retail Produce markets and stands—retail	Vegetable markets and stands—retail			

Figure 5.12

Occupational Information Systems (OIS)

The OIS can help identify the industries that employ a given occupation and will identify the occupations employed within a given industry (the staffing patterns) and their demand/supply outlook.

Some State Occupation Information Coordinating Committees (SOICCs) have created computerized Occupational Information Systems (OIS) programs which use data from the Occupational Employment Statistics Program (OES). These databases may provide information on the industries that employ a specified occupation, as well as the occupations employed by a specific industry.

Industry/Occupational Relationships Route

<Chc:1 3>

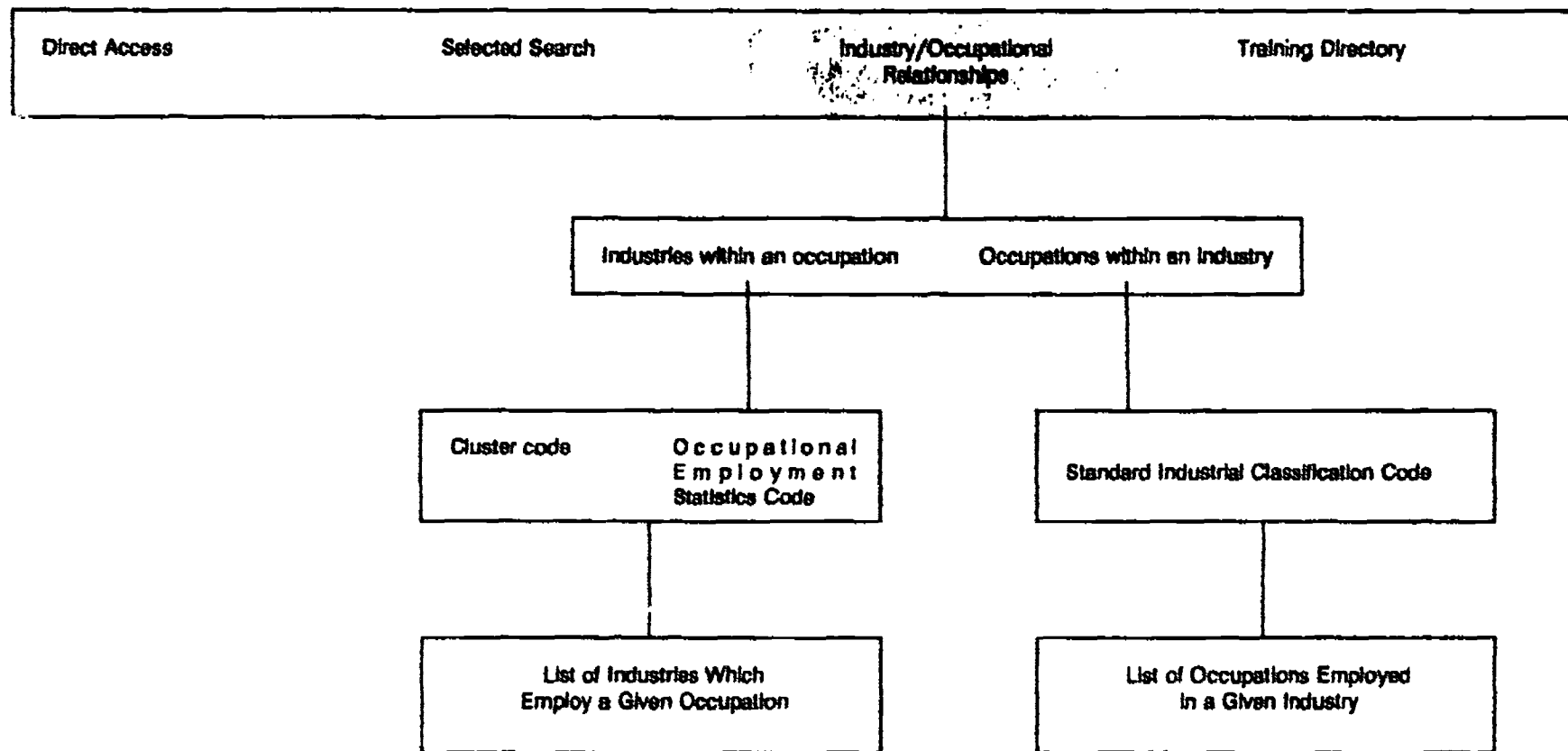


Figure 5.13

For example, Figure 5.14 illustrates where the occupations Bookkeeping and Accounting Clerks are employed in North Dakota industries.

NORTH DAKOTA OCCUPATIONAL INFORMATION SYSTEM		
MATRIX REPORT		
NORTH DAKOTA CLUSTER TITLE: BOOKKEEPING & ACCOUNTING CLERKS		Press Return
		NORTH DAKOTA CLUSTER # 6850
))) OES OCCUPATION: [55339305] -- BOOKKEEPING & ACCOUNTING CLERKS (Employment Level = 6111)		
SIC - CODE	-- STANDARD INDUSTRIAL CLASSIFICATION (SIC) TITLE	PERCENT OF OES EMPLOYMENT
581	EATING AND DRINKING PLACES, TOTAL	2.89 %
517	PETROLEUM AND PETROLEUM PRODUCTS	3.82 %
588	MACHINERY, EQUIPMENT, AND SUPPLIES	3.85 %
515	FARM-PRODUCT RAW MATERIALS	4.37 %
983	LOCAL GOVERNMENT, EXC. EDUCATION	4.57 %
682	COMMERCIAL AND STOCK SAVINGS BANKS	4.89 %
882	SELF EMPLOYED AND UNPAID FAMILY WORKERS	8.98 %

[FIGURE 27] INDUSTRIES WITHIN AN OCCUPATION REPORT {sample}

Figure 5.14

The codes and titles on the left are *Standard Industrial Codes (SIC)* and select groupings of businesses by common activity or product. The percent of employment shown in the right column is a percent of the total employment, which is listed in the heading of the report, "Employment Level." To determine the number of Accounting and Bookkeeping Clerks within a given industry, multiply the percent times the Employment Level. For example, Eating and Drinking places employ 177 (2.8% of 6111) bookkeeping and accounting clerks in North Dakota. Farm Products and Raw Materials employ 267 Accounting and Bookkeeping Clerks (4.37% of 6111).

Decision Area: A Geographic Area

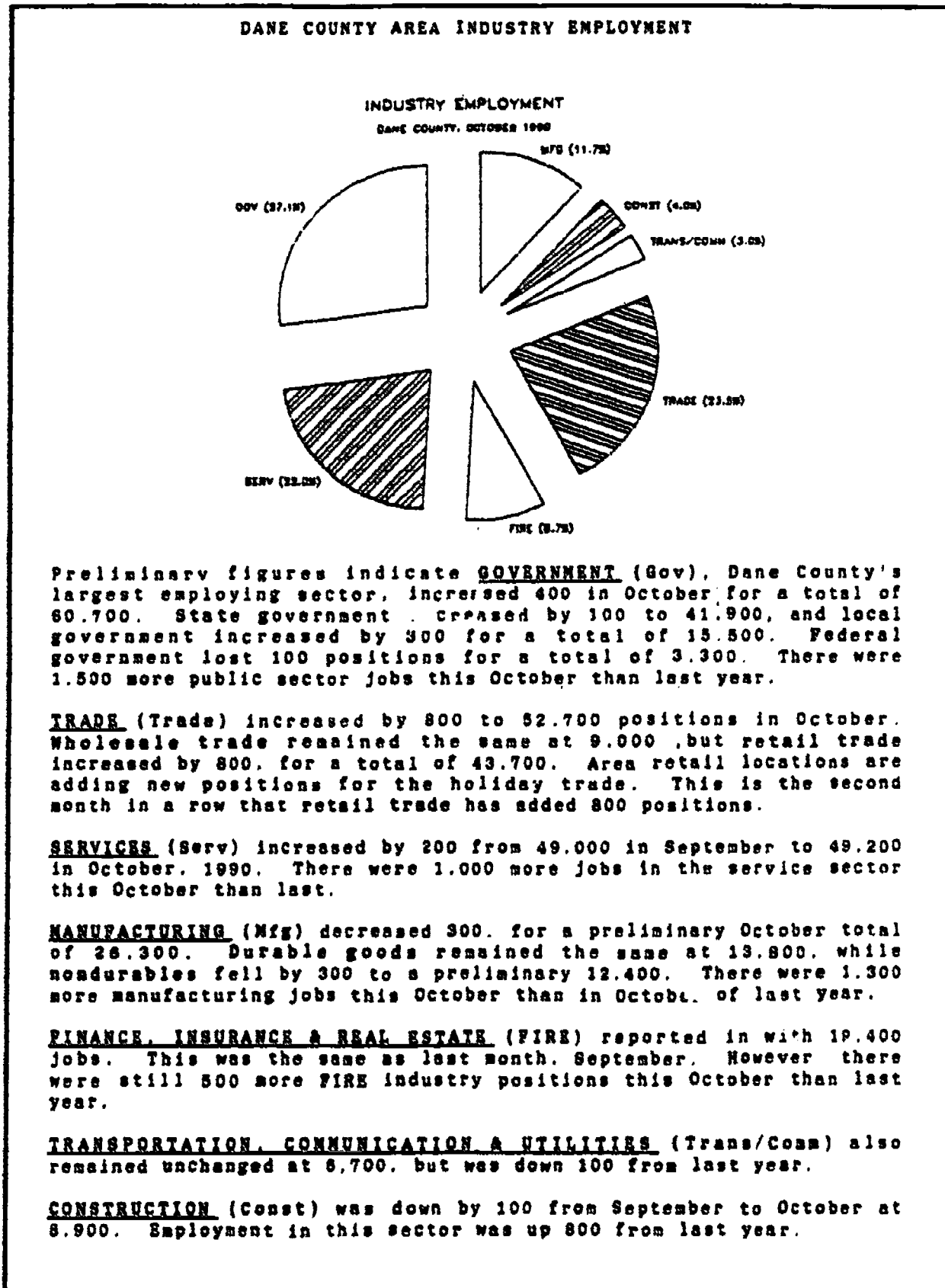
This decision area allows the student or client to explore career options based on a preference for a particular geographic area. For those who are undecided or unenthusiastic about any particular occupational or industrial sector, the most important starting point may be geography. Where would the person prefer to live? Sometimes people begin to explore options by considering family ties, or the weather, and maybe the unemployment rate. In other cases, the attraction may be family or friends.

To illustrate the importance of geographic location, consider the following. McKee and Froeschle (1985) found that two metropolitan

areas of roughly the same population, Pittsburgh and Dallas-Fort Worth, differed significantly in their opportunities for clerical workers. Pittsburgh anticipated that 195,303 clerical workers would be employed in 1985, while Dallas-Fort Worth anticipated 362,100. This discrepancy was accounted for by the industrial structure of the areas. Dallas-Fort Worth is a regional service center and financial hub. Therefore, it has a greater need for clerical support positions. Conversely, Pittsburgh has more of a manufacturing economy and has a lower demand for clerical positions.

When looking for information by geographic area, many have noted that in contrast to the abundance of national and state information, local information is often the most difficult to find. There are several sources that provide details on the local economy and industrial structure. Two of these sources, CIDS and OIS provide local data that is easily accessed. *County Business Patterns* is another example that identifies the number of business establishments in each industry and the distribution of business establishments by employee size.

Example of Local Information



Data produced in cooperation with the Bureau of Labor Statistics-USDOL.

Figure 5.15

The State Employment Security Agency (SESA) also publishes industrial employment data for individual counties.

Another source, often overlooked, is the Yellow Pages in the local telephone directory. With this resource, one can determine the number of industries in the local area and can easily find employer names, addresses and telephone numbers.

Using Crosswalks to Ease the Process

Accessing the most useful information can be complicated for the novice because there are many data collection programs that provide career and labor market information. In addition, there are many different ways to classify and organize that information.

Within the descriptions of various resources, it was pointed out that one could move from one system to another, such as from the *Military Career Guide* to the DOT. This movement is called "crosswalking." It enables the user to move back and forth across the various classification systems in order to analyze and compare occupations. To maximize our use of information, these bridges, or crosswalks, between the various information systems are actually conversion tables between the different systems. Crosswalks are similar to a dictionary, which moves us from an English word to its Spanish equivalent; they allow the user to translate one information system to another. An example of a crosswalk can be found in a CIDS. The system links occupational information with related educational and training requirements "behind the scenes." These two pieces of information are linked in the system and presented in a single profile so the user has a more complete picture of the occupation.

For more information on crosswalks, contact the National Crosswalk Service Center at the Iowa SOICC office (515/242-4890).

Labor Force, Industry and Occupational Projections

The following is an example of career and labor market information that can be used to enhance career decision making. These labor force, industry and occupational projections can provide insight into how the nation's work force and economy are likely to grow, e.g., which occupations will grow the fastest, which will decline, which will provide the greatest number of new jobs, and which occupations have the highest and lowest turnover rates.

It is relatively easy to describe the demographics of the labor supply, but projecting which way the economy will go and which industries and occupations will grow and decline is not as predictable. A combination of statistical techniques and human judgment is required.

The major goal of this section in Module 5 is to present information that describes and analyzes significant trends in the labor force, economy, industries and occupations that will have an impact on the effectiveness of career decision making. The results of the Bureau of Labor Statistics (BLS) projections from 1990-2005 are included. Much of the information is available at the state and local levels through offices of labor market information and SOICCs.

Several trends need to be noted as the projections are discussed:

- **the rate of economic growth will be much slower;**
- **women's share of the labor force will continue to increase;**
- **the work force will age;**
- **employment will be concentrated in a few industries, namely the services and retail trade industries;**
- **workers with the most education and training will have the best opportunities; and**
- **technology will continue to change the structure of employment and how work is done.**

These trends have far reaching implications for how we direct our clients and students to make educational and career choices.

These projections were made given the following assumptions about general economic or social conditions:

- **Work patterns will not change significantly over the projections period, meaning that the average workweek will not change markedly.**
- **Broad social and educational trends will continue. For example, women will continue to be a large portion of the labor force.**
- **There will be no major war.**
- **There will be no significant change in the size of the Armed Forces.**
- **Fluctuations in economic activity due to the business cycle will continue to occur.**

These projections cover the period 1990-2005. An expanded version of the projections can be found in the November 1991 issue of the *Monthly Labor Review* or in *Outlook 1990-2005*, published by the Bureau of Labor Statistics.

OUTLOOK 1990 - 2005

Bureau of Labor Statistics Office of Employment Projections

- The BLS projections program is carried out in the Office of Employment Projections.
- The program began with the development of career guidance information to assist returning veterans from World War II.
- Projections for a 10- to 15-year period have been developed every other year since the mid-1960's.
- The latest set of projections, which covers the 1990 - 2005 period, is the subject of this slide presentation.

Figure 5.16

A four step analysis leads to the projections. Components analyzed are:

- Labor Force
- Economy
- Industry
- Occupations

Sequence of Projection Procedures to Determine Occupational Demand

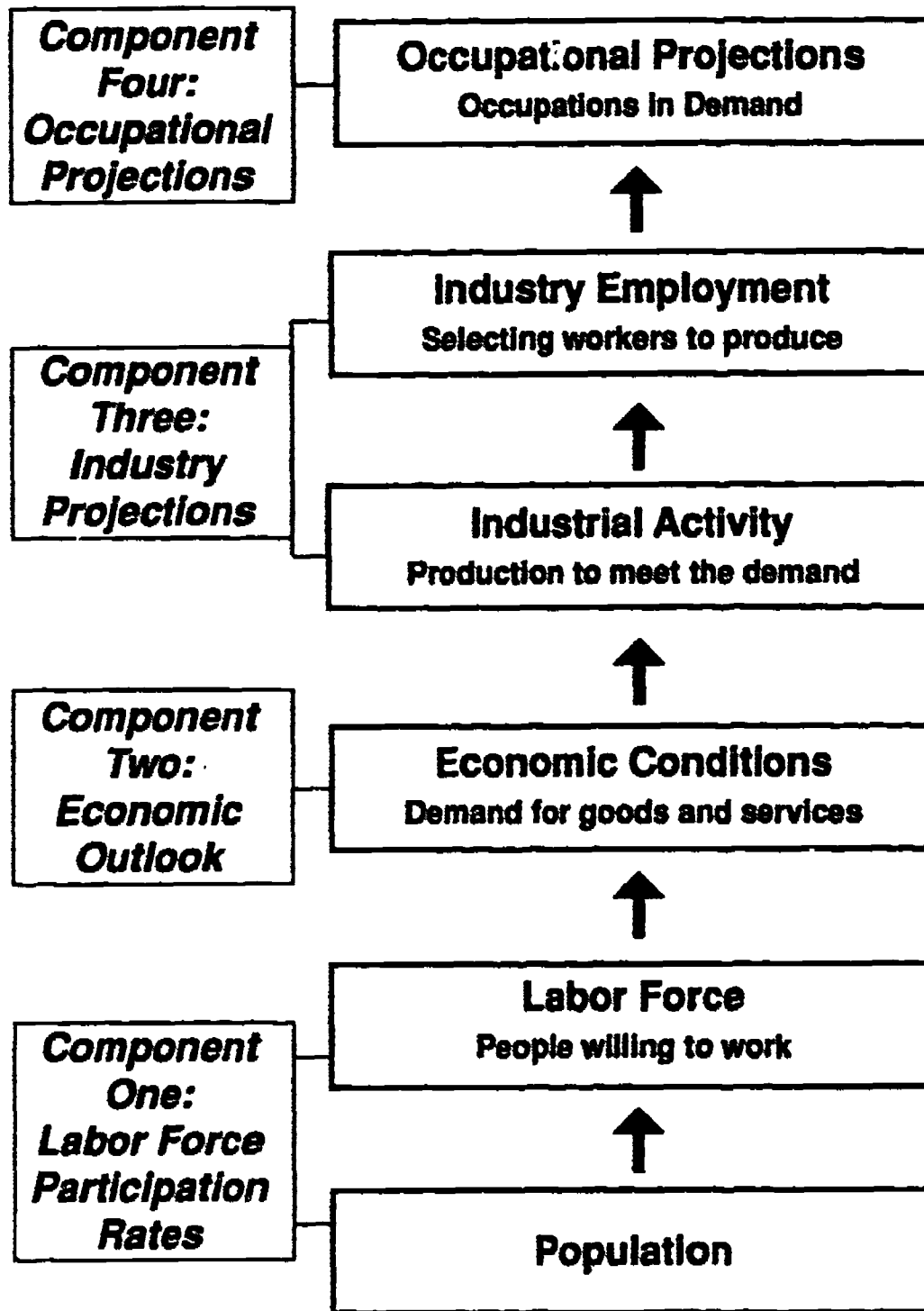


Figure 5.17

Component One: Labor Force Participation Rates

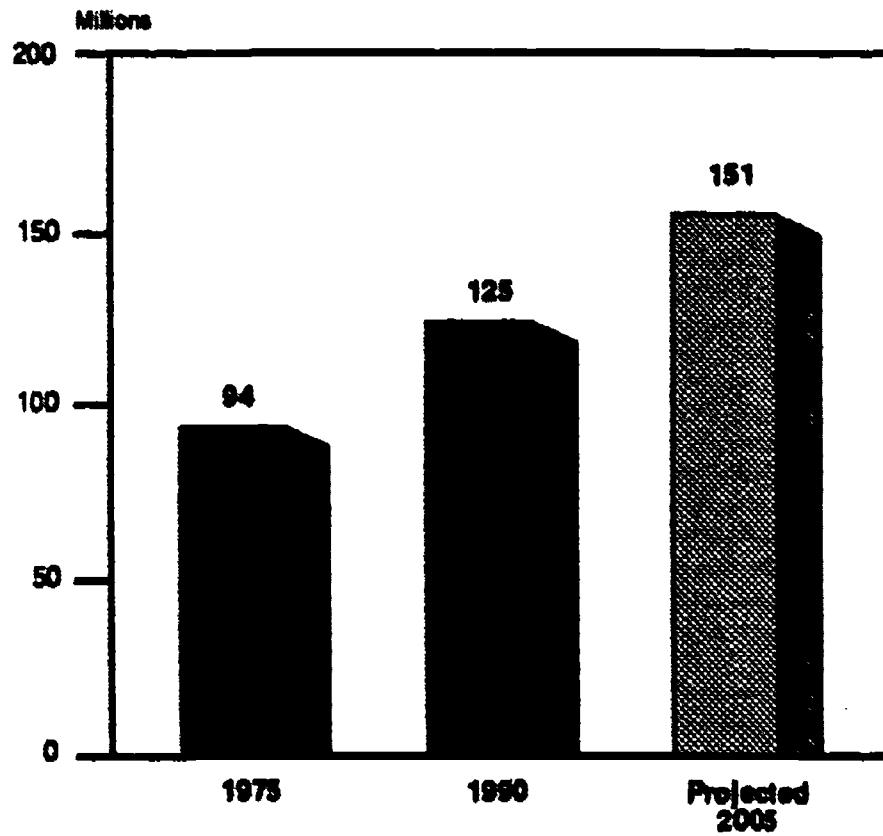
OUTLOOK: 1990-2005

- ***Labor force***
- ◆ **Economic outlook**
- ◆ **Industry employment**
- ◆ **Occupational employment**

Figure 5.18

The labor force is expected to expand but at a slower pace than in 1975-90.

Labor force will continue to grow

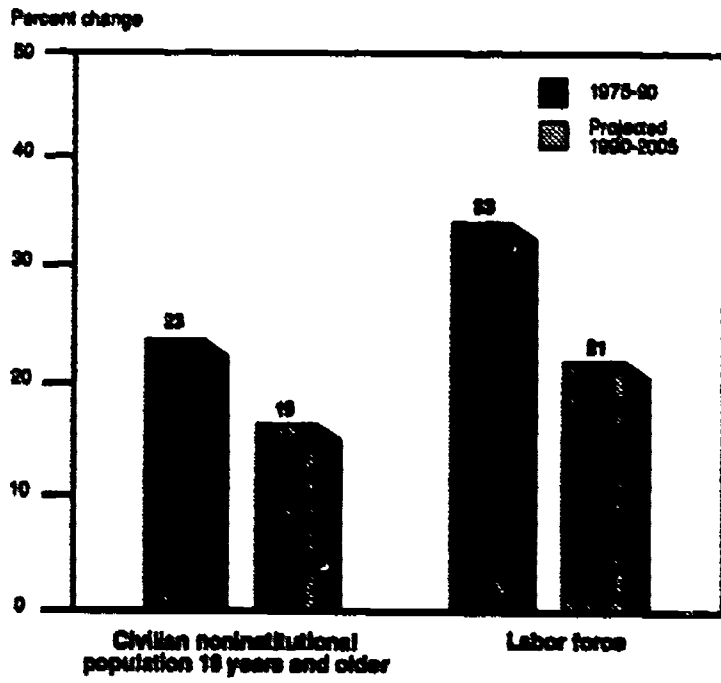


SOURCE: Bureau of Labor Statistics

Figure 5.19

The declining birthrate contributes to this slowing of the growth rate.

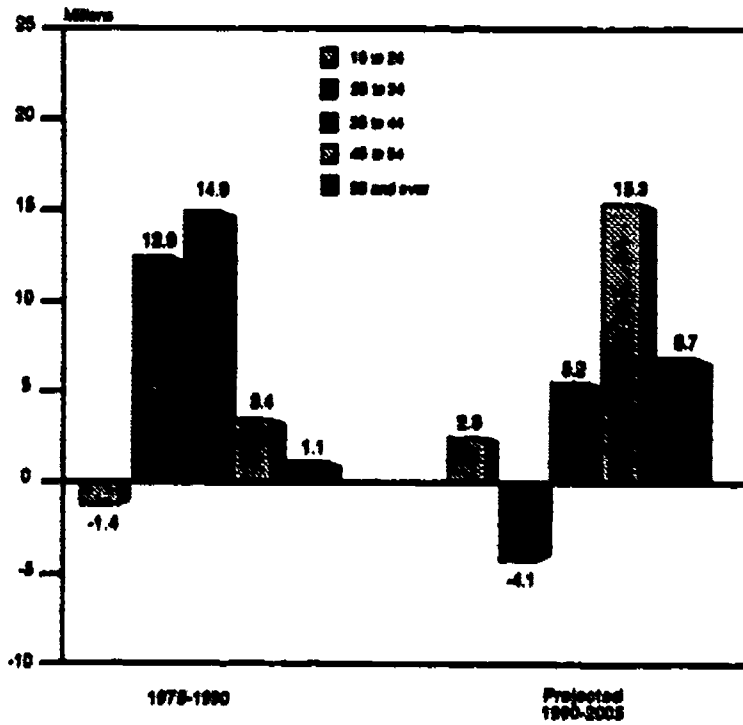
Labor force grows faster than population



SOURCE: Bureau of Labor Statistics

Figure 5.20

Labor force growth by age

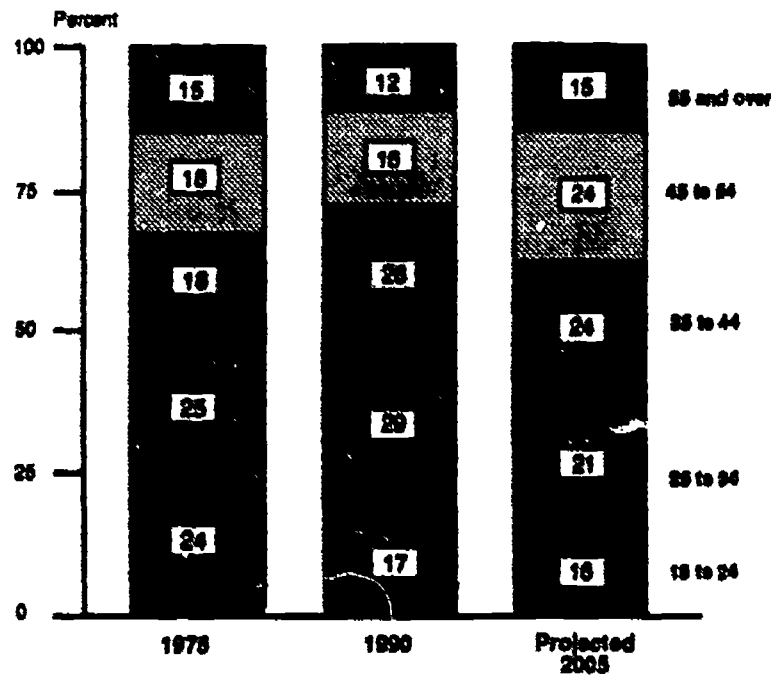


SOURCE: Bureau of Labor Statistics

Figure 5.21

The baby boom, declining birth rates in the 1960s, and children of the baby boom cohort will continue to have an impact on the labor force.

Age distribution of labor force is changing

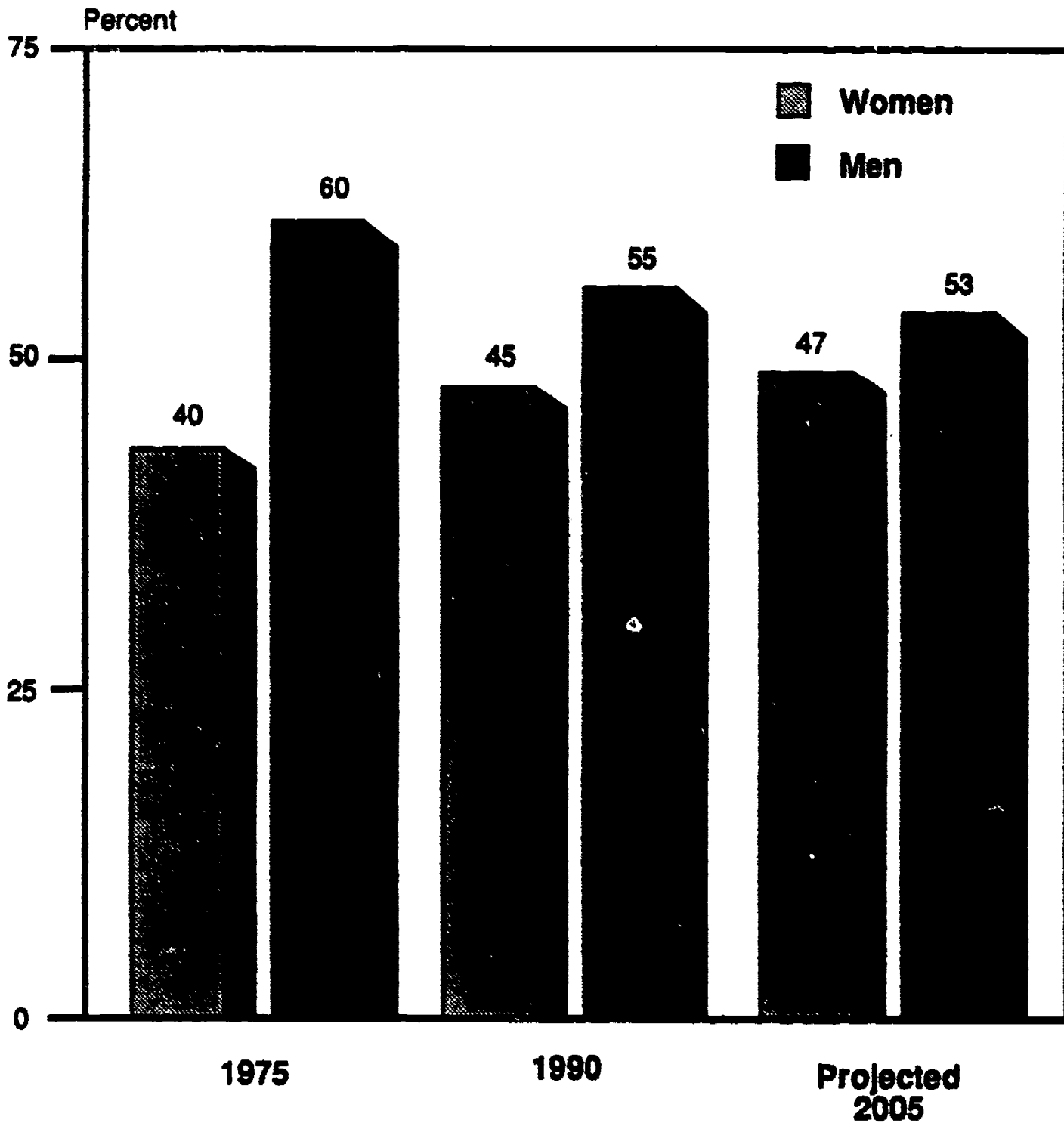


SOURCE: Bureau of Labor Statistics

Figure 5-22

Although rates of labor force growth are projected to drop for both men and women, labor force growth for women will be greater, reflecting their increasing labor force participation.

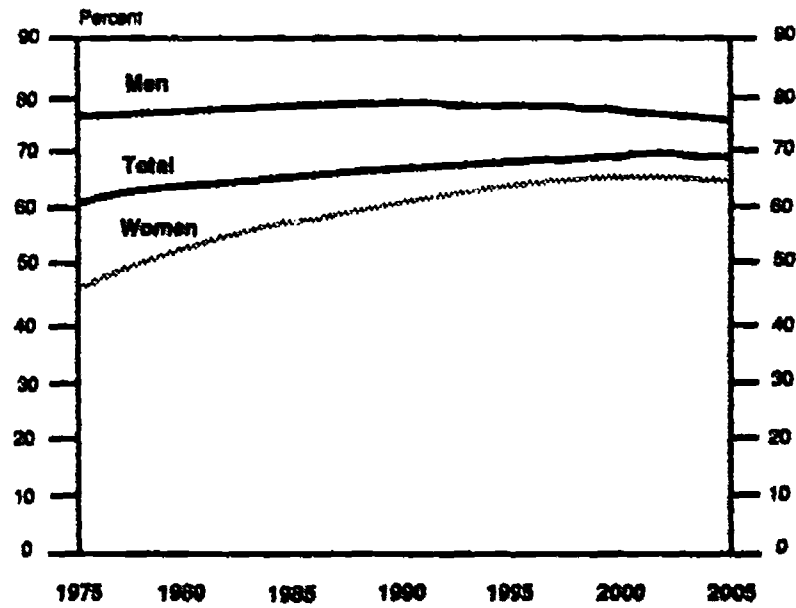
Women's share of labor force is growing



SOURCE: Bureau of Labor Statistics

Figure 5.23

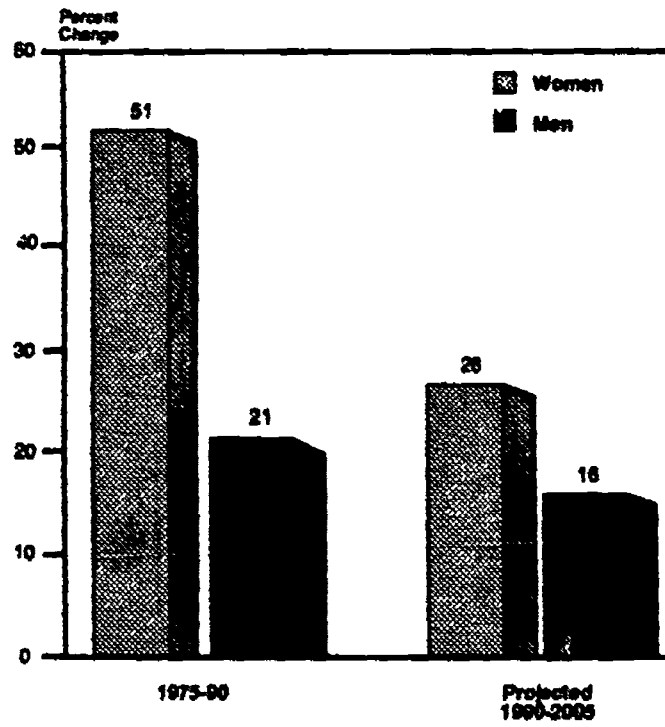
Labor force participation rate trends differ for men and women



SOURCE: Bureau of Labor Statistics

Figure 8.24

Labor force growth slows more for women than men

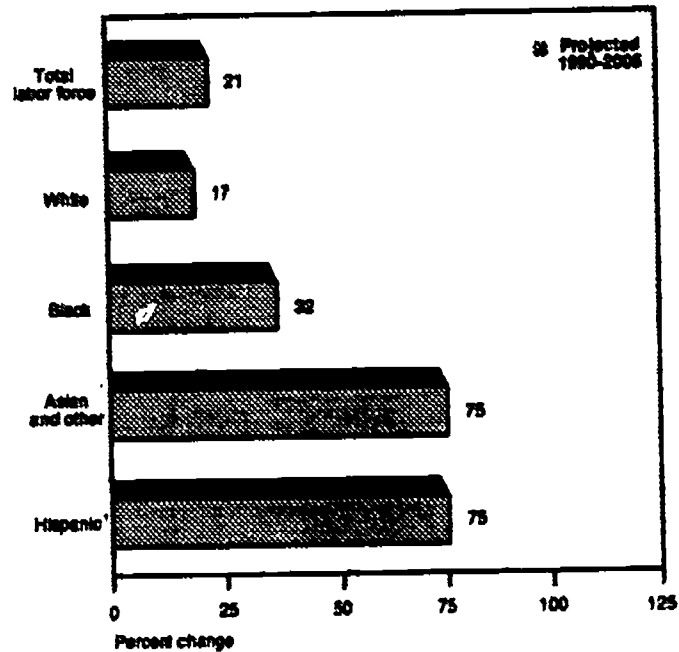


SOURCE: Bureau of Labor Statistics

Figure 8.25

Minorities' share of the labor force will continue to grow. Some of the entrants into the labor market will be needed to replace those leaving the labor force. The others represent a net growth of 26 million workers. Despite these increases, the majority of the entrants will continue to be white, non-Hispanic, men and women.

Labor force growth by race and Hispanic origin

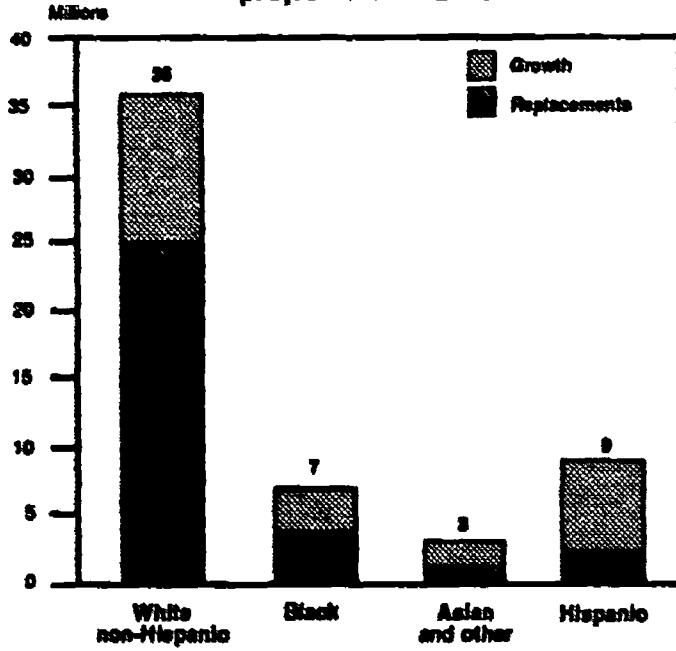


SOURCE: Bureau of Labor Statistics

Figure 5-26

1 Persons of Hispanic origin may be of any race

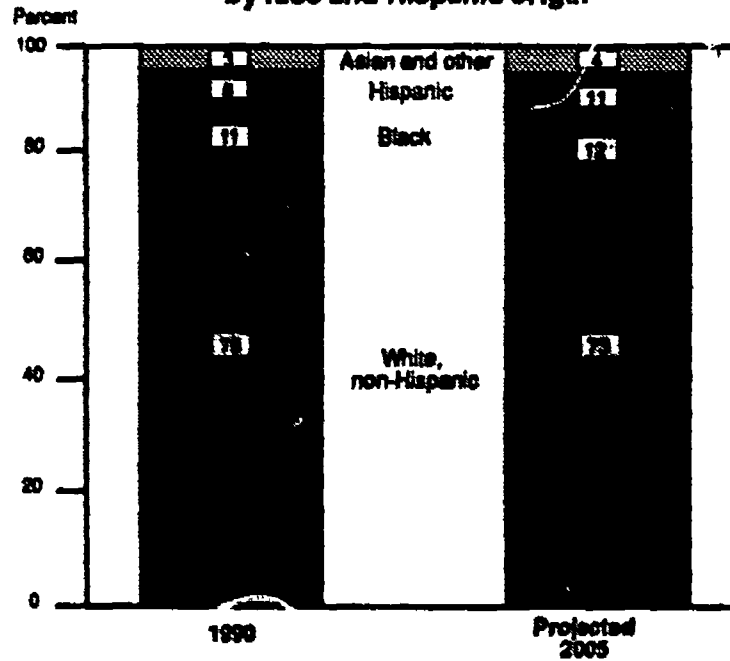
Labor force entrants by race and Hispanic origin, projected 1990-2005



SOURCE: Bureau of Labor Statistics

Figure 5.27

Distribution of the labor force by race and Hispanic origin



SOURCE: Bureau of Labor Statistics

Figure 5.28

Component Two: Economic Outlook

OUTLOOK: 1990-2005

- Labor force
- **Economic outlook**
- Industry employment
- Occupational employment

Figure 5.29

After the labor force participation rates are projected, the second stage is to determine the sum total of all economic activity in the United States, also known as the aggregate economic activity. This includes real gross national product (GNP), and the distribution of GNP across five major demand and income categories:

1. personal consumption expenditures (buying a car);
2. gross private domestic investment (business investment in equipment);
3. exports (e.g., selling wheat to Russia);
4. imports (buying oil from OPEC); and
5. government (spending on Medicaid).

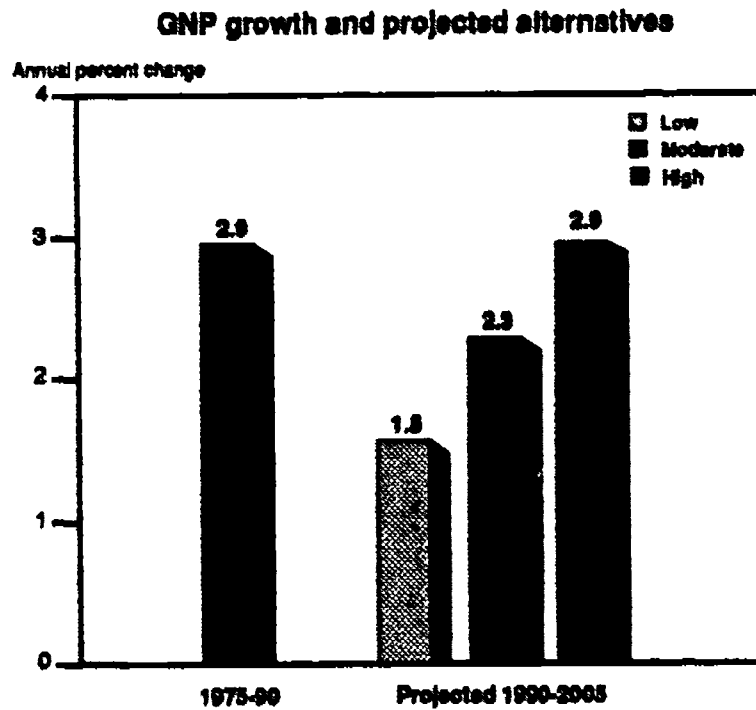
Through this analysis, the relative wealth of the nation is determined. Estimates of demand are then made by industry, both public and private.

Summary results from recent analyses show:

- Goods and services purchased by individuals will grow at about the same rate as total GNP and will continue to be the largest component of demand.
- Investment will continue to grow faster than total GNP.
- Exports will grow faster than imports.

- Federal government expenditures will continue to decline due to cuts in defense expenditures.
- State and local government expenditures are the only major category that will increase faster during this period than it did from 1975 to 1990.

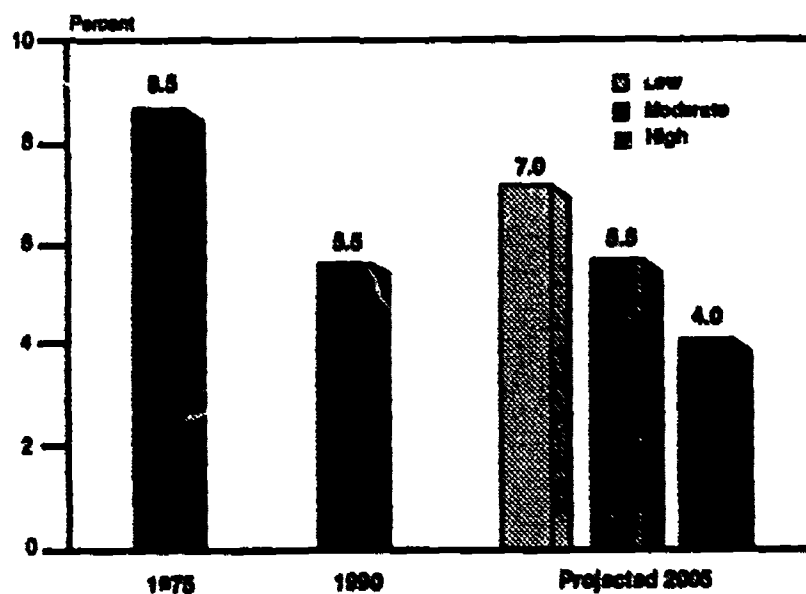
According to a moderate growth scenario, the unemployment rate is assumed to remain unchanged and the rate of GNP growth is expected to grow. This is attributable to the slowing labor force growth.



SOURCE: Bureau of Labor Statistics

Figure 5-30

Unemployment rates and projected alternatives



SOURCE: Bureau of Labor Statistics

Figure 5.21

Component Three: Industry Projections

This component analyzes the trends in employment by industry.

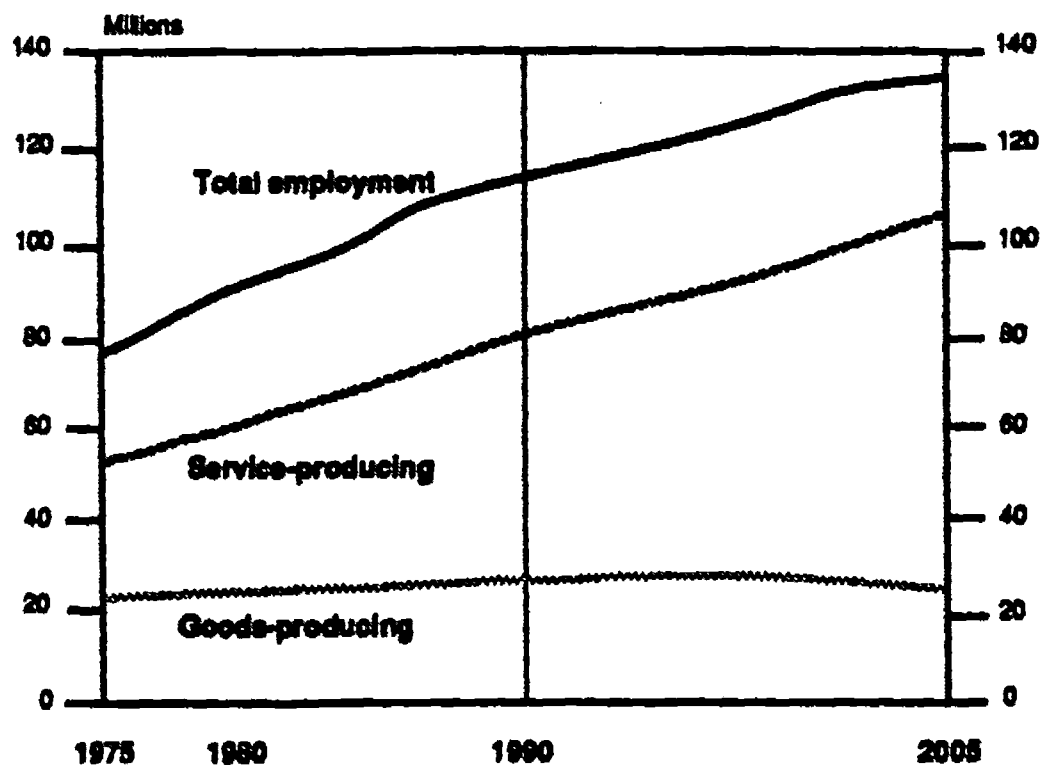
OUTLOOK: 1990-2005

- Labor force
- Economic outlook
- **Industry employment**
- Occupational employment

Figure 5.22

It is projected that of the 26 million new jobs by the year 2005, the service-producing sector will dominate and the goods-producing sector will remain stable. Total employment is projected to increase but at a slower rate. This slowdown reflects the slower growth of the labor force.

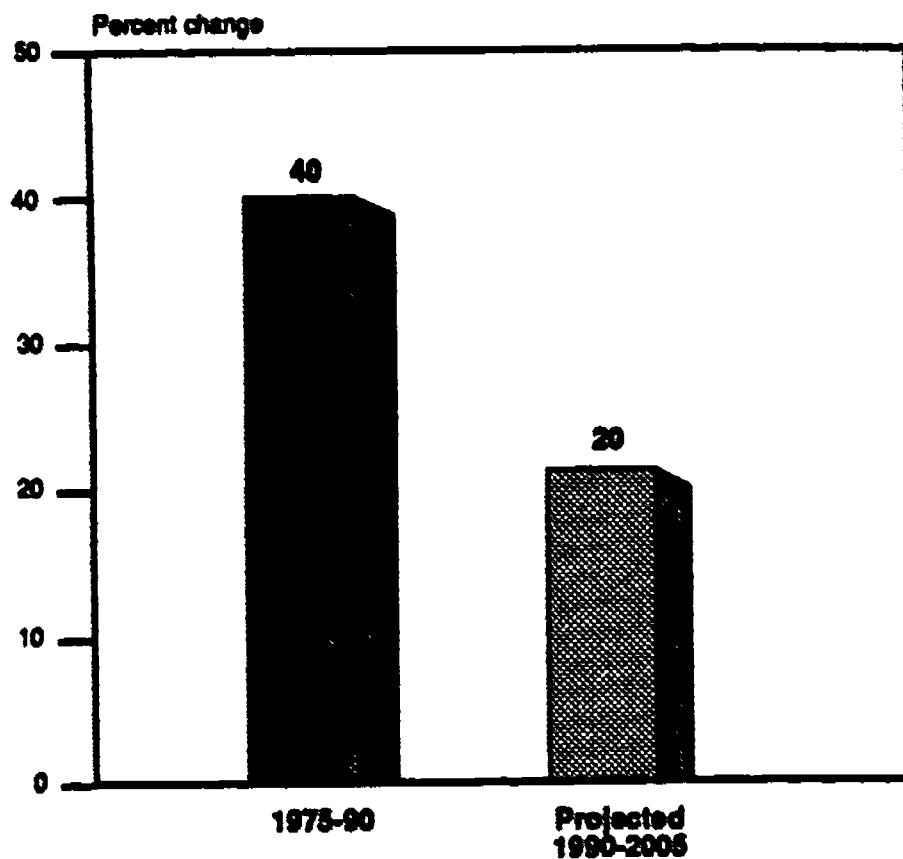
**Employment growth by major economic sectors,
1975-2005**



SOURCE: Bureau of Labor Statistics

Figure 5.33

Employment growth, 1975-90 and projected 1990-2005

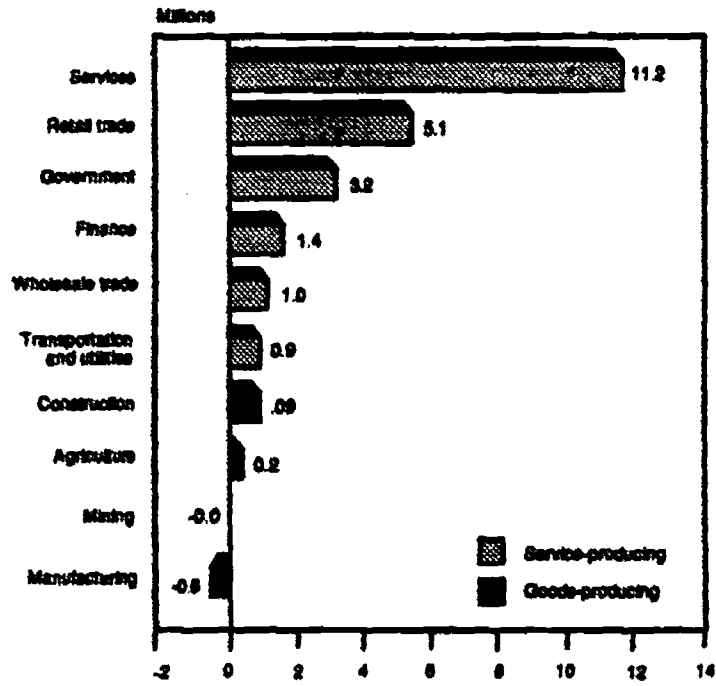


SOURCE: Bureau of Labor Statistics

Figure 5-34

Employment gains will continue to be in service producing industries.

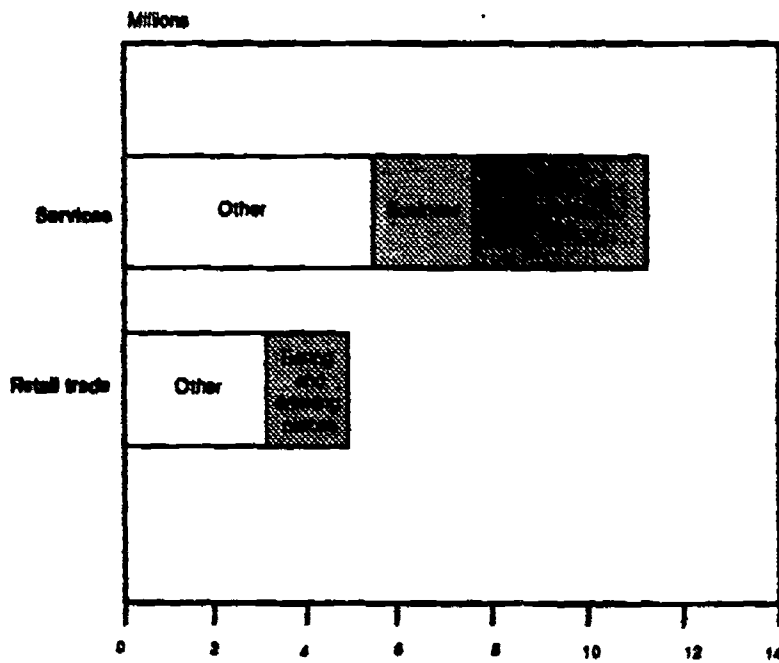
Job growth in services outpaces other industry divisions, 1990-2005



SOURCE: Bureau of Labor Statistics

Figure 5.26

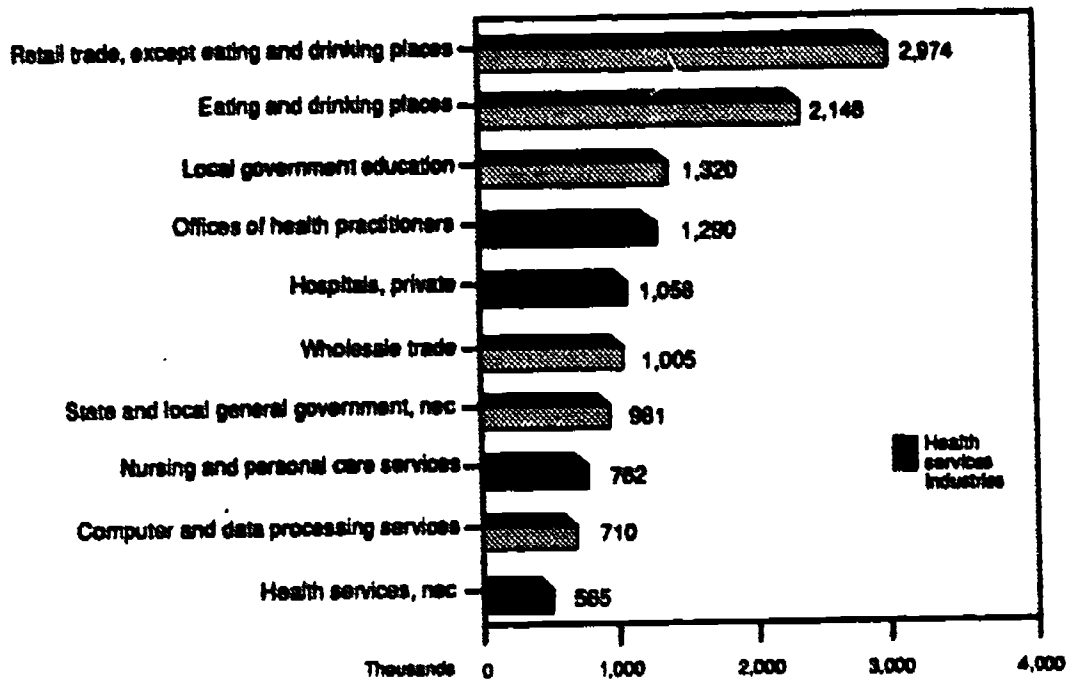
Employment growth within services and retail trade will be concentrated, 1990-2005



SOURCE: Bureau of Labor Statistics

Figure 5.28

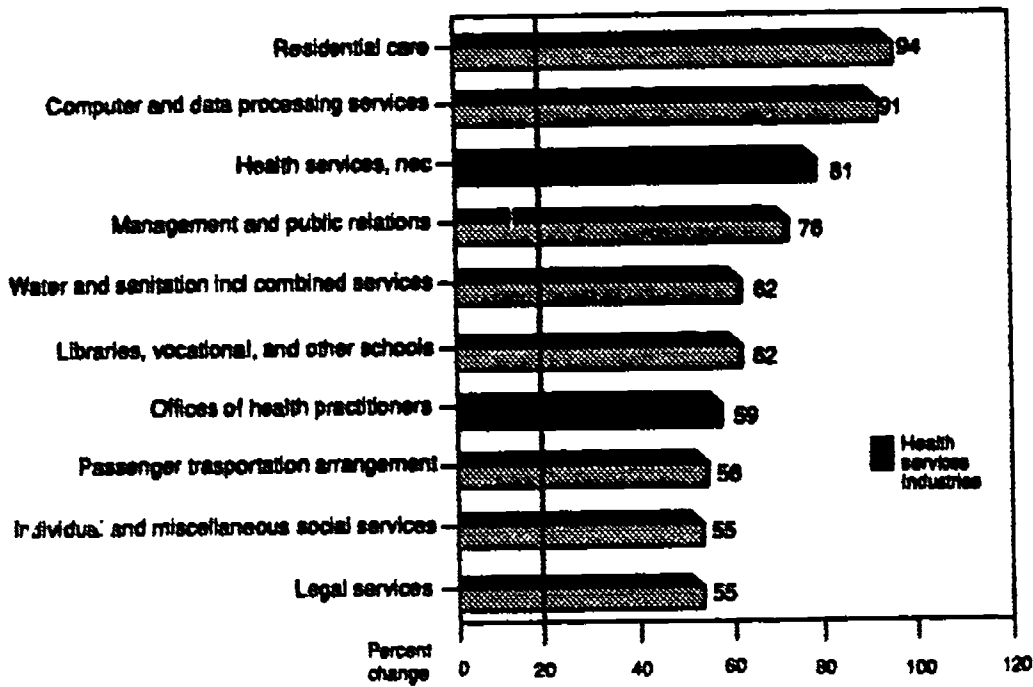
Industries adding the most jobs, 1990-2005



SOURCE: Bureau of Labor Statistics

Figure 5.37

Industries with the fastest job growth, 1990-2005

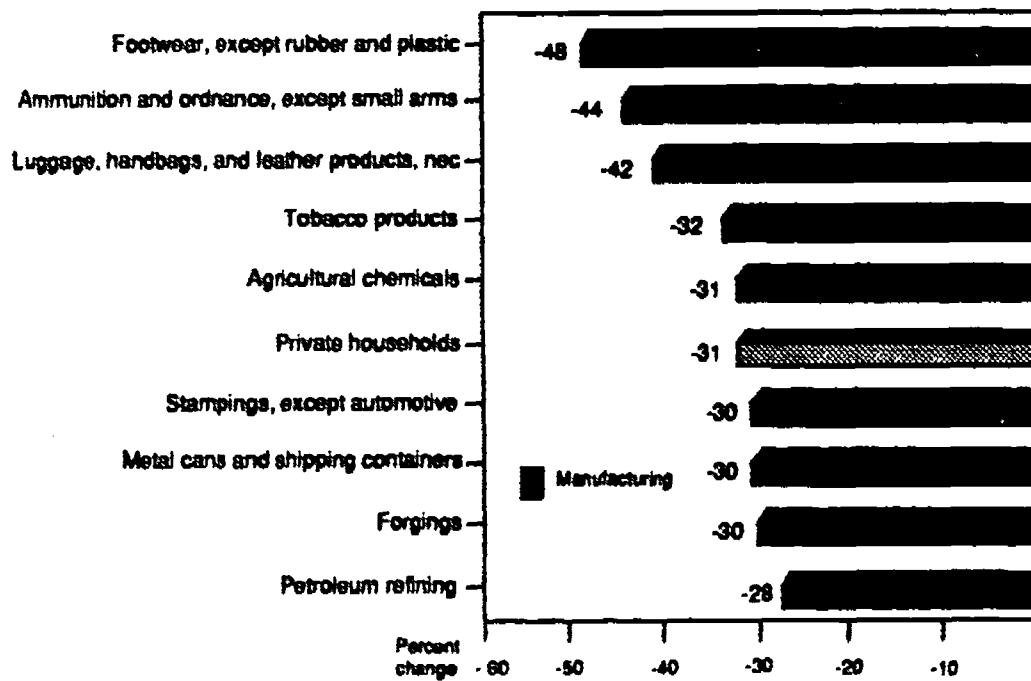


SOURCE: Bureau of Labor Statistics

Figure 5.38

The majority of the most rapidly declining industries, in terms of employment, will be in manufacturing.

Industries with the most rapid job declines, 1990-2005

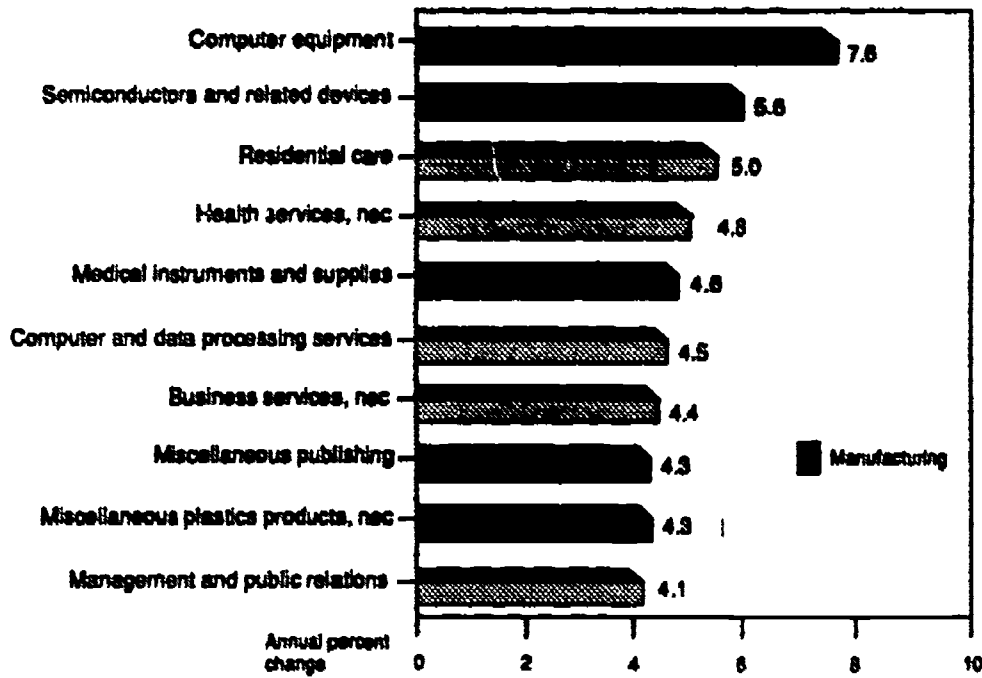


SOURCE: Bureau of Labor Statistics

Figure 5.30

Another way to talk about industries is to look at their output. High technology manufacturing industries will be among the fastest growing in terms of output.

Industries with the fastest growing output, 1990-2005

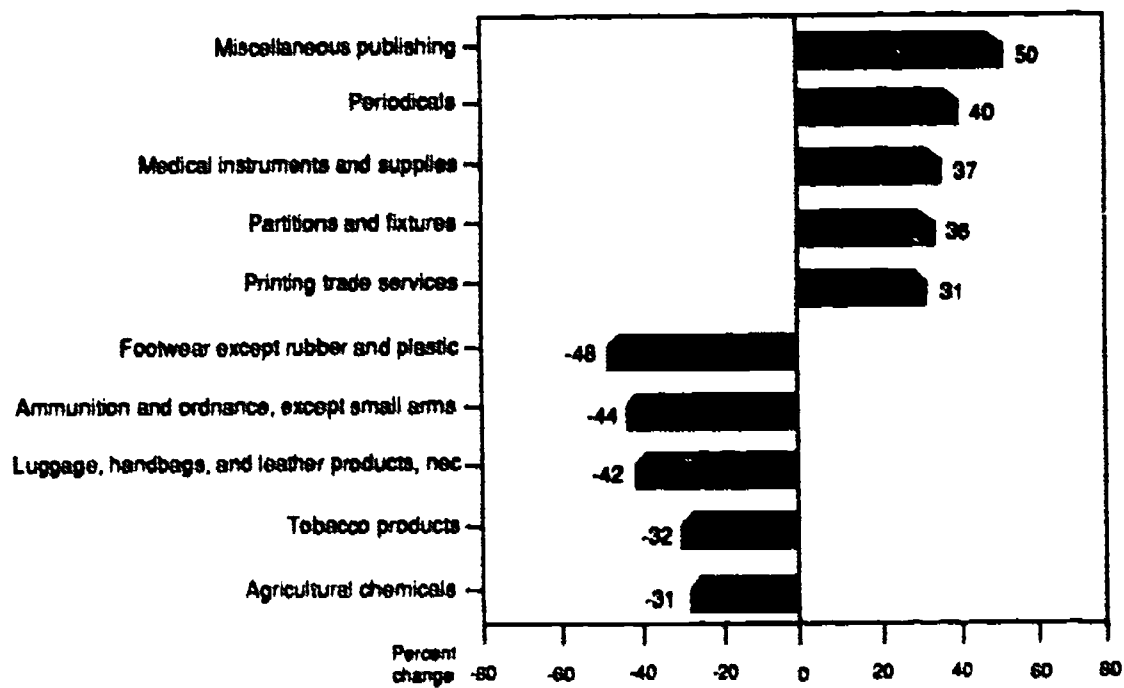


SOURCE: Bureau of Labor Statistics

Figure 5.40

Even though total manufacturing employment will decline slightly, a handful of manufacturing industries are projected to experience some employment growth.

Fastest growing and declining manufacturing industries, 1990-2005



SOURCE: Bureau of Labor Statistics

Figure 5.41

Component Four: Occupational Projections

The fourth major phase of the projections process is to develop employment projections for approximately 500 occupations. An industry-occupation matrix is used to project employment in these occupations for over 200 industries.

OUTLOOK: 1990-2005

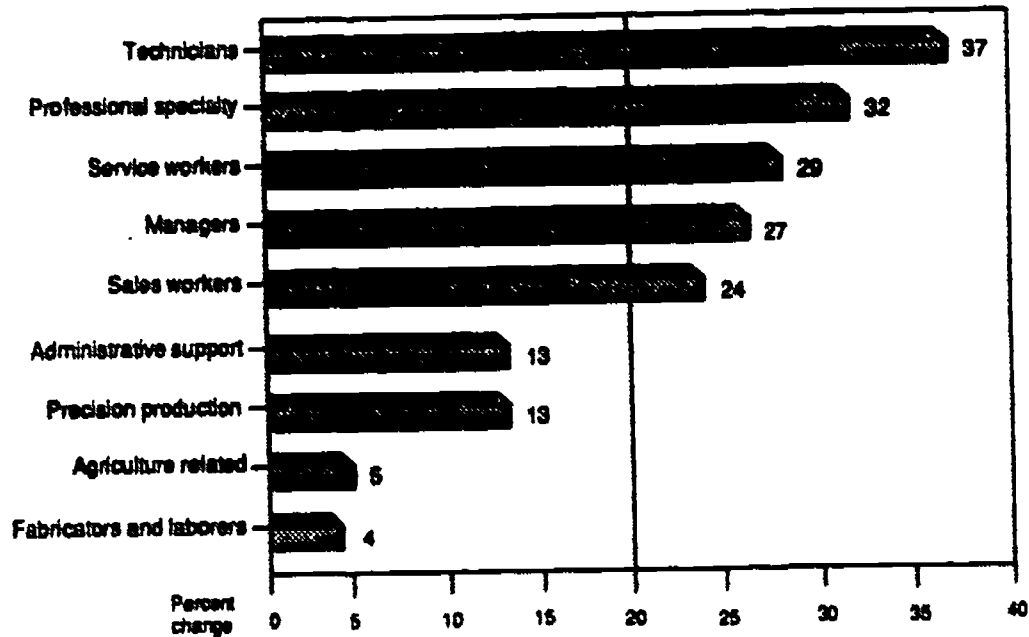
- Labor force
- Economic outlook
- Industry employment
- ***Occupational employment***

Figure 5.42

It is projected that jobs will be available for workers at all educational levels, but those with the most education and training will enjoy the best opportunities. The occupational groups with the highest levels of educational attainment will experience faster than average growth. They are:

- technicians,
- professional specialty occupations, and
- managers.

Employment growth by major occupational group, 1990-2005

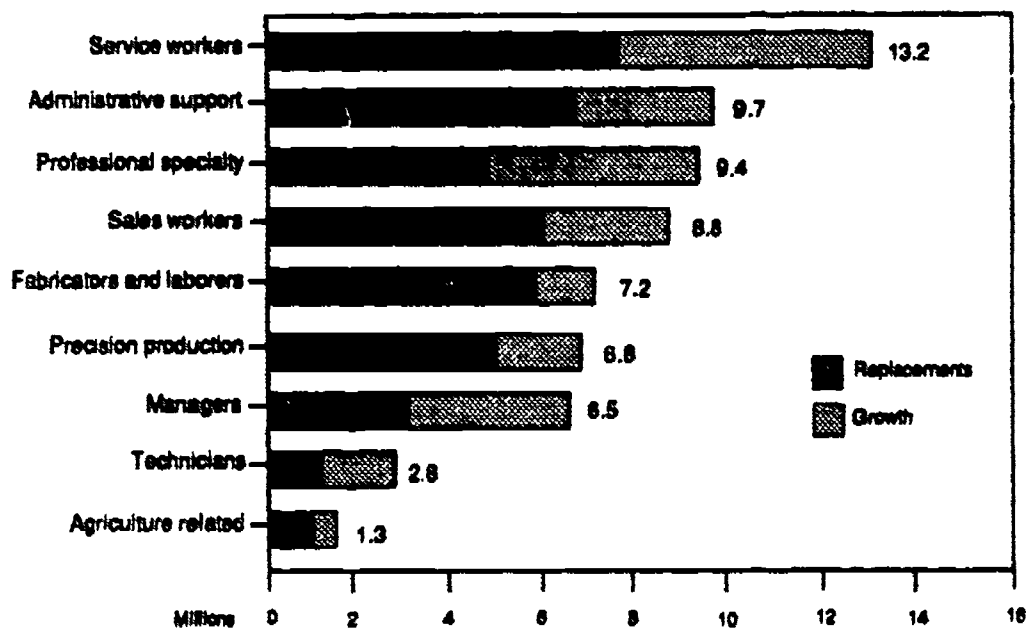


SOURCE: Bureau of Labor Statistics

Figure 5-43

In contrast, precision production operators and agriculture related occupations have the lowest proportion of workers with college training, and these occupations are projected to have the slowest employment growth.

Job openings for replacement and growth, 1990-2005

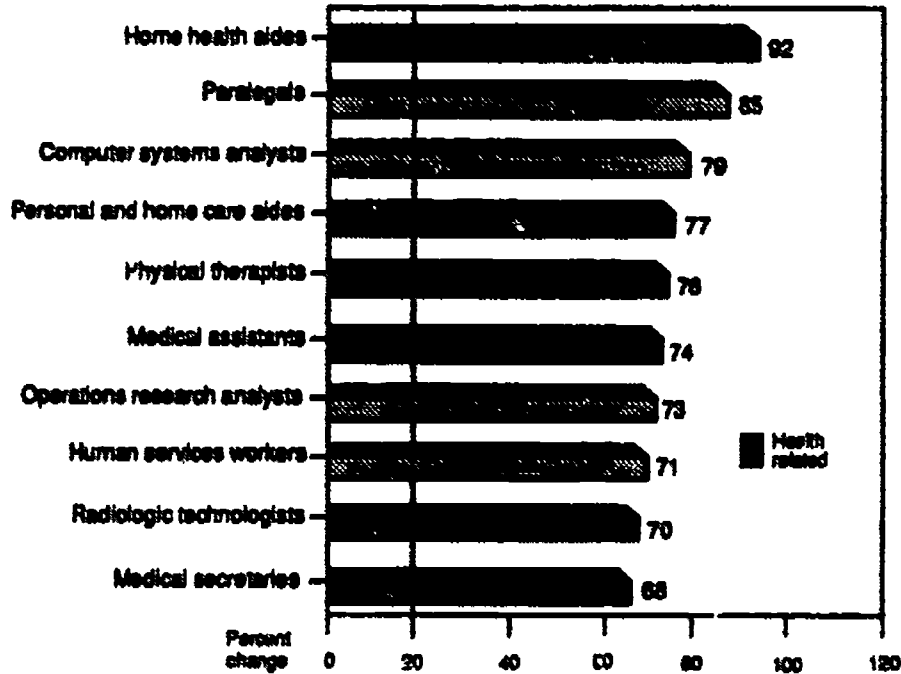


SOURCE: Bureau of Labor Statistics

Figure 5-44

Due to rapid growth in the health services industry, many growing occupations are health-related.

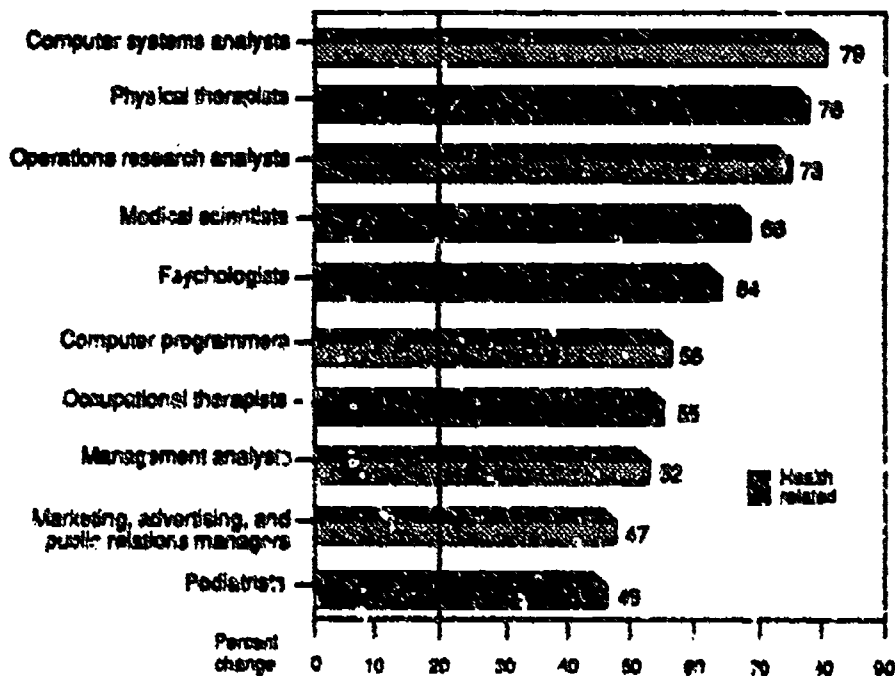
Fastest growing occupations, 1990-2005



SOURCE: Bureau of Labor Statistics

Figure 3.45

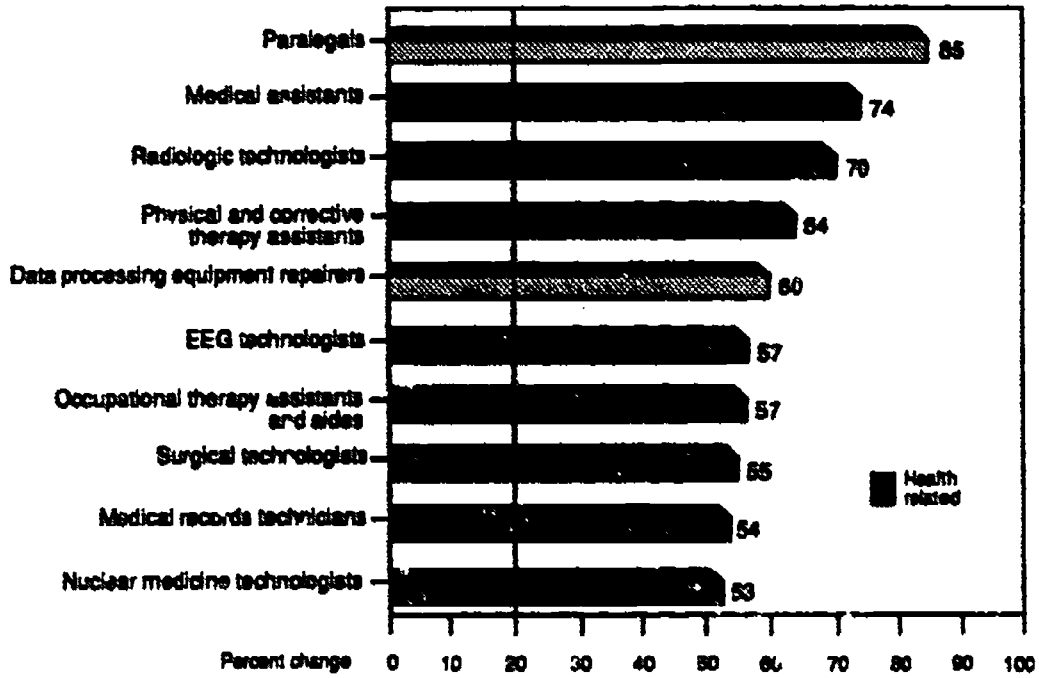
Fastest growing occupations generally requiring at least a bachelor's degree, 1990-2005



SOURCE: Bureau of Labor Statistics

Figure 4.48

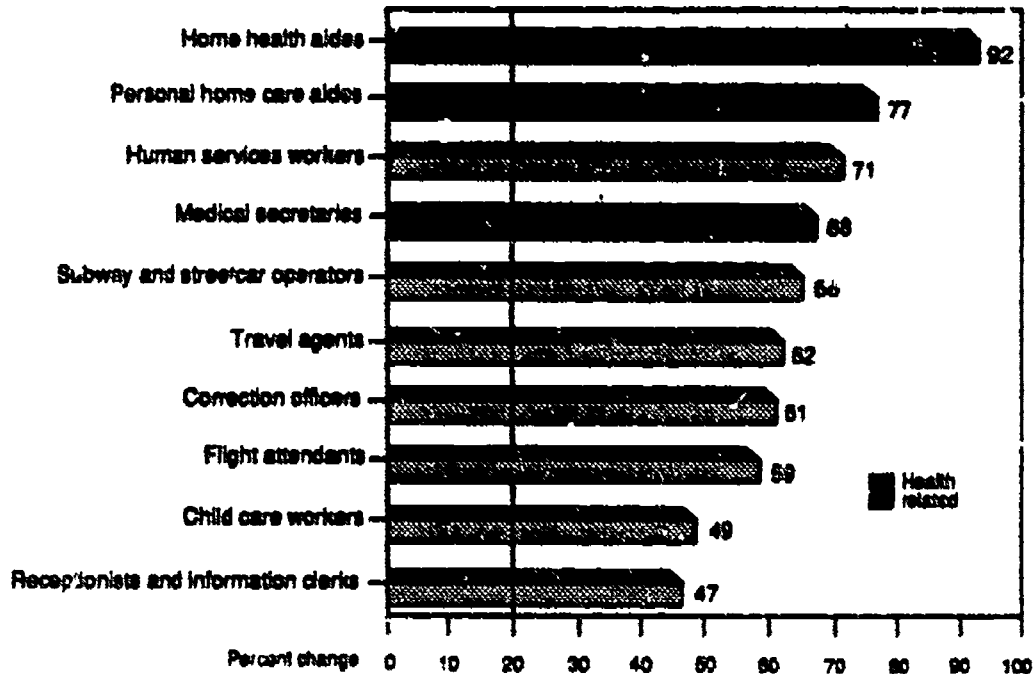
Fastest growing occupations generally requiring post-secondary training but less than a college degree, 1990-2005



SOURCE: Bureau of Labor Statistics

Figure 5.47

Fastest growing occupations generally requiring no more than a high school diploma, 1990-2005

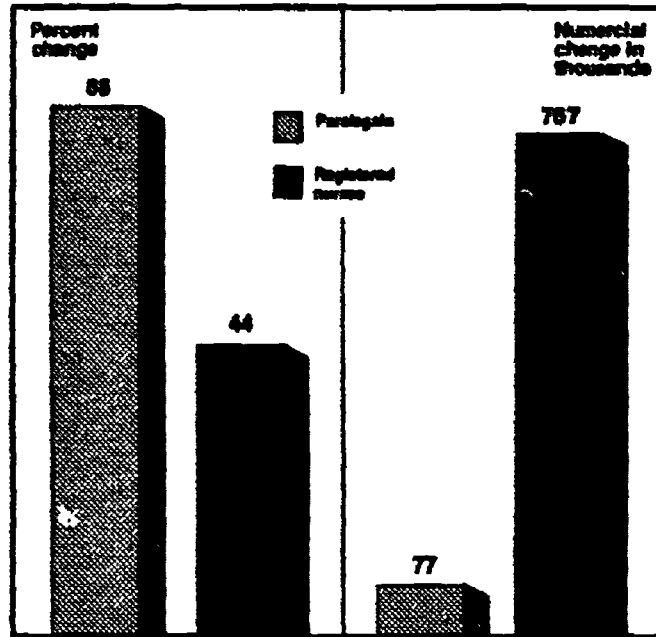


SOURCE: Bureau of Labor Statistics

Figure 5.48

Do not always assume that occupations with the fastest growth rate provide the most new jobs. Remember, "growth" refers to the percentage of already existing jobs, not the actual number of jobs.

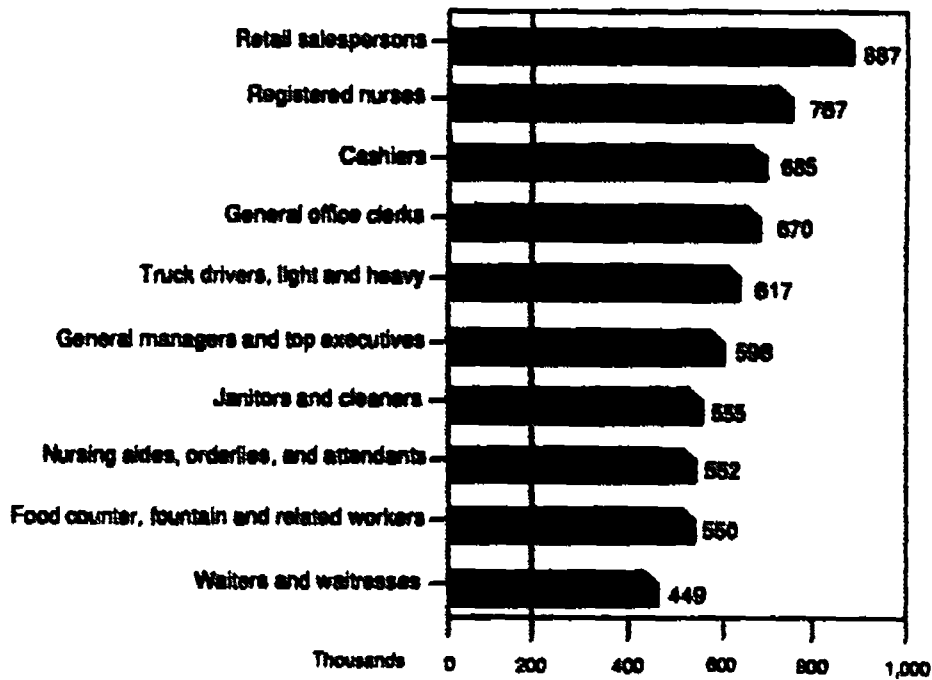
Job growth may be viewed in two ways:
Changes, 1990-2005



SOURCE: Bureau of Labor Statistics

Figure 5.40

Occupations adding the most jobs, 1990-2005

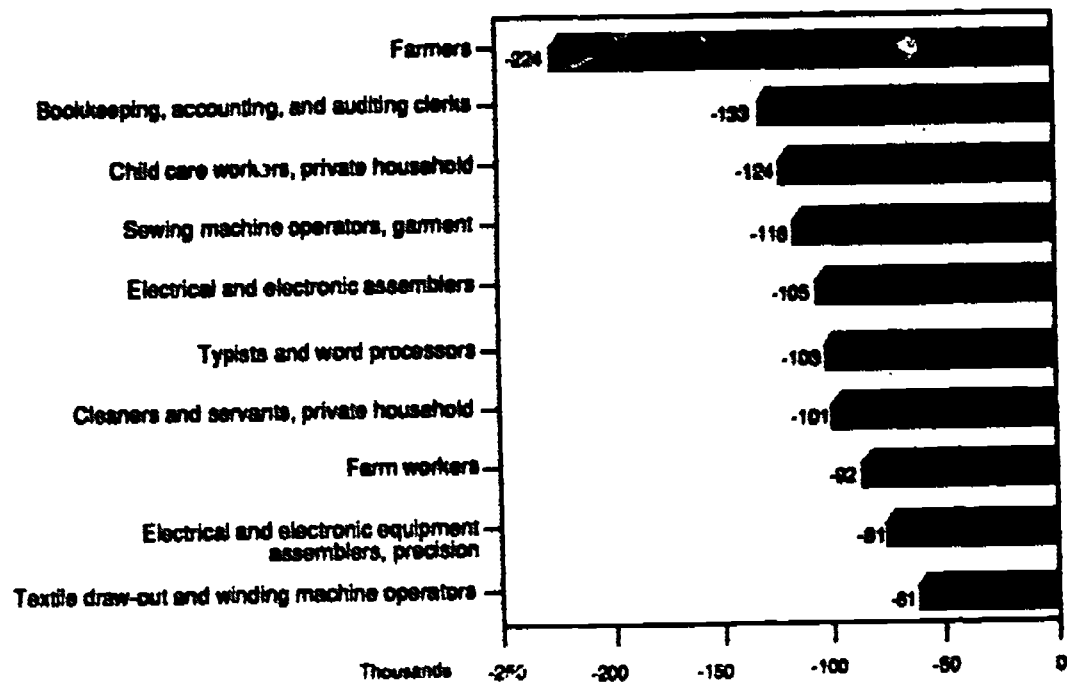


SOURCE: Bureau of Labor Statistics

Figure 5.20

Workers who might experience layoffs include those in occupations within declining industries and those whose occupations are changing due to technological innovations. Even though the demand for a particular occupation may be declining, there will still be a need for new workers to replace people leaving these occupations.

Employment change in declining occupations, 1990-2005

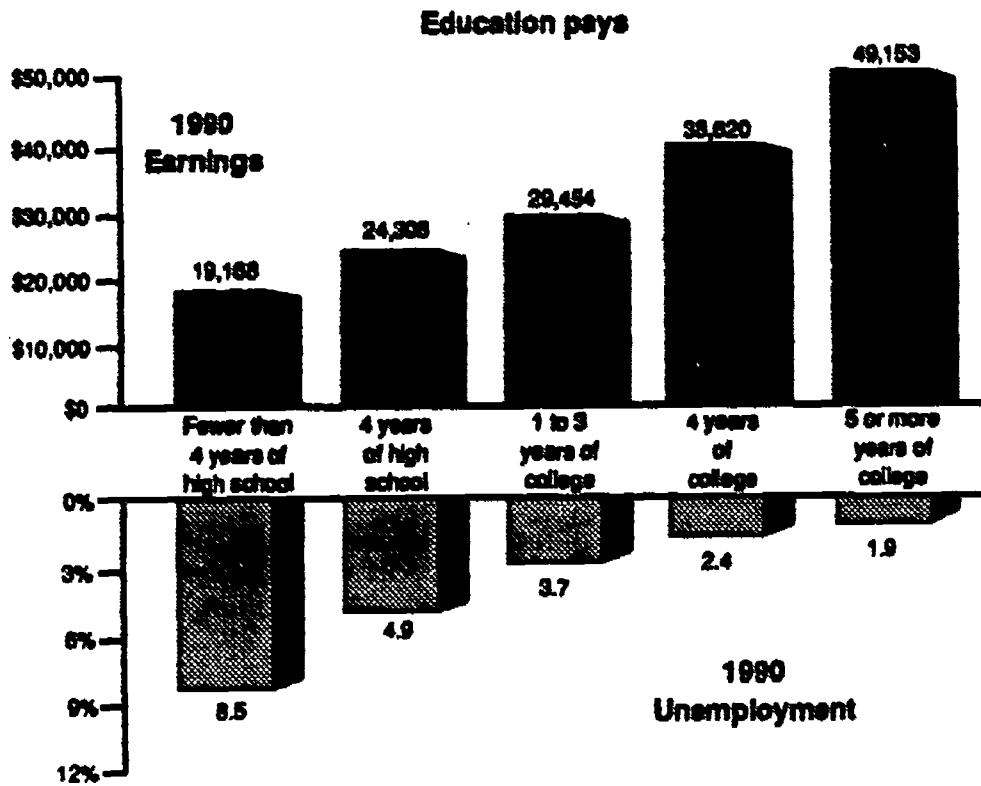


SOURCE: Bureau of Labor Statistics

Figure 5.51

Combining Projections with Other Information

Another way to use labor market information is to combine it with other indicators such as educational attainment.



SOURCE: Bureau of Labor Statistics

Figure 5.52

Not only is education important in getting higher paying jobs, but people with more education have higher earnings within virtually all occupations.

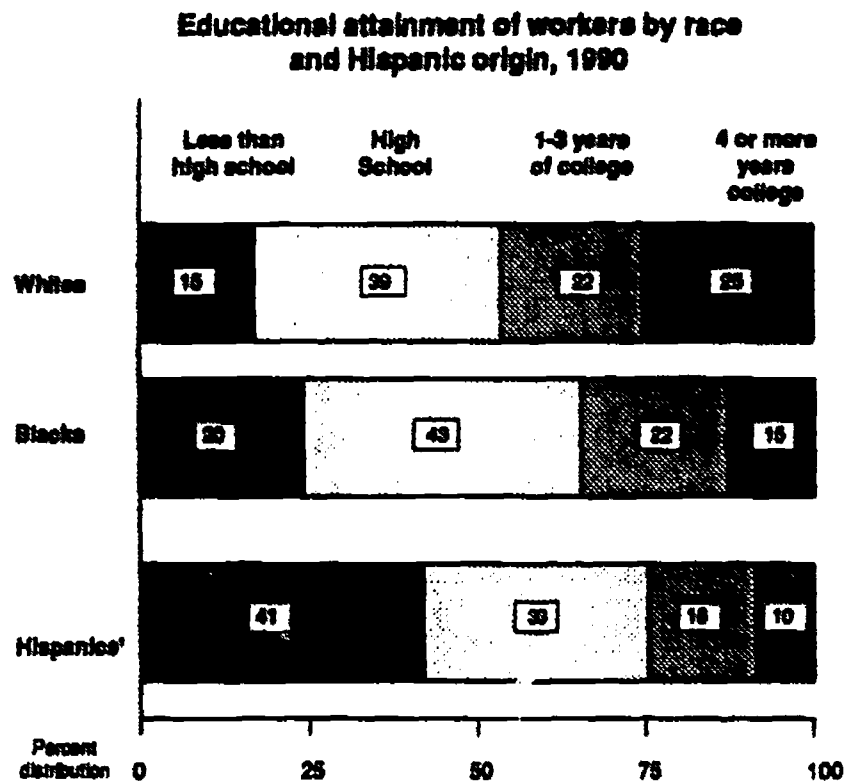
Annual earnings of workers by highest level of educational attainment, 1987

Occupational group	High school	Some college	4-year college	5 or more years of college	Percent of workers in group
Average, all occupations	\$21,543	\$15,249	\$18,902	\$21,975	\$31,029
Managerial	30,264	22,306	23,896	27,255	37,252
Professional specialty	30,116	19,177	23,230	27,456	31,311
Technicians	24,469	18,207	21,358	23,830	26,004
Marketing and sales	22,220	13,746	17,654	22,546	32,747
Administrative support	17,120	15,535	16,554	17,491	20,623
Service	13,443	10,764	13,093	16,997	21,361
Precision production	24,856	20,485	25,140	27,042	30,958
Operators	18,132	15,365	19,303	21,627	22,114
Agriculture-related	11,781	10,571	12,730	16,331	17,130

SOURCE: Bureau of Labor Statistics

Figure 5.53

Blacks and Hispanic workers have lower educational attainment than whites. As a result, blacks and Hispanics are underrepresented in the fast growing and higher paying occupations.



SOURCE: Bureau of Labor Statistics
* Persons of Hispanic origin may be of any race

Figure 8.84

Concentration of blacks and Hispanics by major occupation group, 1990

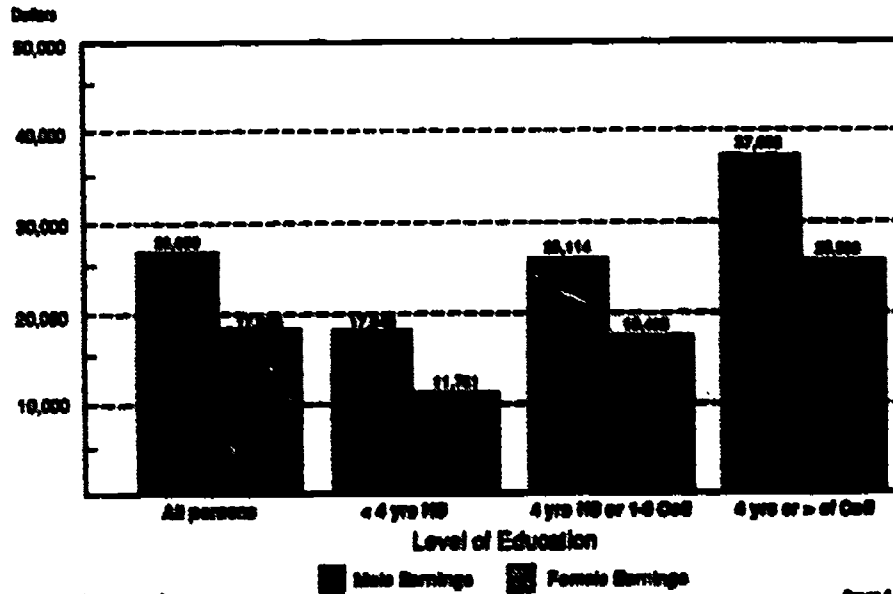
Occupation	Percent of total black population	Percent of total Hispanic population	Relative growth rate	Relative earnings	Relative unemployment rate
Total	10.1	7.5			
Managers	6.2	3.6	H	H	L
Professional specialty	6.7	3.4	H	H	L
Technicians	9.1	4.3	H	High	L
Sales workers	6.4	5.3	H	Average	A
Administrative support	11.4	6.5	L	Low	L
Service workers	17.3	11.2	H	L	H
Precision production	7.8	8.5	L	H	A
Fabricators and laborers	15.0	12.2	L	L	H
Agriculture related	6.1	14.2	L	L	H

SOURCE: Bureau of Labor Statistics

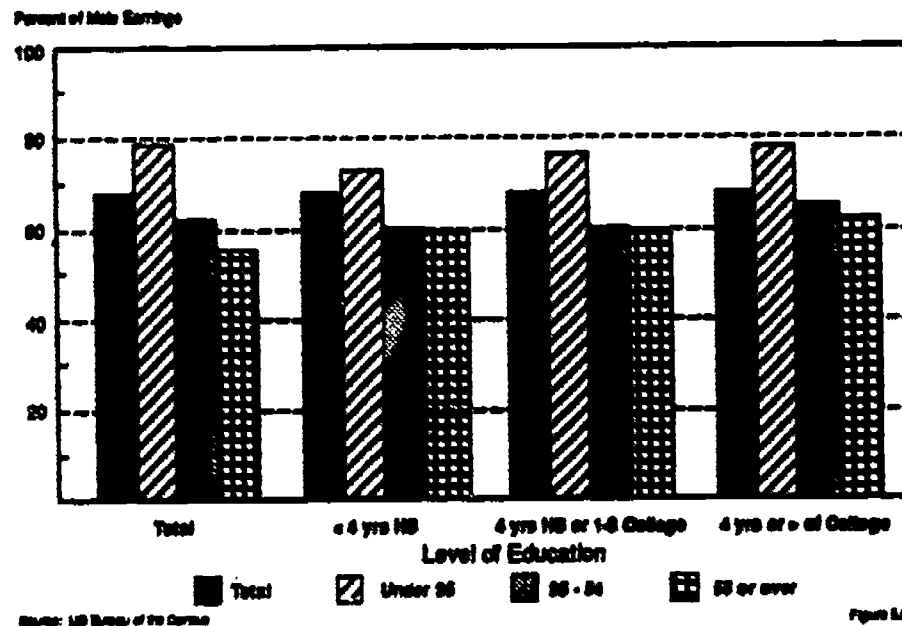
Figure 8.85

Women continue to increase their participation rate although average earnings are still short of men's earnings.

Educational Attainment and Earnings
Male versus Female
Year round, full time workers



Female Earnings as a Percent of Male Earnings
By age and education level
Year round, full time workers



In conclusion, despite changes in individual occupations, the overall structure of occupations will remain relatively stable. However, it is important to note that those without some education beyond high school will be at a serious disadvantage in the labor market. They will face low wages, dislocation and disruption throughout their working lives.

Issues and Implications

Given these projections, we need to consider a number of challenges.

- **Productivity:** Development of world markets would provide an impetus to focus on high technology goods and services.
- **Education:** The potential imbalance between the educational preparation of those entering the labor force and the skill requirements of industry, requires attention.
- **Labor Shortage:** Those employers looking for 16-24 year old workers will feel increasing competition in recruitment. Tightened immigration laws will also effect the numbers of entry level workers.
- **Minorities:** All minority groups are projected to increase their share of the labor force. Specific outreach programs will be needed to educate and train all minority groups to compete effectively.
- **Women:** Women will continue to exert their influence on the work world.
- **Industrial Shift:** Closer collaboration with public training institutions can help industries maintain a skilled work force.
- **Occupational Shift:** Shifting skills within occupations requires a flexible work force.

Conclusion

All of these issues are interrelated. Understanding the dynamics of the labor force and the specific projections for the economy, industries and occupations can guide career development professionals to assist clients and students in making good career choices. The slowing rate of growth in productivity is linked to the need for our economy to remain competitive. Remaining competitive requires an available pool of highly skilled, educated and adaptable workers. The increasing sophistication of jobs in the future challenges all of us to meet the educational needs of all those who will enter the labor force.

Other Uses of Information

Career and labor market information also describes the specific populations in our country. It can be used to break down sexist and stereotypical preconceptions about people in the labor force. The following example illustrates how educators have used labor market statistics to promote self-awareness and sex equity in the classroom. The boxed statements indicate those built upon labor market information.

Sample of How Labor Market Information Is Used

- When elementary school girls are asked to describe what they want to do when they grow up, they frequently identify only a few career options, and even these fit stereotypic patterns. The majority identify only two careers, teaching and nursing. Boys, on the other hand, are able to identify many more potential occupations.
- Many girls enter college without completing four years of high school mathematics. This lack of preparation in math serves as a "critical filter," inhibiting or preventing girls from many science, math, and technologically related careers.
- The preparation and counseling girls receive in school contributes to the economic penalties that they encounter in the workplace. Although over 90 percent of the girls in our classrooms will work in the paid labor force for all or part of their lives, the following statistics reveal the cost of the bias that they encounter.

Using Labor Market Information to
Promote Self-Awareness and Sex Equity

- More than a third of families headed by women live below the poverty level.
- A woman with a college degree will typically earn approximately the same amount as a male who is a high school graduate.
- The typical working woman will earn 59 cents for every dollar earned by a male worker.
- Minority women earn even less, averaging only 50 percent of the wages earned by white males.
- Women are 79 percent of all clerical workers, but only 5 percent of all craft workers.
- Women must work nine days to earn what men get paid for five days of work.
- In contrast to the popular belief that things are getting better for female workers, since 1954 the gap between the wages earned by men and women has not gotten smaller.
- A majority of women work not for "extra" cash but because of economic necessity. Nearly two-thirds of all women in the labor force are single, widowed, divorced, or separated, or are married to spouse earning less than \$10,000 a year.

Developed by Myra and David Sadler
Mid-Atlantic Center for Sex Equity

Distributed by the Department of Public Instruction,
P.O. Box 7841, Madison, Wisconsin 53707

Barbara Bitters-Vocational Equity
Melissa Keyes-Sex Equity

Figure 5.58

Limitations of Career and Labor Market Information

An understanding of the limitations is helpful in understanding and using various sources.

- **Complete versus Sample.** Most surveys are answered by a sample of the population and then inflated to represent the entire country.
- **National versus State versus Local Data.** Given the limitations of sample surveys, it is not always easy to find current, local data.
- **Timeliness.** Not all data are updated monthly or even annually. Another problem is the length of processing time for the larger data collection programs.
- **Institutional Bias.** Remember: that those who have an argument to present will select the data necessary to make a point.

Networks as Sources

The old maxim "It is not what you know, but who you know" also applies to finding people to help you access and interpret labor market information. If the long list of published sources seems more like a maze, remember that there are people in the community or state who can help you find the information you need. Most of these human resources are more than willing to help you answer the occasional question or direct you to resources that you can use with clients or students.

There are many people in the community or state who can help you locate the information you need. One of the closest resources is the local library. Other resources include:

- **The State Occupational Information Coordinating Committees** also offer another point of access to the wide range of LMI. (See Appendix B for a list of the SOICCs.)
- **Regional planning agencies** frequently have staff skilled at analyzing labor market statistics.
- Each state has a **State Data Center** affiliated with the Bureau of the Census, which prepares reports and helps people use data produced by the Bureau. (See Appendix O for a list of the State Data Centers.)
- **Employment Security Offices** in each state have labor market analysts, sometimes at both state and local levels, who collect, analyze and disseminate labor market statistics.
- **Government Printing Office Bookstores** are located in

several major cities. They serve as retail outlets for publications of the federal government. They usually have copies of the major reference works as well as copies of the most recent releases. They frequently concentrate on reports with information about the state and region in which they are located. (See Appendix J for a list of the Government Printing Office Bookstores.)

- State and local Chambers of Commerce are another possible source of labor market information, especially information about local geographical areas.

Notes

Module 6

Developing An Awareness of Multicultural Issues



National Career Development Guidelines-Counselor Competencies

Knowledge of different cultures to interact effectively with all populations.

Skills to assist individuals in changing biased attitudes that stereotype others by gender, race, age, and culture.

Knowledge of basic concepts related to career counseling, such as career development, career progressions, and career patterns.

Knowledge of differing cultural values and their relationship to work values.

Knowledge of unique career planning needs of minorities, women, persons with disabilities, and older persons.

Knowledge of alternative approaches to career planning needs for individuals with specific needs.

Developing An Awareness of Multicultural Issues

Module 6

Introduction

Self-knowledge is essential in forming one's identity. Part of this self-knowledge comes from the values and beliefs derived from one's cultural and ethnic background. These values and beliefs often form the core of one's identity. Likewise, one's cultural and ethnic background is often the basis for how one evaluates the relative status among careers and concomitantly how decisions are made about careers.

To be effective, career development facilitators are encouraged to adopt counseling goals and strategies that are consistent with the client's cultural and ethnic orientation. To do that it is important to develop an awareness of one's own cultural background and that of other cultures.

This module will seek to develop an awareness of cultural and ethnic influences which are central to each individual's development.

Definitions

First, a few key terms and definitions will be presented.

Ethnic Minority

A person who identifies with a common and distinctive culture or language that is not of the majority population in a country. (Rifenbary, 1991)

Ethnocentrism

A tendency to view cultures other than one's own with disfavor, which results in a sense of inherent cultural superiority. (Rifenbary, 1991)

Multiculturalism

Recognizing, understanding and appreciating cultures other than one's own. It stresses an appreciation of the impact of differences--race, class, age, sex, physical attributes, sexual/affectional orientation and religion. A multicultural philosophy is one that promotes the acknowledgement, appreciation and usage of cultural differences as

a critical factor in the development and implementation of any system, institution, program or curriculum. (Rifenbary, 1991)

Multicultural Counseling

An intervention process that places equal emphasis on the ethnic and cultural impressions of both counselor and client. The goal in multicultural counseling is to help clients empower themselves for environmental mastery and competence. (Lee, 1991)

Why Multicultural Career Counseling?

According to the 1990 Census, people of color and ethnic minorities will be a growing share of the work force. Blacks remain the largest minority but the dramatic increase in Hispanics and Asians indicate an increasingly diversified racial, ethnic and cultural mix in this country. In fact, between 1985 and 2000, people of color will comprise 29% of the net additions to the work force and will make up more than 15% of the work force in the year 2000.

**NON-WHITES ARE A GROWING SHARE
OF THE WORKFORCE**
(numbers in millions)

	1970	1985	2000
Working Age Population (16+)	137.1	184.1	213.7
Non-White Share	11.1%	13.6%	15.7%
Labor Force	82.8	115.5	140.4
Non-White Share	11.1%	13.1%	15.6%
Labor Force Increase (Over Previous Period)	X	32.7	25.0
Non-White Share	X	18.4%	29.0%

Source: Workforce 2000, 1987

Figure 6.1

**Concentration of Blacks and Hispanics
by Major Occupational Group, 1988**

	Total	Blacks	Hispanics	Relative Concentration	Relative Concentration
Total	10.1	7.2			
Managers	5.8	4.0	H	H	L
Professional specialty	8.7	4.0	H	H	L
Technicians	9.4	4.3	H	High	L
Sales workers	8.1	8.9	H	Average	L
Administrative support	11.3	8.8	L	Low	A
Service workers	17.8	10.2	H	L	L
Precision production	7.5	8.2	L	A	H
Fabricators and laborers	15.0	11.1	L	L	A
Agriculture related	8.8	13.0	L	L	H

Source: Bureau of Labor Statistics

Figure 6.2

In conjunction with these statistics, the authors of *Workforce 2000* (1987) note that:

- relative rates of unemployment and earnings among minorities have not improved during the past decade and may become worse;
- blacks and Hispanics are overrepresented among declining occupations; and
- blacks, Hispanics and other minority groups frequently are concentrated in a small number of central cities beset by severe economic and social problems.

Traditionally, our educational efforts have focused on the average student and have tended to overlook the special needs of students who are at a disadvantage in the white, middle class, physically able society. Also, we have frequently overlooked the needs of minority populations.

If we are to do our job effectively as career development facilitators, it is essential that the educational and career needs of these individuals

be addressed. Given the state of the labor market and the declining birth rate, we are witnessing a rare opportunity to present better job prospects for historically disadvantaged people, many of whom are cultural and ethnic minority groups.

Some ethnic and cultural minorities see the counseling process as contrary to their own life experiences and inappropriate or insufficient for their needs. In particular, many career development theories are inherently ineffective because they do not account for the effects of racism, sexism, and classism on career development. The traditional theories frequently focus on the role of personality and neglect the influence of sociocultural, environmental and economic forces on individual choice, assuming people of all cultures have the same array of choices open to them.

Cultural Awareness Questionnaire

In order to become aware of your multicultural experiences, take a few minutes to think about the following questions.

1. Think back to your childhood days.

Did you have much contact with people of cultures different from your own? If yes, at what age? If no, when did you finally experience people of other cultures?

Did you benefit from your contact (i.e., spending time with families that had configurations different than your own or enjoying the experience of a friend's Bar Mitzvah celebration)? If yes, what were the benefits?

Were there customs or behaviors in the culture that you did not understand? Where there reaction from your parents or friends that you did not understand?

Did you react or interact with people from another culture the way you wanted to at the time, or the way others (peers, parents) wanted you to act? Why?

What messages did your family and friends give you about people from other cultures?

2. Think about the present.

Do you have much contact with students or peers of cultures unlike your own?

If yes, have you benefitted in some way from your contact with them? (i.e., learning about a different perspective on a political issue or hearing about a country unknown to you.) If no, why has there been little contact in your life with other cultures?

Do you feel that you interact with people from other cultures the way you want to, or the way others want you to act? Why?

How does the media affect your views of people from other cultures?

What is different about your attitude and beliefs regarding cultural differences now, that did not exist when you were a child? Why?

(Adapted from: *An Introduction to Multicultural Issues in Career Development*)

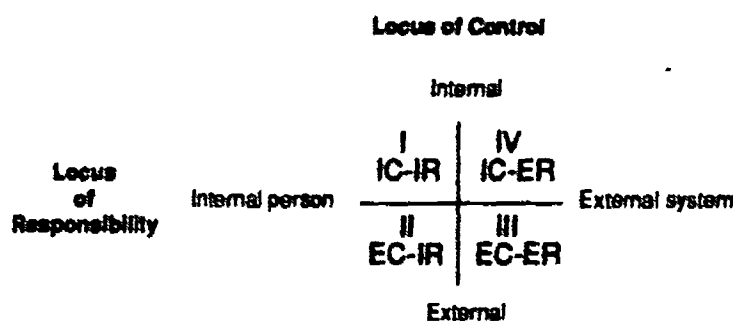
Dynamics in Culturally Responsive Counseling

Lee and Richardson (1991) have identified dynamics that are especially important in culturally responsive counseling. They are built on the assumption that culturally responsive counselors must work with the understanding of culture. The challenge of client diversity can be addressed by considering the following:

The Client's Level of Ethnic Identity and Acculturation. These stages of personal development can range from little or no identification with the dominant culture and complete identification with the group of origin to complete identification with the dominant culture and little identification with the ethnic group of origin. The status of ethnic identity and acculturation may be influenced by a variety of factors such as age, length of residence in the United States, level of education attained, extent of experience with racism and socioeconomic status.

Sue (1978) developed a framework for understanding clients who are culturally different than the counselor. Sue's framework responds to this challenge to understand the level of ethnic identity and acculturation that Lee and Richardson discuss. Sue's model incorporates the concepts of locus of control and locus of responsibility in a person's ethnic identity. First, a few definitions:

- Internally controlled people are those who believe that reinforcement is primarily a product of their own actions.
- Externally controlled people are those who believe that reinforcement is not entirely self-related, but can also result from luck, chance, fate or others.
- Internal locus of responsibility means that a person's success or failure can be attributed to personal qualities or skills.
- External locus of responsibility means that a person's environment is more powerful than personal qualities or skills.



Source: Sue, D.W. (1978). World view and counseling. *Personnel and Guidance Journal*, 55, 425-462.

Figure 6.3

As seen in Figure 6.3, these two concepts are put together to provide four different ways in which to view how individuals interact with their environment. Please note that there are differences within race and ethnic groups based on factors such as gender and class. Sue believes that Quadrant I typifies the American middle class culture. People in this quadrant believe they are responsible for what happens to them and have the power to change their fate. Sue believes that more minorities fit into one of the other quadrants. Members of minority groups frequently feel as though they have less power to change themselves or their environment. Counselors need to understand their own world view, as it exists on these interacting continuums, but also that of their clients. Most importantly, they need to accept the legitimacy of the other's point of view.

There are other factors to be considered by career development facilitators in multicultural counseling. These factors can either serve to limit or enhance career development. They are:

Family Influences. Understanding and appreciation of how the family of origin and current partner and/or children play a critical role as one's support system in the career decision making process.

Sex-Role Socialization. Different perceptions of the roles of men and women effect career development and should be considered in culturally responsive counseling.

Religious and Spiritual Influences. Religious institutions are important sources of psychological support. Religious leadership is an important support system during decision making and problem resolution.

Immigration Experience. In addition to cultural beliefs and practices, immigrants bring with them the trauma and history of separation from their homelands. Some have been lured by the promise of economic opportunity and others have fled political unrest, wars, starvation, etc. The major challenge is often reconciling their wishes to maintain cultural customs while adapting to a new culture and new expectations.

The Role of Schools

Schools have often been seen as the support for all individuals in their educational and career pursuits. The school can play a major role in linking the many cultures within it and outside it. Some schools do an outstanding job of establishing these liaisons and celebrating cultural diversity; others do not. According to Axelson (1985), serious problems will arise in educational and training systems under the following conditions (Note: Although the following discussion focuses on the school, many of these concepts can be transferred to the work place):

- When formal segregation, isolation and alienation are present, this can lead to divisiveness and racial conflicts. The vicious and ugly race riots over enforced school busing to achieve a racial balance in Boston's public schools are an illustration of the effects of school segregation.
- When there is informal segregation, i.e., castelike social separation, such as educational tracking systems that separate students according to past achievement records, situations that

hinder cross cultural understanding and communication will continue to occur.

- When cultural diversity goes unrecognized and acceptance is left to chance, an enriched educational climate will be wasted.

In addition, there will be communication problems for people when the following conditions exist:

- When cultural differences are viewed only as deficiencies people will not be valued for their individual differences and their special heritages.
- When subcultures are viewed as a group, we tend to lump all minority groups together and depict them as having identical attributes and problems.
- When language differences are viewed only as deficits, bilingualism is not longer seen as an asset.
- When presumptions of intellectual inferiority are based on cultural group identity or membership we can fall into the mental trap of thinking, for example, that all members of a particular racial group do poorly in particular disciplines.
- When individual potential goes undiscovered and unrecognized, every persons's unique abilities and personal talents are not awakened and expanded.
- When individual personality traits are over generalized according to cultural group identity or membership, we see a person only as a member of a group rather than as an individual.

(Axelson, 1985)

The Role of Career and Labor Market Information

Along with stress, language, class bound, and cultural barriers, the lack of career and labor market information and the limited knowledge that many ethnic and cultural minorities have about the world of work presents additional challenges to their career development. An individual's knowledge of the world of work partially depends upon past work experiences and the degree of exposure to people who work in a wide range of occupations (Martin, 1991).

In addition to the lack of information that all students have about careers, some students also have to face cultural barriers, such as prejudice, language differences, cultural differences and isolation.

Those providing educational and career planning services also need to:

- **learn to recognize and appreciate differences between themselves and the clients they serve;**
- **examine their own ethnocentric values and the language associated with these values;**
- **understand the importance of and need for positive role models who represent the client's racial and ethnic backgrounds;**
- **create a multicultural environment for clients and value the backgrounds from which they come;**
- **consider issues surrounding racism when they arise by addressing them directly and talking about them;**
- **read and research information about the historical, social, economic and political factors affecting clients, including statistics related to work force participation rates;**
- **identify and promote full development of a client's potential;**
- **respect and value ethnic and racial diversity;**
- **recognize when cultural differences are affecting communication and make appropriate adjustments;**
- **promote responsible, critical thinking in clients to empower them to be their own advocates;**
- **awaken and expand each client's desire to strive for his/her full potential; and**
- **be open and accepting.**

(Brown and Brooks, 1984)

Actions to Be Taken

There are specific actions that can be taken by career development facilitators to achieve these personal and professional goals:

- **Career development facilitators need to recognize and eliminate the educational and career voids in disadvantaged clients.**
- **Career development facilitators need to get out of their offices and become change agents and facilitators who modify the effects of discriminatory political, social and economic forces on minority groups.**
- **Career development facilitators need to work toward increasing the participation rate of ethnic minorities in nontraditional careers and to develop strategies that encourage achievement in academic courses that are prerequisites for entering those careers.**
- **Techniques that broaden career options for clients should be**

- mastered. This awareness of opportunity is critical.
- Strategies to strengthen self-concept must be included.

Summary

In order to serve the many cultures in this country, career development facilitators have a responsibility to meet multicultural needs as they assist their clients in career planning and development. In addressing the need to reach out to one another across cultures, the late Jawaharlal Nehru, the leader of India, advised:

"If we seek to understand a people, we have to try to put ourselves, as far as we can, in that particular historical background...If we wish to convince them, we have to use their language as far as we can, not language in the narrow sense of the word, but the language of the mind."

Developing An Awareness of Multicultural Issues Module 6 References

- Atkinson, D. R., Marten, G. and Sue, D. W. (1979). *Counseling American minorities: Across cultural perspective*. Dubuque, IA: William C. Brown.
- Axelson, J. A. (1985). *Counseling and development in a multicultural society*. Monterey, CA: Brooks/Cole.
- Brown, D., & Brooks, L. (1984). *Career choice and development*. San Francisco: Jossey-Bass.
- Cheatham, H. E. (1990, June). Africentricity and Career Development of African Americans. *The Career Development Quarterly*, , pp. 334-344.
- Johnston, W. B., & Packer, A. H. (1987). *Workforce 2000*. Indianapolis, IN: Hudson Institute.
- Lee, C. (1991, January/February). Empowerment in counseling: A multicultural perspective. *Journal of Counseling and Development*, 69(3), 229-230.
- Lee, C. C., & Richardson, B. L. (eds.). (1991). *Multicultural issues in counseling: New approaches to diversity*. Alexandria, VA: American Association for Counseling and Development.
- Martin, W. E., (1991, March). Career development and American Indians living on reservations: Cross-cultural factors to consider. *Career Development Quarterly*, 39(3), 273-283.
- Rifenbary, D. (1991, Spring). *An introduction to multicultural issues in career development*. Available from the New Mexico Career Information System, University of New Mexico, College of Education, Department of Educational Administration.
- Sue, D. W., (1978). World views and counseling. *Personnel and Guidance Journal*, 56, 428-462.

Developing An Awareness of Multicultural Issues
Module 6
Resources

- Alderfer, C. P. (1982). Problems of changing white males' behavior and beliefs concerning race relations. In P. Goodman (ed.). *Change in Organizations* (pp. 122-165). San Francisco: Jossey-Bass.
- Arbona, C. (1989). Hispanic employment and the Holland typology of work. *Career Development Quarterly*, 37, 257-268.
- Arbona, C. (1990). Career counseling research and Hispanics: A review of the literature. *The Counseling Psychologist*, 18, 300-323.
- Atkinson, D. R., Morten, G., & Sue, D. W. (1983). *Counseling American Minorities*, Dubuque, IA: Wm. C. Brown.
- Atneave, C. L. (1985). Practical counseling with American Indian and Alaska Native clients. In P. Pedersen (ed.) (1985). *Handbook of Cross-Cultural Counseling and Therapy* (pp. 135-140). Westport, CT: Greenwood Press.
- Campbell, R. E. (1975). Special groups and career behavior: Implications for guidance. In J. Picou, & R. E. Campbell (eds.) *Career Behavior of Special Groups* (pp. 424-444). Columbus, OH: Merrill.
- Carney, C. G., & Kahn, K. B. (1984). Building competencies for effective cross-cultural counseling: A developmental view. *The Counseling Psychologist*, 12(1), 111-119.
- Carter, R. T., & Helms, J. E. (1987). Relationship of black value orientations to racial identity attitudes. *Measurement and Evaluation in Counseling and Development*, 19, 185-195.
- Casas, J. M., & Atkinson, D. R. (1981). The Mexican American in higher education: An example of subtle stereotyping. *Personal and Guidance Journal*, 59, 473-476.
- Christensen, E. W. (1983). Counseling Puerto Ricans: Some cultural considerations. In D. R. Atkinson, G. Morten, & D. W. Sue. *Counseling American Minorities* (pp. 204-212). Dubuque, IA: Wm. C. Brown.
- Chun, K. T. (1980). The myth of Asian Americans; success and its educational ramifications. *IRCD Bulletin*, 15, 1-2.
- Decker, W. H. (1986). Occupations and impressions: Stereotypes of males and females in three professions. *Social Behavior and Personality*, 14, 69-75.
- Dillard, J. M. (1985). *Multicultural Counseling*, Chicago: Nelson-Hall.
- Doughtie, E. B., Chang, W. N., Alston, H. L., Wakefield, J. A., Jr., and Yom, B. L. (1976). Black-white differences on the Vocational Preferences Inventory. *Journal of Vocational Behavior*, 8:41-44.
- England, P. (1981). Assessing trends in occupational sex segregation, 1900-1976. In I. Berg (Ed.), *Sociological perspectives on Labor Market* (pp. 273-295). New York: Academic Press.
- Fukuyama, M. A. (January 1990). Career Development and Asian-Americans: A response to the Gallup Survey. Paper presented at the National Conference of the National Career Development Association, Scottsdale, AZ.
- Garcia, F., Jr., & Ybarra-Garcia, M. (1988). Strategies for Counseling Hispanics: Effects of racial and cultural stereotypes. (Revised). ERIC reports, ED #300-687., U.S. Department of Education.
- Gettys, L. D., & Cann, A. (1981). Children's perceptions of occupational sex stereotypes. *Sex Roles*, 7, 301-308.
- Gottfredson, L. S. (1978). Providing black youth more access to enterprising work. *Vocational Guidance Quarterly*, 27, 114-123.
- Griffith, A. R. (1980). Justification for a black career development. *Counselor Education and Supervision*, 19, 301-308.
- Hageman, M. B., & Gladding, S. T. (1983). The art of career exploration: Occupational sex-role stereotyping among elementary school children. *Elementary School Guidance & Counseling*, 17, 280-287.
- Harmon, L. W. (1977). Career counseling for women. In E. Rawlings & D. Carter (eds.), *Psychotherapy for women* (pp. 197-206). Springfield, IL: Thomas.

- Helms, J. E. (1984). Toward a theoretical explanation of the effects of race on counseling: A black and white model. *The Counseling Psychologist*, 12(4), 153-165.
- Henton, W. A. (1985). Toward counseling the Japanese in America: A cross-cultural primer. *Journal of Counseling and Development*, 63, 500-503.
- Ibrahim, F. A. (1985). Effective cross-cultural counseling and psychotherapy: A framework. *The Counseling Psychologist*, 13, 625-638.
- Jackson, S. M. (1982). *Career Planning for Minority Women*. Washington, DC: Women's Educational Equity Act Program, U.S. Department of Education.
- Jones, A., & Seagull, A. A. (1983). Dimensions of the relationship between the Black client and the White therapist: A theoretical overview. In D. R. Atkinson, G. Morten, & D. W. Sue, *Counseling American Minorities* (pp. 156-166). Dubuque, IA: Wm. C. Brown.
- Kitano, H. H. L., & Matsushima, N. (1981). Counseling Asian Americans. In P.D. Pedersen, et al. (eds.) *Counseling Across Cultures* (pp. 163-230). Honolulu: University Press of Hawaii.
- La Fromboise, T. D. (1982). *Assertion Training with American Indians: Cultural Behavioral Issues for Trainers*. Las Cruces, NM: ERIC Clearinghouse on Rural Education and Small Schools.
- Lee, C. C. (1982). The school counselor and the black child: Critical roles and functions. *Journal of Non-White Concerns in Personnel and Guidance*, 10, 94-101.
- Leong, F. T. L. (1985). Career development of Asian Americans. *Journal of College Student Personnel* 26, 539-546.
- Leong, F. T. L., & Hayes, T. J. (1990). Occupational Stereotyping of Asian Americans. *The Career Development Quarterly*, 39(2), 143-154.
- Lewis, R. G., & Ho, M. K. (1983). Social work with Native Americans. In D. R. Atkinson, G. Morten, & D. W. Sue. *Counseling American Minorities* (pp. 65-72). Dubuque, IA: Wm. C. Brown.
- Lonner, W. J. (1985). Issues in testing and assessment in cross-cultural counseling. *The Counseling Psychologist*, 13, 599-614.
- McDavis, R. J., & Parker, W. M. (1981). Strategies for helping ethnic minorities with career development. *Journal of Non-White Concerns in Personnel and Guidance*, 9, 130-136.
- O'Leary, V. E. (1974). Some attitudinal barriers to occupational aspirations in women. *Psychological Bulletin*, 81, 809-826.
- Oppenheimer, K. C., & Miller, M. D. (1988). Stereotypic views of medical educators toward students with a history of psychological counseling. *Journal of Counseling Psychology*, 35, 311-314.
- Osipow, S. H. (1975). The relevance of theories of career development to special groups: Problems, needed data, and implications. In J.S. Picou, & R.E. Campbell (eds.). *Career Behavior of Special Groups* (pp. 9-22). Columbus, OH: Merrill.
- Padilla, A. M., Ruiz, R. A., & Alvarez, R. (1983). Community mental health services for Spanish-speaking/surnamed population. In D. R. Atkinson, G. Morten, & D. W. Sue. *Counseling American Minorities* (pp. 181-203). Dubuque, IA: Wm. C. Brown.
- Panek, P. E., Rush, C. R., & Greenawalt, J. P. (1977). Current gender stereotypes of 25 occupations. *Psychological Reports*, 40, 212-214.
- Parham, T. A. (1989). Cycles of psychological nigrescence. *The Counseling Psychologist*, 17, 187-226.
- Parham, T. A. & Helms, J. E. (1981). The influence of Black students' racial identity attitudes on preference for counselor's race. *Journal of Counseling Psychology*, 28, 250-257.
- Parham, T. A., & Helms, J. E. (1985a). Relation of racial identity attitudes to self-actualization and affective states of Black students. *Journal of Counseling Psychology*, 32, 431-440.
- Parham, T. A., & Helms, J. E. (1985b). Attitudes of racial identity and self-esteem of Black students: An exploratory investigation. *Journal of College Student Personnel*, 26, 143-46.
- Pedersen, P. D., Draguns, J. G., Lonner, W. J., & Trimble, J. E. (1981). *Counseling Across Cultures*. Honolulu, University Press of Hawaii.
- Pomales, J., Claiborn, C. D., & La Fromboise, T. D. (1980). Effects of black students' racial identity on perceptions of white counselors varying in cultural sensitivity. *Journal of Counseling Psychology*, 33, 57-61.

- Ponterotto, J. G. (1987). Counseling Mexican Americans: A multimodal approach. *Journal of Counseling and Development*, 65, 308-312.
- Richardson, E. H. (1981). Cultural and historical perspectives in counseling American Indians. In D. W. Sue. *Counseling the Culturally Different* (pp. 216-255). New York: John Wiley.
- Rosenthal, R., & Jacobson, L. (1968). *Pygmalion in the classroom: Teacher expectations and pupils' intellectual development*. New York: Holt, Rinehart, and Winston.
- Ruiz, R. A. (1981). Cultural and historical perspectives in counseling Hispanics. In D.W. Sue. *Counseling the Culturally Different* (pp. 186-215). New York: John Wiley.
- Ruiz, R. A., & Casas, M. M. (1981). Culturally relevant and behavioristic counseling for Chicano college students. In P. D. F. dersen et al. *Counseling Across Cultures* (pp. 181-202). Honolulu: University Press of Hawaii.
- Ruiz, R. A., & Padilla, A. M. (1983). Counseling Latinos. In D. R. Atkinson, G. Morten, & D. W. Sue, *Counseling American Minorities* 213-231. Dubuque, IA: Wm. C. Brown.
- Shipp, P. L. (1983). Counseling blacks: A group approach. *Personnel and Guidance Journal*, 62, 108-111.
- Smith, E. J. (1975). Profile of the black individual in vocational literature. *Journal of Vocational Behavior*, 6, 41-59.
- Smith, E. J. (1980). Career development of minorities in nontraditional fields. *Journal of Non-White Concerns in Personnel and Guidance*, 8, 141-156.
- Smith, E. J. (1983). Cultural and historical perspectives in counseling Blacks. In D. W. Sue (1981). *Counseling the Culturally Different* (pp. 141-185). New York: John Wiley.
- Smith, E. J. (1983). Issues in racial minorities' career behavior. In W. B. Walsh, & S. H., Osipow (eds.). *Handbook of Vocational Psychology*, 1, 161-222. Hillsdale, NJ: Lawrence Erlbaum.
- Smith, E. J. (1985). Ethnic minorities: Life stress, social support, and mental health issues. *The Counseling Psychologist*, 13(4), 537-580.
- Spencer, B. G., Windham, G. O., Peterson, J. H., Jr. (1975). Occupational orientations of an American Indian group. In J. S. Picou, & R. E. Campbell (eds.), *Career Behavior of Special Groups* (pp. 199-223). Columbus, OH: Merrill.
- Stewart, E. C. (1981). Cultural sensitivities in counseling. In P. Pedersen et al (eds.), *Counseling Across Cultures* (pp. 61-86). Honolulu, HI: The University Press of Hawaii.
- Sue, D. W. (1975). Asian-Americans: Social psychological forces affecting their life styles. In J. S. Picou & R. E. Campbell (eds.), *Career Behavior of Special Groups: Theory, research and practice*. (pp. 97-121). Columbus, OH: Merrill.
- Sue, D. W. (1981). *Counseling the Culturally Different*. New York: John Wiley.
- Sue, D. W., Bernier, J. E., Feinberg, L., Pedersen, P., Smith, E. J., Vasquez-Nuttall, E. (1982). Position paper: Cross-cultural counseling competencies. *The Counseling Psychologist* 10(2): 45-52.
- Sue, D. W., & Kirk, B. A. (1972). Psychological characteristics of Chinese American students. *Journal of Counseling Psychology*, 19, 471-478.
- Sue, D. W., & Kirk, B. A. (1973). Differential characteristics of Japanese and Chinese American college students. *Journal of Counseling Psychology*, 20 142-148.
- Sue, D. W., & Sue, S. (1977). Barriers to effective cross-cultural counseling. *Journal of Counseling Psychology*, 24, 420-429.
- Sue, D. W., & Sue, D. (1985). Asian-Americans and Pacific Islanders. In P. Pedersen (ed.) *Handbook of Cross-cultural Counseling and Therapy* (pp. 141-146). Westport, CT: Greenwood Press.
- Sue, S., & Zane, N. (1987). The role of culture and cultural techniques in psychotherapy: A critique and reformulation. *American Psychologist*, 42, 37-45.
- Suinn, R. M., Rickard-Figueroa, K., Lew, S., & Vigil, P. (1987). The Suinn-Lew Asian Self-Identity Acculturation Scale: An initial report. *Educational and Psychological Measurement* 47: 401-07.
- Szapocznik, J., Scopetta, M. H., Kurtines, W., & Arnalde, M. A. (1978). Theory and measurement of acculturation. *Interamerican Journal of Psychology*, 12, 113-120.

- Toldson, I. L., & Pasteur, A. B. (1976). Therapeutic dimensions of the Black aesthetic. *Journal of Non-White Concerns in Personnel and Guidance*, 4, 105-117.
- Trimble, J. E. (1976). Value differences among American Indians: Concerns for the concerned counselor. In P. Pedersen, W. L. Conner, & J. G. Draguns (eds.). *Counseling Across Cultures*, 65-81. Honolulu: The University Press of Hawaii.
- Trimble, J. E., & La Fromboise, T. (1983). American Indians and the counseling process: Culture, adaptation, and style. In P. Pedersen (ed.) *Handbook of Cross-Cultural Counseling and Therapy*, 127-133. Westport, CT: Greenwood Press.
- Tucker, S. J. (1973). Action counseling: An accountability procedure for counseling the oppressed. *Journal of Non-White Concerns in Personnel and Guidance*, 2, 34-41.
- Tucker, C. M., Chemault, S. A., & Mulkerne, D. J. (1981). Barriers to effective counseling with blacks and therapeutic strategies for overcoming them. *Journal of Non-White Concerns in Personnel and Guidance*, 68-76.
- Vontress, C. E. (1981). Racial and ethnic barriers in counseling. In P. Pedersen, et al. (eds.). *Counseling Across Cultures* (pp. 87-107). Honolulu: University Press of Hawaii.
- Wood, P. S., & Mallinckrodt, B. (1990). Culturally sensitive assertiveness training for ethnic minority clients. *Professional Psychology: Research and Practice*, 21, 5-11.
- Yanico, B. J. (1978). Sex bias in career information: Effects of language on attitudes. *Journal of Vocational Behavior*, 13, 26-34.
- Youngman, G., & Sandongei, M. (1983). Counseling the American Indian child. In D. R. Atkinson, G. Morten, & D. W. Sue. *Counseling American Minorities* (pp. 73-80). Dubuque, IA: Wm. C. Brown.

Notes

Module 7

Specific Needs of Adults



National Career Development Guidelines-Counselor Competencies

Knowledge of developmental issues individuals address throughout the life span.

Knowledge of decision making and transition models.

Skills to assist individuals in changing biased attitudes that stereotype others by gender, race, age, and culture.

Knowledge of basic concepts related to career counseling, such as career development, career progressions, and career patterns.

Skills to use career development resources and techniques designed for specific groups.

Knowledge of unique career planning needs of minorities, women, persons with disabilities, and older persons.

Specific Needs of Adults

Module 7

Introduction

There are many issues that distinguish the needs of an adult in career transition from those of a younger person. This module examines the issues facing those in adult life stages who are making career changes. Of special merit are the adult's experiences in their work, leisure time, family and overall lifestyle. Another factor to consider is the need for reassurance that career changes are not unusual but instead can be healthy moves for an individual to undertake.

According to Zunker (1990) particular issues of concern for adults in career transition are:

- they are generally unaware of potential occupations and lack direction;
- they have not kept pace with changing job technologies, procedures and practices;
- many have a single career orientation and do not understand the benefits and problems which accompany a career change; and
- they are unfulfilled in their present career and are searching for challenge and meaning.

Assumptions

Assumption 1. Career development is a continuous process over the life span.

Assumption 2. Career development involves both choice and adjustment issues.

Assumption 3. Both career choice and adjustment involve content and process variables.

(Minor 1985)

A Theoretical Framework

Based on these assumptions, Minor (1985) developed a theoretical basis for adult career counseling programs:

- Individuals seldom regard their careers in the same way throughout their lives and they behave differently at various

times in their lives.

- Choices of occupational fields and specific jobs at certain times are influenced by, and can be predicted from, certain individual characteristics, such as intelligence and achievement; special skills and talents; the ability to relate to people; individual needs, values and goals; and personality type.
- Choices of occupational fields and specific jobs also are influenced by factors external to the individual. These include the reinforcement received from parental and career related activities; community influences; family requirements and values; the economic and social conditions of the family and society; opportunities for learning; the availability of information; and historical events.
- The process of making choices about occupational fields or specific jobs follows a general pattern of exploration, crystallization, choice, and clarification.
- The process of making adjustments to new choices follows a pattern of induction and integration, or balance, between the needs of the individual and the needs of those around him/her, such as the family. For example, a person may aspire to a career as a concert pianist, but, as a result of personal abilities and environmental factors, he/she may become a piano teacher.
- Adjustment to the consequences of occupational or specific job choices depends on factors in the work environment and on the characteristics of the individual. The most difficult adjustment is related to the magnitude of the discrepancy between what the individual expects to find, in terms of requirements and rewards, and what the environment provides in those areas. In short, people do not always get what they hoped to get from a particular job.
- Satisfaction and success depends on how people fit into their work environment. Individuals must be able to express their values and interests, play roles, and perform activities that they feel are appropriate.
- Satisfaction in a specific job comes from receiving positive feedback on a successful performance and/or meeting an internally defined challenge and accomplishment.
- An individual's career is very much a part of one's life activities. The interaction of occupational and family life cycles, life style, leisure and other issues cannot be separated. They must be considered together in career planning.

- Individuals can be assisted in making choices and planning their careers by
 - helping them understand their own characteristics, making them aware of the work environment and other external forces;
 - providing access to information and appropriate training; and
 - considering the impact of occupational and job choices on other aspects of their lives.

Subgroups of Adults with Career Development Needs

Goodman, Hoppin and Kent (1990) have identified the following groups:

Midlife Career Changers. Midlife career change can take many forms. The change can be voluntary or involuntary. It can result from external circumstances, such as a company moving from one part of the country to another. Other changes are due to circumstances such as the incongruence between an individual's values or skills and the work that he/she is expected to complete.

The following questions should be considered when working with midlife career changers:

- How is midlife career change a part of the larger process of change and growth during adulthood?
- How is career change related to re-establishing self-definitions during middle life?
- How is career change related to satisfaction, or distress, in other adult roles?
- What is the meaning of work beyond providing a livelihood?
- When does your "career" reflect continued growth and development, and when might it minimize opportunities for personal self-actualization?

(Abrego and Brammer, 1985)

Displaced Workers. Employees who have lost their jobs through the actions of others are likely to experience anger, denial and depression towards the "system." One of the major goals when working with displaced workers is to help them express their anger and then re-enter the career decision making process to explore new options and opportunities.

The Underemployed. These workers are adults who work part-time and wish to work full-time, or those employed at a job for which they are over qualified. It is usually necessary to help them gather more information in order to broaden their horizons so that they are aware of all the options outside their current work environment.

Adults Entering the Job Market for the First Time. These adults have no work history, so they are often viewed by employers with some skepticism. In addition, they often lack firsthand knowledge of the labor market, have minimal employability skills and little experience coping with employer expectations.

Women Entering or Reentering the Labor Market. (See Module 8 - Specific Needs of Women)

Older Workers. These workers not only need to update their knowledge about the world of work but also need to learn how to counter age-related stereotypes and express their advantages in terms of life experiences and maturity.

Adults with Limited English Proficiency (LEP). Many of these adults are immigrants. As a result of being newcomers, both to the culture and the world of work, they face many barriers to employment despite the fact that they may have marketable skills. Their primary need frequently is English as a Second Language instruction and counseling to understand culturally appropriate behavior.

Adults with Disabilities. (See Module 9 - Specific Needs of Persons with Disabilities)

Adults Who Live in Rural Areas. Inaccessibility, a lack of support services, and a lack of knowledge about the world of work, outside of opportunities in rural areas, often prevent these adults from fully participating in the labor market.

Components of a Successful Program

There are differences and similarities among these adults. Their career development needs are numerous and complex. Career development facilitators who work with adults can best serve them by including components of successful programs in their support services. Zunker (1990) includes seven components for adults in career transition:

Component 1: Identification of Key Experiences

Work and life experiences are evaluated to determine how they can contribute to a career. This can be accomplished through an interview, autobiography, collection of background information or a work and leisure analysis. Some skills are easy to identify through work and life experiences, and others, such as communication, social, organizational and leadership skills, are only implied.

The goal of these activities is to identify specific work tasks, leisure experiences, family concerns associated with work, lifestyle needs and potential reasons for change. Using this information, it is possible to identify a partial list of "career satisfaction" variables.

Component 2: Interest Identification

Measured interests often are used to predict job satisfaction. Interest identification can serve to broaden and stimulate career options for adults. One way to broaden options is to identify interesting components of uninteresting jobs. This finding should lead to the building of "interest clusters," or patterns, as well as specific interest indicators.

Component 3: Skills Identification

The focus of this program component is on identifying skills mastered from previous work experiences, hobbies, leisure interests, social activities and community volunteer work. Many adults not only have trouble recognizing their skills, but they also do not know how to relate them to occupational requirements. Adults often underestimate the value of their life experiences. They need to learn how to translate terms they use to describe their transferable skills into the language of the market place(s) they seek to enter.

Skills identification can be completed by understanding the adult's functional/transferable skills. This can be accomplished by a self-analysis of marketable skills, estimates of developed skills, or by the more traditional method of standardized testing. The critical factor in identification is to encourage the adult to consider skills mastered in a variety of experiences. The next step would be to cluster the identified skills in adaptive, functional and occupational categories so that a more precise relationship to occupational requirements is completed at the same time.

Component 4: Lifestyle Identification

It is important to focus on the adult's total lifestyle, not just their work. This concentration should include their values and needs in

relation to work, their leisure time, peer relationships and family ties. The goal is not only to identify these values and needs, but also to communicate that life is indeed multifaceted and that the process for making a satisfactory career choice should not be oversimplified.

Component 5: Education and Training

Once an area of interest is identified, adults frequently need assistance to find sources of information that will direct them to appropriate educational and training resources. These resources might include printed materials, a computerized career delivery system that is both interactive and information oriented, local information resources and/or a microfiche system. Publications such as *The Wall Street Journal* and *USA Today* routinely present career focused information. Various sections of local newspapers and files of local resource persons can be extremely valuable. Adults need to be shown how to systematically make effective use of this information.

Tasks to complete include:

- identify sources of information;
- identify continuing education programs;
- understand admission requirements;
- investigate how to obtain credit for past work experiences and completed training programs;
- evaluate accessibility and feasibility;
- identify and communicate with support systems such as financial aid offices; and
- relate skills needed and careers of interest to education training programs to evaluate the best use of one's time and money.

Component 6: Occupational Planning

This component also focuses on the need for career and labor market information in terms of access and effective integration into a plan of action. This information can be accessed at the same time as education and training information. Adults need a variety of information about job tasks, work availability, the training needed to enter the field and salary estimates. They must then reflect upon how their abilities and needs match with that information. They need the opportunity to access and evaluate all the variables that will affect their lifestyle. This can be accomplished with published materials, computer-based systems, microfiche and gathering of

information from workers, organizations and personal contacts. The information gathered should be more than simply work tasks. It should be processed so that lifestyle needs and values become integrated with the occupational information. Tasks to complete might include:

- identify sources of occupational information;
- access and assess the information;
- relate skills, values and goals to specific careers;
- evaluate how needs will be met;
- relate family needs to career; and
- identify education and training needs for entry and advancement.

Component 7: Toward a Life Learning Plan

Throughout many career moves, it is important to use life planning and decision making skills. Because of rapid change, we all need periodic information updates and we must strive to upgrade our skills, thus minimizing the chances of becoming obsolete. We need to remain flexible. For this reason, life learning plans are cyclical and can be revised as changes are needed.

Summary

The average worker can expect to change jobs approximately seven times during his/her adult life. These movements are sometimes voluntary, but often they are not. The adults who make these changes often are in a state of personal crisis or transition. Many of them, such as the displaced workers or homemakers, have specific needs due to their circumstances or position in life. They need career counseling services to:

- help them reassess their work records and life experiences;
- provide information about the occupations and opportunities available to them; and lastly,
- reassure them of their potential not only to cope with change, but to grow as a result of it.

Career and labor market information can help accomplish these goals.

**Specific Needs of Adults
Module 7
References**

- Abrego, P. & Brammer, L. (1985). Counseling adults for career change. In Z. Leibowitz & D. Lea (Eds.), *Adult Career Development* (pp. 17-39). Alexandria, VA: American Association for Counseling and Development.
- Bradley, L. (1990). *Counseling midlife career changers*. Washington DC: National Career Development Association.
- Brown, D. & Brooks, L. (1984). *Career choice and development*. San Francisco: Jossey-Bass.
- Goodman, J., Hoppin, J., & Kent, R. (1990). *A practical guide for job hunting*. Rochester, MI: Oakland University.
- Miller, J. V. (1982, June). Lifelong career development for disadvantaged youth and Adults. *The Vocational Guidance Quarterly*, 359-366.
- Minor, C. W. (1985). Career development theories and issues. In Z. Leibowitz & D. Lea (Eds.), *Adult career development* (pp. 17-39). Alexandria, VA: American Association for Counseling and Development.
- Morris, L. (1985). Adult learning: A brief overview. In Z. Leibowitz & D. Lea (Eds.), *Adult Career Development* (pp. 40-48). Alexandria, VA: American Association for Counseling and Development.
- Perrone, P. A., Wolleat, P. L., Lee, J. L., & Davis, S. A. (1977). Counseling needs of adult students. *Vocational Guidance Quarterly*, 28(1), 27-36.
- Schlossberg, N. K. (1985). Adult development theories: Ways to illuminate the adult experience. In Z. Leibowitz & D. Lea (Eds.), *Adult career development* (pp. 2-16). Alexandria, VA: American Association for Counseling and Development.
- Zunker, V. G. (1990). *Career counseling: Applied concepts of life planning*. Pacific Grove, CA: Brooks/Cole.

Notes

Module 8

Specific Needs of Women and Teen Parents



National Career Development Guidelines-Counselor Competencies

Skills to assist individuals in changing biased attitudes that stereotype others by gender, race, age, and culture.

Knowledge of changes taking place in the economy, society, and job market.

Knowledge of education, training, employment trends, labor market, and career resources.

Knowledge of basic concepts related to career counseling, such as career development, career progressions, and career patterns.

Knowledge of changing gender roles and how these impact on work, family, and leisure.

Knowledge of unique career planning needs of minorities, women, persons with disabilities, and older persons.

Specific Needs of Women and Teen Parents

Module 8

Issues Facing Women in the Work Place

Women have become and will continue to be full participants in the work force. This participation opens up new horizons for women but at the same time presents many new challenges. Legislation and regulations have opened up new opportunities for women that enable them to develop their talents and abilities in the work force but at the same time, women are also being faced with new challenges. We need to help girls and women overcome these barriers by providing information and strategies that will promote freedom of choice in both their personal and professional lives.

Recognizing The Uniqueness of Women's Career Patterns

The realities of women's career development are quite different from those of men. Critical issues to consider are:

- their career patterns are often interrupted because of family responsibilities;
- career development facilitators need to become aware of all the stereotypes and myths that have influenced previous decisions and will continue to influence future decisions; and
- women's choices are complicated by others' expectations.

The barriers and challenges are real but they are also surmountable. Some can be overcome with information during career decision making. Women need information not only to make a career choice but also to understand the networking, role models and supports can help them function to their fullest in the work place.

What is the Status of Women in the Work Force?

- Women's participation has increased. Not only are more women working, but they also represent an increasing share of the labor force.

**Women's share of labor force
is growing in the U.S.**

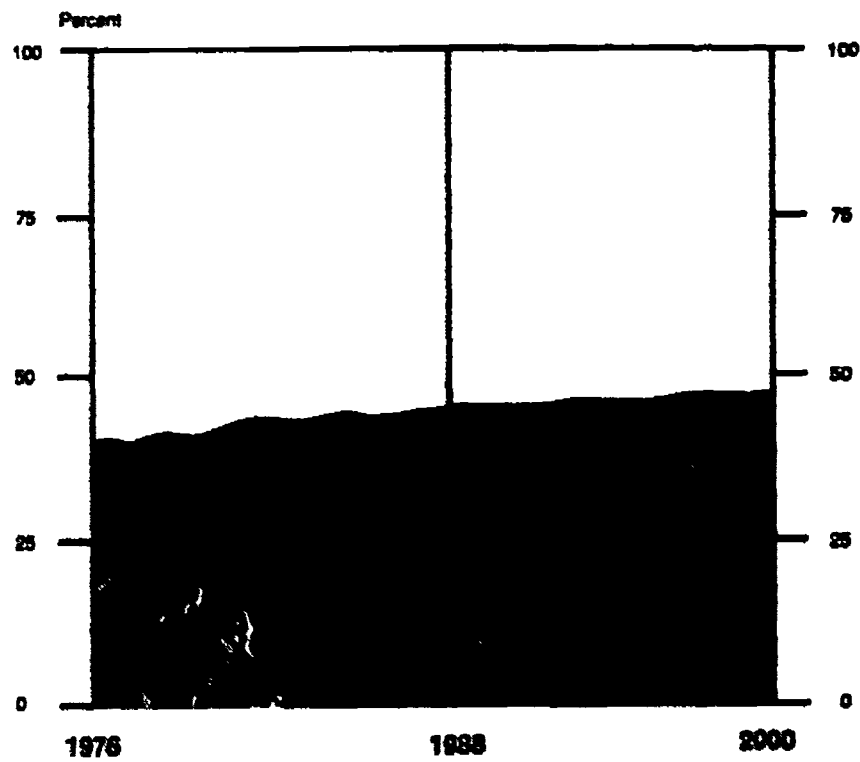
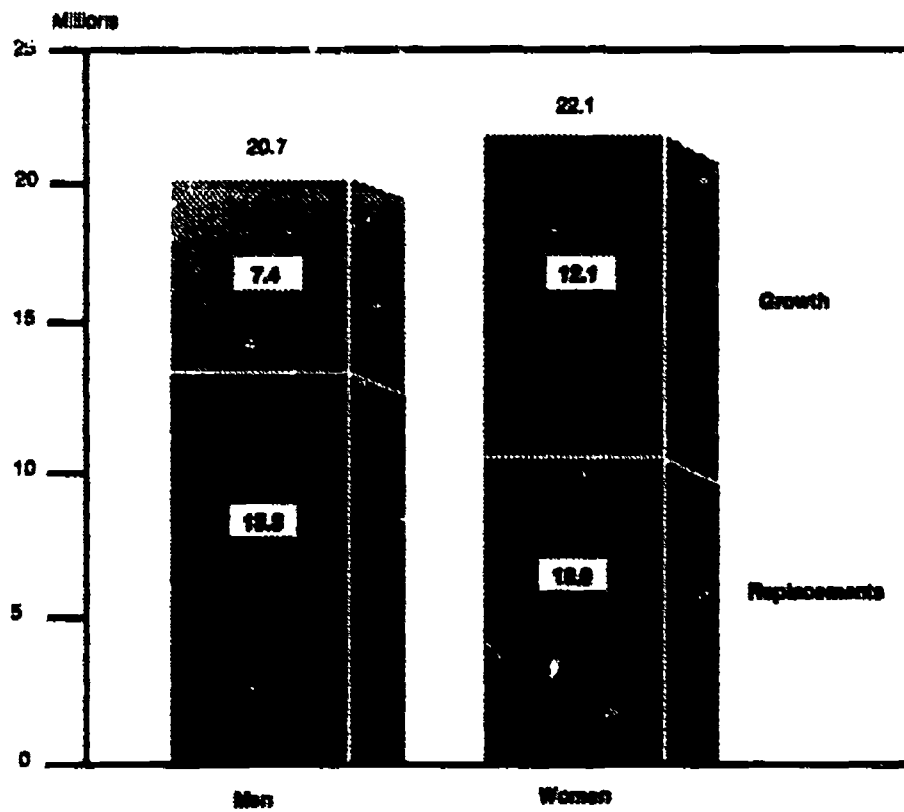


Figure 8.1

U.S. Labor force entrants by sex, 1988-2000



SOURCE: Bureau of Labor Statistics

Figure 8.2

- There is a myth that women are in the work force not out of necessity but for pleasure. Women need to be cognizant of the critical nature of their economic contributions whether they are single, heads of households or married.
- Educated women experience more success in the world of work. The more education, the higher the median earnings for both men and women. Women who do not have advanced degrees also work but often in low paying jobs.

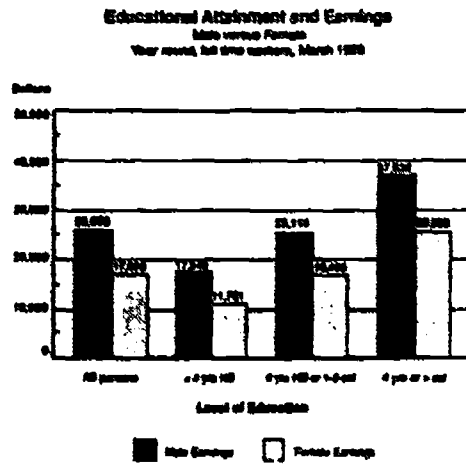


Figure 8.3

- Women are heavily concentrated in low paying jobs and they receive less pay than men for equal work.

Percent Distribution and Median Earnings
of Males and Females aged 35-54 by Occupation
Year round Full time Workers in the U.S.

	Percent Male	Percent Female	Median Earnings Male	Median Earnings Female
Total	48.8	48.2	31,435	19,900
Exec., Managerial and Professional Specialty	18.2	18.0	41,221	28,601
Technical, Sales, and Administrative Support	9.1	19.1	31,021	17,900
Service	3.1	9.1	21,612	11,924
Precision, Production, Craft, and Repair	9.2	7.4	29,890	18,742
Operators, Assemblers, Inspectors, Transporters, and Material Moving	7.7	4.5	25,031	13,900
Farm, Forestry, and Fisheries	1.2	.2	17,112	7,188

U.S. Bureau of Economic Analysis, "Salary Trends and Paying in the US: 1989" (Released from 1987, GPO: GSA Service P, 89-100, 100)

Figure 8.4

- A critical barrier in the career development of women is their continued occupational segregation. Does this occupational segregation really hurt? In terms of wages, the answer is an unequivocal yes.

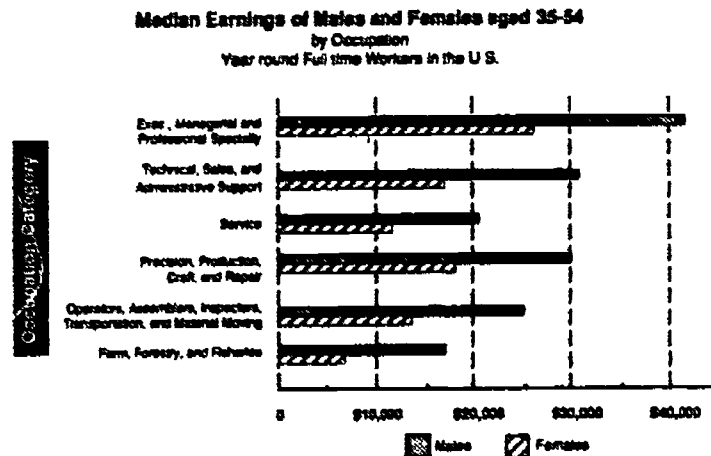


Figure 8.5

- Women in the work force, especially mothers, experience many conflicts between their career and family responsibilities. This problem is growing; the number of families with children at home in which both spouses work outside the house continues to increase.

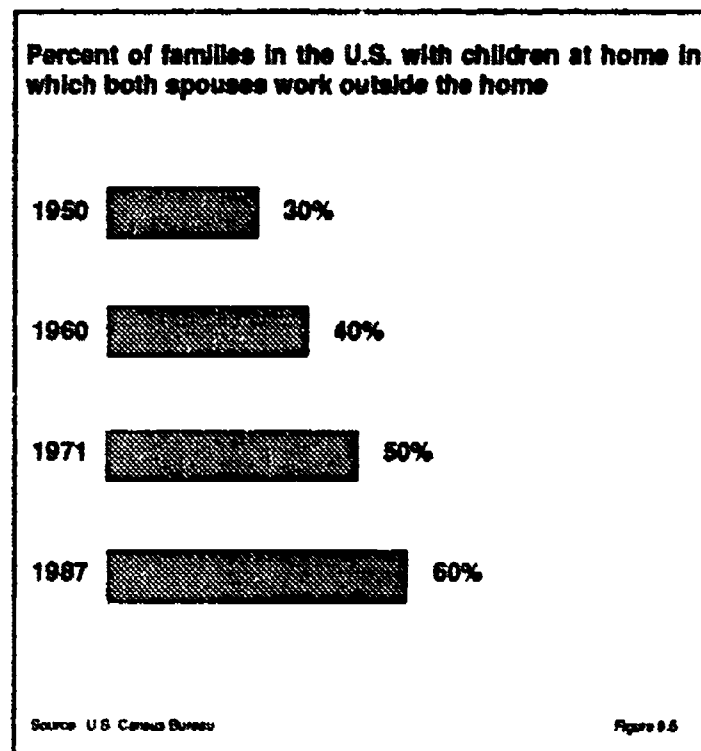


Figure 8.6

- **The lack of basic literacy skills has stifled women's work force participation. An estimated 23% of all adult females have severely limited skills. The feminization of poverty is one result of these barriers.**

Teen Parents

One group of women who need special attention are teen parents. Without appropriate intervention such as career development programs, their educational and employment opportunities will remain very limited. In addition to the social and economic problems they face, there are other factors that impact on their education and training including:

- **low self-concept and self-esteem;**
- **lack of information about academic planning and occupational choices;**
- **lack of role models;**
- **lack of educational skills;**
- **lack of self-awareness;**
- **lack of assertiveness;**
- **low aspirations, motivation and expectations of themselves;**
- **low level of trust in others;**
- **poor communication and decision making skills;**
- **unrealistic goals and ambitions;**
- **defensive attitudes**
- **limited emotional resources for support and maintenance;**
- **immature behavior;**
- **need for immediate gratification; and**
- **Low socio-economic status**

Programs for teen parents need to also include life skills such as

- **parenting and nutrition;**
- **learning how to give and receive emotional support;**
- **learning how to access available child care, transportation services and other support services necessary to one's survival;**
- **self-concept building;**
- **learning how to meet the challenge of combining work and family roles;**
- **building support systems;**
- **networking for work opportunities and connections;**
- **enhancing interpersonal communication and relationships;**
- **avoiding the role of a victim .**

How Can Access to Information Lead to Women's Full Participation in the Work Force?

One way to help girls and women make choices that will lead to a career that not only values their contribution but also provides them with a wage that is commensurate with their contribution, is to provide information about higher wage occupations.

An important component of addressing that need is to expand our services to women who do not have easy access to information. An example is the void of information directed to women on apprenticeships.

Occupational segregation is also holding women back. As noted, three out of four adult women work full time but they are employed in low paying jobs in areas such as retail sales and service. Once again, we can combat this problem by providing appropriate information that recognizes, communicates, and challenges inequities and stereotypes and at the same time raises expectations and monitors choices.

Specific Needs of Women and Teen Parents Module 8 References

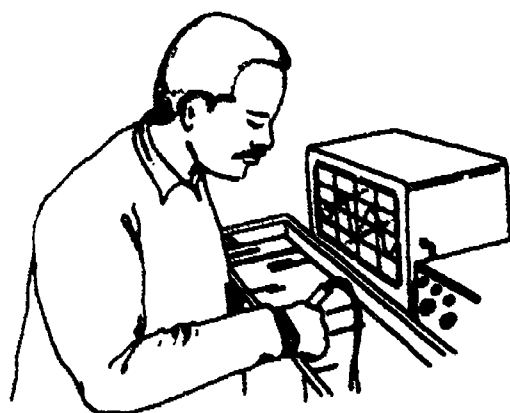
- Brown, D., & Brooks, L. (1991). *Career counseling techniques*. Needham Heights, MA: Allyn and Bacon.
- Hansen, L. S. (1978). Promoting female growth through a career development curriculum. In L. S. Hansen and R. S. Ropoza (eds.). *Career development and counseling women*. Springfield, IL: Charles C. Thomas.
- Lindner, F. *Career survival kit for teen educational employment*.
- Nash, M. A. (1991). *The changing roles of men and women: Educating for equity in the work place*. Available from the Vocational Studies Center, 1025 West Johnson Street, Madison, WI 53706.

Specific Needs of Women and Teen Parents
Module 8
Resources

- American Psychological Association. (1985). Report of the task force on sex bias and sex-role stereotyping in psychotherapeutic practice. *American Psychologist*, 30, 1169-1175.
- Astin, H. S. (1984). The meaning of work in women's lives: A sociopsychological model of career choice and work behavior. *The Counseling Psychologist*, 12, 117-126.
- Bem, S. L. (1977). Beyond androgyny: Some presumptuous prescriptions for a liberated sexual identity. In C. G. Carney & S. L. McMahon (eds.), *Exploring Contemporary Male/Female Roles: A Facilitator's Guide*, 209-29. San Diego: University Associates.
- Berger, M., & Wright, L. (1980). Divided allegiance: Men, work, and family life. In T.M. Skovholt, P.G. Schauble, & R. Davis (eds.), *Counseling Men*, 157-63. Monterey, CA: Brooks/Cole.
- Betz, N. E., & Fitzgerald, L. F. (1987). *The Career Psychology of Women*. Orlando, FL: Academic Press.
- Birk, J. M., Tanney, M. F., & Cooper, J. F. (1979). A case of blurred vision: Stereotyping in career information illustrations. *Journal of Vocational Behavior*, 15, 247-57.
- Brooks, L. (1988). Encouraging women's motivation for non-traditional career and lifestyle options: A model for assessment and intervention. *Journal of Career Development*, 4, 223-41.
- Brooks, L. & Haring-Hidore, M. (1988). Career interventions with women. *Journal of Career Development*, 14(4): (entire issue).
- Broverman, I. K., Broverman, D. M., Clarkson, F. E., Rosenkrantz, P. S., & Vogel, S. R. (1970). Sex-role stereotypes and clinical judgments of mental health. *Journal of Consulting and Clinical Psychology*, 34, 1-7.
- Brown, L. S. (1990). Taking account of gender in the clinical assessment interview. *Professional Psychology: Research and Practice*, 21, 12-17.
- Carter, B. (1989). Gender sensitive therapy: Moving from theory to practice. *Family Therapy Networker*, 13, 57-60.
- Coombs, L. C. (1979). The measurement of commitment to work. *Journal of Population*, 2, 203-23.
- Diamond, E. E. (ed.) (1975). *Issues of sex bias and sex fairness in career interest measurement*. Washington, DC: National Institute of Education.
- DiBenedetto, B., & Tittle, C. K. (1990). Gender and adult roles: Role commitment of women and men in a job family trade-off context. *Journal of Counseling Psychology*, 37, 41-8.
- Fitzgerald, L. F. (1986). Career counseling women: Principles, procedure, and problems. In Z.B. Leibowitz & H. D. Lea (eds.) *Adult Career Development: Concepts, Issues and Practices*, 116-31. Washington, DC: National Career Development Association.
- Fitzgerald, L. F. (1980). Nontraditional occupations: Not for women only. *Journal of Counseling Psychology*, 27, 252-59.
- Gilbert, L. H. (1987). Dual-career families in perspective. *The Counseling Psychologist*, 15, (1): (entire issue).
- Good, G. E., Gilbert, L. A., & Scher, M. (1990). Gender aware therapy: A synthesis of feminist therapy and knowledge about gender. *Journal of Counseling and Development*, 68, 376-80.
- Hansen, L. S. (1984). Interrelationships of gender and career. In N.C. Gysbers and Associates, *Designing Careers*, 216-47. San Francisco: Jossey-Bass.
- Mintz, L. B., & O'Neill, J. M. (1990). Gender roles, sex, and the process of psychotherapy: Many questions and few answers. *Journal of Counseling and Development*, 67, 381-87.
- Osipow, S. H. (1982) Research in career counseling: An analysis of issues and problems. *The Counseling Psychologist*, 282, 77-90.
- Thomas, A. H., & Stewart, N. R. (1971). Counselor response to female clients with deviate and conforming career goals. *Journal of Counseling Psychology*, 18, 352-57.
- Tittle, C. K., & Zytowski, D. G. (eds.) (1978). *Sex-fair Interest Measurement: Research and Implications*. Washington, DC: National Institute of Education.

Module 9

Specific Needs of Persons with Disabilities



National Career Development Guidelines-Counselor Competencies

Knowledge of decision making and transition models.

Skills to assist individuals in setting goals and identifying strategies for reaching goals.

Knowledge of basic concepts related to career counseling, such as career development, career progressions, and career patterns.

Skills to use career development resources and techniques designed for specific groups.

Knowledge of unique career planning needs of minorities, women, persons with disabilities, and older persons.

Knowledge of alternative approaches to career planning needs for individuals with specific needs.

Specific Needs of Persons with Disabilities

Module 9

Introduction

The process of enabling persons with disabilities to enter the mainstream of life may be a long and sometimes arduous task, but the rewards to our society are enormous. This module will discuss the career counseling needs of persons with disabilities, review some of the federal legislation that supports their career development, and describe the components of a school to work transition program. The career development facilitator has a key role to play in helping persons with disabilities enter the mainstream of life. Serving students and clients with disabilities needs to be a concern of all career development facilitators.

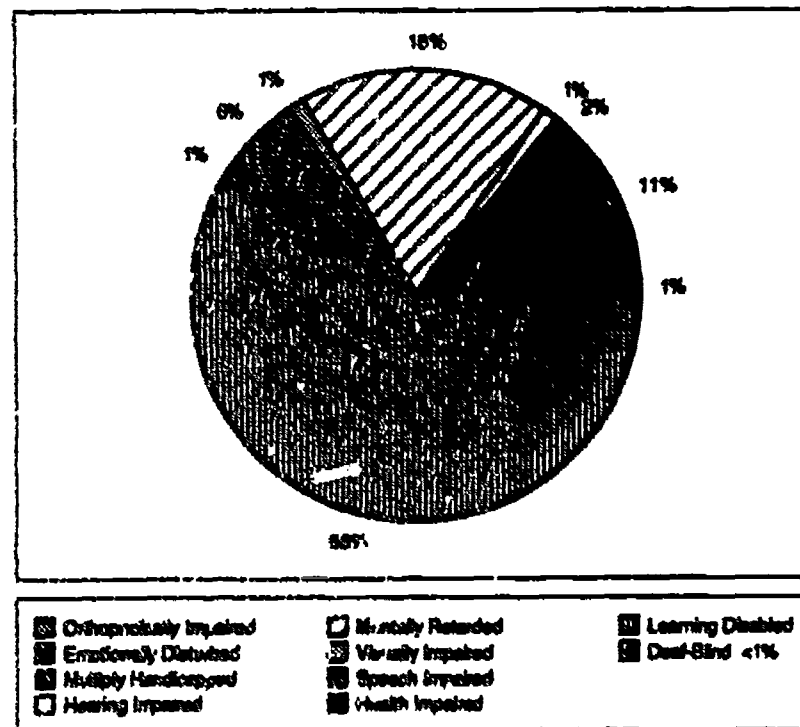
What Is a Disability?

It is important to remember that the term "disability" has a broad interpretation. Title I of the Americans with Disabilities Act defines "disability" to mean a physical or mental impairment that substantially limits one or more of the major life activities of an individual. What is critical when working with persons with disabilities is to emphasize their abilities, not their limitations.

Career Counseling Persons with Disabilities

Is saving students with disabilities a concern for educators and career counselors? The answer is a resounding "yes." Today, students with disabilities comprise approximately 10% of our school age population.

U.S. Secondary School Special Education Students, 1987



National Longitudinal Transition Study of Special Education Students, 1987
SVE International, Menlo Park, CA.

Figure 9.1

Persons with disabilities often have been isolated from society. Therefore, they have a greater need for information to become aware of all options. There are many barriers to better paying jobs for persons with disabilities but providing labor market information can be part of the solution. The barriers are numerous. Many persons with disabilities do not have an employment history, nor have they participated in work experience programs. Therefore, they may not only lack marketable skills, but they also lack information about the work place. In many cases, they are not aware of the careers that are open to them. Because some individuals have been socially isolated, they have not been exposed to successful role models with similar conditions. In addition, due to a lack of information, many individuals with disabilities are unaware of the physical modifications that are available to them that could enhance their performance in the work place.

The directions for career development facilitators are quite clear. Students with disabilities need:

- an assessment of their abilities and limitations;
- an individualized educational program to develop their strengths;
- career information, education and exploration;
- work study programs or on-the-job training;

- independent living skills;
- a knowledge of the federal and state legislation affecting them; and
- effective school to work transition services.

Special Counseling Considerations

Research states that there are four major areas that should be included in the career development plans of persons with disabilities:

- career information, such as an understanding of the roles, responsibilities and the realities of the work place;
- learning strategies to enable individuals to master the information they need to know;
- prevocational skills such as responsibility, initiative, punctuality, care of materials and task completion; and
- social skills, with an emphasis on job interviewing, accepting and providing criticism, and relating to authority figures.

Making the School to Work Transition

Career counseling is also one of the ways to bridge the gap between school and the work place. Transition periods can occur between high school, postsecondary education or training and the first years of employment.

The Individuals with Disabilities Education Act of 1990 (IDEA) defines transition services as:

"a coordinated set of activities for a student, designed within an outcome-oriented process, which promotes movement from school to postschool activities, including postsecondary education, vocational training, integrated employment (including supported employment), continuing and adult education, adult services, independent living, or community participation. The coordinated set of activities shall be based upon the individual student's needs, taking into account the student's preferences and interests, and shall include instruction, community experiences, the development of employment and other postschool adult living objectives, and when appropriate, acquisition of daily living skills and functional vocational evaluation." Sec. 602(a)(19).

Career development facilitators are part of the network that assists students in making the transition. Recent literature to help counselors

with transition planning for students with disabilities has illustrated the following points to consider:

- Due to a lack of information, persons with disabilities do not always perceive the same possibilities or obstacles that others may see for them. Therefore, their goals may need to be established and clarified. Labor market information will enhance this process.
- Adolescence is a difficult period of life when children want to be accepted by their peers. It can be further complicated by a disability that may set them apart from others.
- Transition involves preparation for a change in environment, from school to work, and a change in roles, from student to employee.
- Transition services must focus on enabling self-determination, independence, and participation in society.

(Humes, Szymanski & Hohenshil, 1989)

What are the ingredients of a successful school-to-work transition program? The following components have been suggested by Stern (1991):

- Career information and career guidance programs are consolidated.
- Counselors have established systems for career information, delivery, placement and a method of teacher/business exchange.
- An effective school that has a strong leader, clear goals and a safe climate for learning is critical.
- A vocational and academic secondary to postsecondary program, with no tracking, that includes science and technology courses with hands-on experiences and on-the-job training must be included.
- The school needs to maintain extensive business and community involvement.
- The school operates with performance standards.

Many schools throughout the United States have adopted the Life Centered Career Education Curriculum, which was first published by the Council for Exceptional Children in 1978, to prepare students to make the transition from school to the work place (Brolin and Gysbers, 1989). Its career areas and competencies are as follows.

Curriculum Areas: Occupational Guidance and Preparation Competencies:

- knowing and exploring occupational possibilities;
- selecting and planning occupational choices;
- exhibiting appropriate work habits and behavior;
- seeking, securing and maintaining employment;
- exhibiting sufficient physical-manual skills; and
- obtaining specific occupational skills.

Life-Centered Career Education (LCCE) Curriculum

Competency:		Subcompetency: The student will be able to:						
Curriculum Area: Occupational Guidance and Preparation	Knowing & Exploring Occupational Possibilities	Identify regulatory aspects of work	Locate sources of occupational & training information	Identify general vocational information	Identify societal requirements through work	Classify jobs into occupational categories	Investigate employment opportunities & training opportunities	
	Selecting & Planning Occupational Choices	Make realistic occupational choices	Identify requirements of appropriate available jobs	Identify occupational aptitudes	Identify major occupational interests	Identify major occupational needs		
	Exhibiting Appropriate Work Habits & Behavior	Follow directions & observe regulations	Recognize importance of attendance & punctuality	Participate in work activities	Demonstrate knowledge of occupational safety	Work with others	Meet demands for quality work	Work at satisfactory rate
	Seeking, Securing & Maintaining Employment	Search for a job	Apply for a job	Interview for a job	Maintain interest in occupational development	Demonstrate knowledge of occupational standards	Know how to adapt to changes in employment	
	Exhibiting Sufficient Physical-Manual Skills	Demonstrate stamina & endurance	Demonstrate satisfactory balance & coordination	Demonstrate manual dexterity	Demonstrate sensory discrimination			
	Obtaining Specific Occupational Skills		There are no specific subcompetencies as they depend on skill being taught					

Source: Brohn, Donn. (1978, 1983, 1985). Reston, VA: The Council for Exceptional Children.

Figure 9.2

All of these skills, for both students and counselors, should be achieved with the use of current and accurate labor market information. According to Brohn and Gysbers (1989), the following counselor competencies are necessary to carry out this curriculum:

- counsel students with disabilities;
- counsel with parents regarding the career development of their children;
- conduct or arrange for a career assessment for students with disabilities;
- consult with other educators concerning the development of self-awareness and decision making competencies in students with disabilities;

- contribute to the development and monitoring of individual learning programs in cooperation with other educators and parents;
- work with students with disabilities in the selection of training opportunities and the selection of job possibilities;
- develop and use community resources, particularly for referral purposes; and
- become an advocate for students with disabilities.

The Impact of Federal Legislation

The legislation has greatly enhanced the outlook for persons with disabilities. The counseling needs of persons with disabilities have become more urgent since recent legislation has enabled them to take their rightful place in our schools and the work force. Students need to be equipped with the skills they will need to find work. Local labor market information can help direct them.

Federal legislation includes:

- Rehabilitation Act of 1973;
- Education for All Handicapped Children Act of 1975;
- Job Training Partnership Act of 1982 (JTPA);
- Carl D. Perkins Vocational Education Act of 1984;
- Amendments to the Perkins Act, 1990; and
- Individuals with Disabilities Education Act (IDEA).

The Train-Place-Train Transition Process

Programs such as the Train-Place-Train Transition process have been developed to help career counselors provide services required under these laws.

Integrating an employee with a disability in the work place:
The Train-Place-Train Model

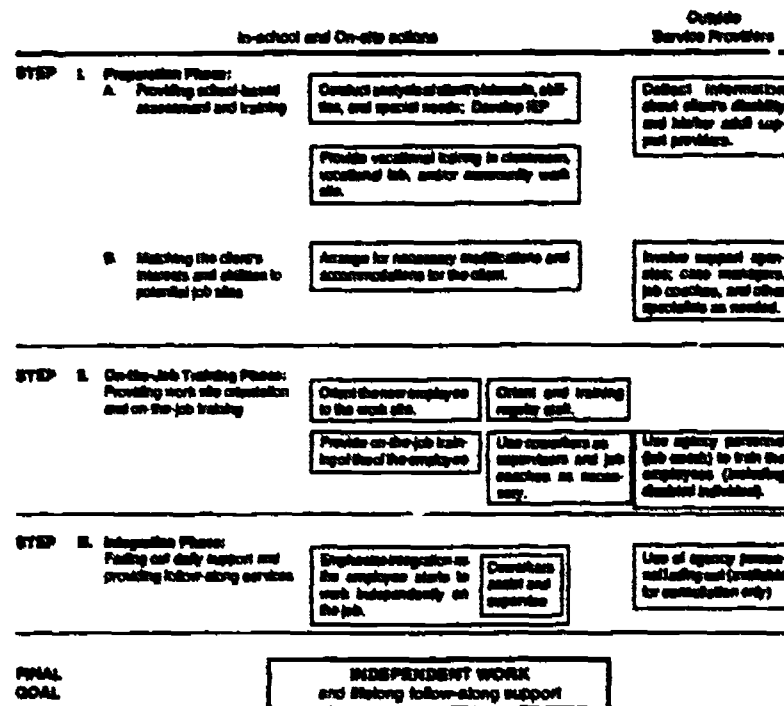


Figure 9.3

The Americans with Disabilities Act of 1990

The outlook for persons with disabilities in the work place was greatly enhanced by the Americans with Disabilities Act of 1990 (ADA). Some of the key provisions follow:

Employment

- By 1994, employers with 15 or more employees may not refuse to hire or promote qualified persons with disabilities.
- By 1992, employers with 25 employees or more must make reasonable accommodations for persons with disabilities to perform the functions of the job.
- Employers must modify the job requirements to enable persons with disabilities to do the work, unless the changes impose undue hardships upon the employers.

Transportation

- All new vehicles for public transportation must be made accessible for persons with disabilities.
- Paratransit services for persons with disabilities who cannot use the mainline system must be provided, unless this service is an undue financial burden.
- All new buses ordered by private carriers, such as Greyhound, must be accessible after 1990.

Public Accommodations

- New buildings must be accessible; barriers must be removed in older facilities if economically possible.
- Auxiliary aids and services, such as large print materials and tape recordings, are to be provided to enable persons with disabilities to enjoy the goods and services offered to the general public.
- Hotels that offer transportation generally must also provide services to persons with disabilities.

Telecommunications

- Telephone companies must offer telephone relay services to individuals who use telecommunications devices for the deaf (TTDs) at regular rates.

In short, the ADA will make the work place, public accommodations and services more accessible to persons with disabilities. In terms of career counseling, this means that many of the barriers to the employment of persons with disabilities will come down, such as the lack of job opportunities, discrimination in hiring practices, the physical demands of the work place and limited public transportation services.

Accommodations for Persons with Learning Disabilities

According to the Americans with Disabilities Act (ADA), firms that hire persons with disabilities must expect to make accommodations for them. In some cases, tax credits may be available to small businesses for expenses incurred in complying with the ADA. The Internal Revenue Service (IRS) should be contacted for information regarding tax credits. Some of the more common adaptations that have been made are as follows (Gugerty, Phelps and Tindall, 1991):

- **Make fewer demands for paperwork.**
- **Allow for flexible scheduling and additional time to accomplish tasks.**
- **Provide supervision designed to reduce stress.**
- **Have staff and coworkers help the employee in scheduling his or her time.**
- **Have staff and coworkers provide guidance, instruction, and repeated directions for retention.**
- **Supervisors should spend more time explaining rules and procedures.**

Accommodations for Persons with Mental Disabilities

- **Provide closer supervision during initial training period.**
- **Provide employee with drawings of correct techniques and examples of finished products.**
- **Have supervisors demonstrate procedures instead of giving verbal instructions.**
- **Provide minimal constant supervision to avoid quality and quantity problems.**
- **Use photographs to show correct items to process, e.g., shelving.**

Accommodations for Persons with Emotional Disabilities

- **Provide postemployment follow-up by job placement personnel.**
- **Monitor work more closely.**
- **Provide postemployment support by an individual or a group of coworkers.**
- **Supply written work schedules of tasks to be accomplished.**
- **Have supervisors provide support to overcome or control job stress.**

Accommodations for Persons with Visual Disabilities

- **Use taxis or a driver to help the employee attend meetings.**
- **Provide a speech synthesizer, Braille or tape recorders.**
- **Have the job placement agency provide postemployment counseling as needed.**
- **Modify the work schedule to accommodate public transportation schedules, e.g., reduced schedules at night and on weekends.**
- **Assign the employee to physical facilities that accommodate communication devices and Braille storage.**
- **Restructure the job to have coworkers do proofreading, typing of forms, etc.**

Accommodations for Persons with Hearing Disabilities

- Adjust work tasks to decrease the employee's need to communicate by hearing.
- Use interpreters for meetings, for communication with supervisors, coworkers or the general public.
- Add volume controls to the telephone.
- Install communication devices where needed.
- Have employees carry notebooks and pencils.
- Assign employee to work with a coworker who knows sign language.

Accommodations for Persons with Physical Disabilities

- Raise the employee's desk to accommodate a wheelchair.
- Make facilities accessible including,
 - office facilities,
 - bathrooms,
 - meeting and eating area,
 - entrance ramps,
 - parking areas, and
 - electric door openers.
- Provide assistance in moving supplies and equipment.
- Modify building evacuation procedures.
- Provide accessible transportation, e.g., vans, cars, chairlifts, etc.
- Provide accessible equipment, e.g., computers, calculators, and telephones.

In short, there are many physical changes that can be made in the work place to accommodate persons with disabilities in order to provide them with jobs that can help them achieve independence.

Summary

Due to the impact of federal legislation supporting their civil rights, persons with disabilities will be entering the work force in much greater numbers. Under the mandates of the Americans with Disabilities Act of 1990, employers will be required to make accommodations in work places to provide employment opportunities for persons with disabilities.

Therefore, serving the academic needs of students with disabilities to prepare them to take their rightful places in the work force is of great

concern to career development facilitators and educators. It is critical that students with disabilities receive education, training and career counseling to enable them to make a smooth transition from school to work or postsecondary education or training.

The career development facilitator plays an important role in working with students with disabilities, their families and other school and community personnel to ensure that career development is a vital and realistic component of students' Individualized Educational Programs (IEPs). It is critical that the IEPs be based on accurate labor market information to ensure that students with disabilities truly are competitive in today's work force.

Specific Needs of Persons with Disabilities
Module 9
References

- Brolin, D. E., & Gysbers, N. C. (1989, November/December). Career education for students with disabilities. *Journal of Counseling & Development, 68*.
- Council for Exceptional Children. (1990, October/November). Americans with Disabilities Act of 1990: What should you know? *Exceptional Children, 57(2)*, (Suppl.).
- Dougherty, B., Novak, J., & Reschke, L. (1986, September). *Ready, set... go!, Volume 1: Planning and developing a program*. Madison, WI: The Vocational Studies Center, School of Education, University of Wisconsin.
- Dunn, L. M. (Ed.). (1973). *Exceptional children in the schools: Special education in transition*. New York: Holt, Rinehart and Winston.
- Ehrsten, M. E., & Izzo, M. V. (1988). Special needs youth and adults need a helping hand. *Journal of Career Development, 15(1)*, 53-63.
- Fagan, T. K., & Jenkins, W. M. (1989, November/December). People with disabilities: An update. *Journal of Counseling & Development, 68*, 140-159.
- Gugerty, J., Phelps, L. A., & Tindall, L. W. (1991, February). Implementing The Americans With Disabilities Act. *WorkAmerica, 8(2)*, (4-6).
- Gugerty, J. J., Tindall, L. W., & Heffron, T. J. (1988, May). *Profiles of success: Serving secondary special education students through the Carl D. Perkins Vocational Education Act*. Madison, WI: The Vocational Studies Center, School of Education, University of Wisconsin-Madison.
- Harrington, T. F. (1982). *Handbook of career planning for special needs students*. Rockville, MD: Aspen Systems.
- Humes, C. W., Szymanski, E. M., & Hohenshil T. H. (1989, November/December). Roles of counseling in enabling persons with disabilities. *Journal of Counseling & Development, 68*, 145-149.
- Levine, M. (1984). *Summary of report: Survey of employer needs*. Washington, DC: Committee for Economic Development.
- Louis Harris and Associates, Inc. (1989). *The ICD survey III: A report card on special education*. New York: International Center Disabled.
- Louis Harris and Associates, Inc. (1987). *The ICD survey II: Employing disabled Americans*. New York: International Center for the Disabled.
- Louis Harris and Associates, Inc. (1986). *The ICD survey of disabled Americans: Bringing disabled Americans into the mainstream*. New York: International Center for the Disabled.
- Vocational Education Weekly, 3(34)*, 4. (1991, January 7).
- Research & Training Center on Independent Living. (1990). *Guidelines for reporting and writing About people with disabilities* (3rd ed.). Lawrence, KS: author.
- SRI International (1987). *National longitudinal transition study of special education students*. (Available from SRI International, The National Longitudinal Transition Study, Room BS136, 333 Ravenswood Avenue, Menlo Park, CA 94025).
- Tindall, L. W., Gugerty, J. J., Heffron, T. J., & Godar, P. G. (1988, March). *Replicating jobs in business and industry for persons with disabilities, 3*. Madison, WI: The Vocational Studies Center, School of Education, University of Wisconsin.
- Wilcox, J. (1991, February). The new perkins act at a glance. *The Vocational Education Journal, 66(2)*.
- Will, M. (1984). *OSERS programming for the transition of youth with disabilities: Bridges from school to working life*. Washington, DC: Office of Special Education and Rehabilitative Services, U.S. Department of Education.
- Worklife, 3(3)*. (1990, Fall). P.L. 101-336 Americans with Disabilities Act of 1990.
- WorkAmerica, 7(9)*, (2, 4). (1990, September). Equal to the task.
- WorkAmerica, 8(6)*, (5). (1991, June). The benefits of accommodation.

Notes

Module 10

Specific Needs of Children At-Risk



National Career Development Guidelines-Counselor Competencies

Skills to assist individuals in setting goals and identifying strategies for reaching goals.

Knowledge of education, training, employment trends, labor market and career resources.

Skills to use career development resources and techniques designed for specific groups.

Knowledge of alternative approaches to career planning needs for individuals with specific needs.

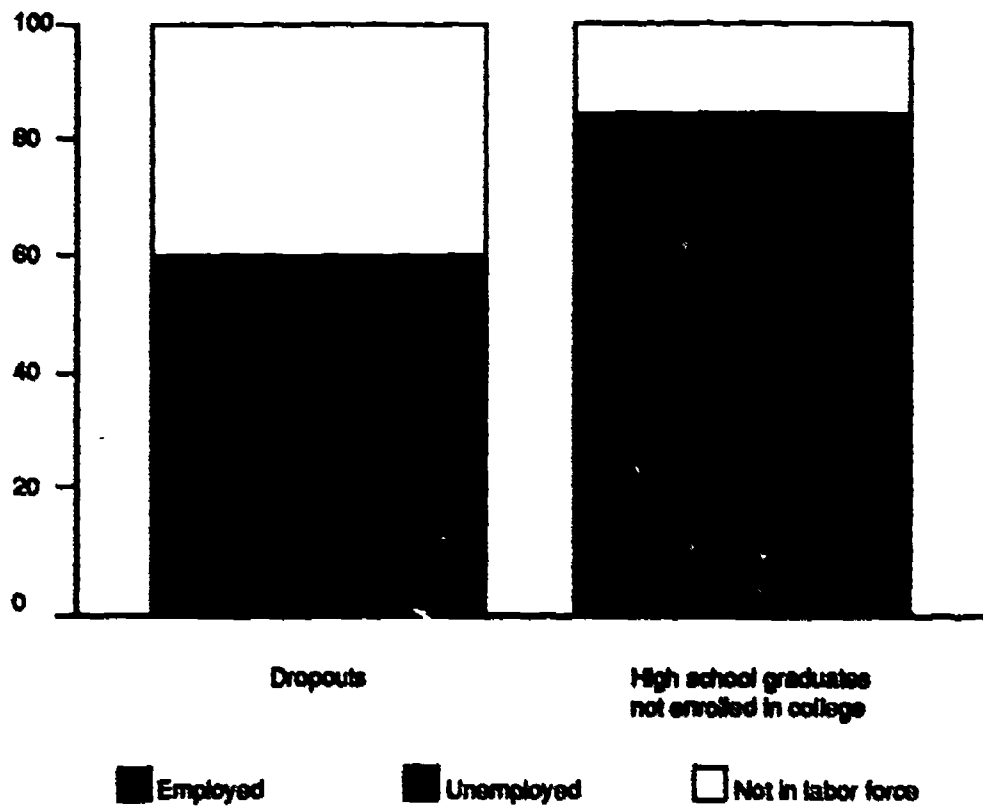
Specific Needs of Children At-Risk

Module 10

Introduction

Keeping children in school through high school graduation is an effective deterrent to a life of poverty. Evidence continues to show that an education can make a difference in one's quality of life.

Labor force status of 1987-1988 high school dropouts and graduates: October 1988

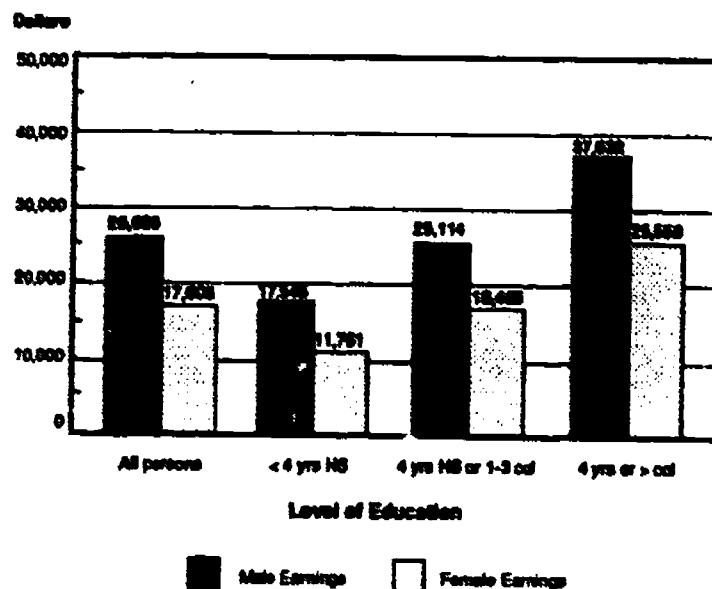


Source: U.S. Department of Labor, Bureau of Statistics

Figure 10.1

Only one in six jobs is suitable for a high school dropout. The critical nature of the relationship between income and education is illustrated in Figure 10.2.

Educational Attainment and Earnings
Male versus Female
 Year round, full time workers, March 1989



Source: U.S. Bureau of the Census

Figure 10.2

Despite the importance of education, many students fail to complete high school. In an attempt to forestall our nation's alarming dropout rate, many schools have identified those students who are most at-risk of leaving school prematurely. They have then developed special educational programs to better meet the needs of these children at-risk.

The concept of "at-risk" is broad and complex. Many factors place a student at-risk. They may be environmental, emotional, social, psychological, physical and/or academic in nature.

To respond effectively to the needs of these students, our initiatives must be directed by the following assumptions:

- all children can learn;
- we know how to teach children at-risk;
- what we teach must be challenging; and
- we must produce, outcomes count.

(CCSSO, 1988)

Meeting the Needs of Children At-Risk

The literature suggests that successful strategies include the following components:

- **base children at-risk policies and programs on the premise that all children can succeed;**
- **provide a safe and orderly environment by setting high standards for discipline and attendance; enforce them fairly, consistently and firmly;**
- **ensure that educational reforms positively affect children at-risk;**
- **provide a challenging academic curriculum to all students, including children at-risk;**
- **use instructional strategies that meet the educational needs of children at-risk;**
- **address children's needs at an early age to increase their chances for success;**
- **carefully plan parent involvement so that it meets the needs of the family, students, and school personnel;**
- **provide a multifaceted program that contains a plan of coordinated services and mobilizes all existing community resources;**
- **include a supervised work experience component that clearly demonstrates the relationship between school and work;**
- **have a staff development plan that leads to increased understanding, sensitivity and effectiveness in educating children at-risk;**
- **include a component that helps enhance students' perceptions of their own self-worth;**
- **coordinate standards for effective and appropriate education of children at-risk at the state level; endorse and implement them at the local level to meet community needs; and**
- **include policies, guidelines, and programs on drug and alcohol abuse in a comprehensive children at-risk program.**

(Rodenstein, 1990)

A Strategy That Works: Career Development Programs

Although this list does not include the words "career development," an underlying theme in many of these components is an attempt to help students overcome their sense of isolation from school and the world of work through career development.

A component of career development programs that appears to be successful with at-risk high school students, seeks to enhance the transition from school to work by providing access to career and labor market information delivered through a Career Information Delivery System (CIDS). According to Bloch (1988), a CIDS can establish links between school and work. The connections between what a student learns in school and the world of work becomes more obvious. Bloch believes there are four critical components of all at-risk career education programs. She refers to them as the four C's.

Cash

This means that students need to see the link between making money and the subjects they are studying in school. Students need to understand how classroom instruction fits into their career aspirations and in turn, their paycheck.

Care

Caring means that students must get the concern they need from teachers and other adults. Career education programs should be intensive and focused. There needs to be personalized, individualized attention to student needs. Students can receive immediate feedback and rewards when they interact with a CIDS.

Coalition

Coalitions of schools, businesses and local education foundations are needed, especially for those students who have trouble understanding the linkages between the classroom and the world of work. Parents and the community become resources as the students begins to understand the relationship between school and work.

Computers

The final "C" is for computers. One of the more powerful career planning tools is a Career Information Delivery System (CIDS). By using the computer to retrieve personally relevant occupational and educational information, students can relate school and learning to the world of work. CIDS also helps students feel more in charge of their own lives and gives them a sense of control. Immediate feedback is also built into the system. A CIDS has proven to be a motivator, user-friendly and a reliable source for labor market information.

Summary

In conclusion, career development programs are a tool that can motivate students to discover their likes, dislikes and career interests. Delivery of career information through a CIDS results in a wealth of easy-to-read, up-to-date and individualized information for career decision making. It helps students create a future for themselves.

Specific Needs of Children At-Risk Module 10 References

- American Association of School Administrators. (1989). *Problems and solutions*. Arlington, VA: author. (Paper no. 021-00213).
- Bloch, D. P. (1988). *Reducing the risk: Using career information with at-risk youth*. Eugene, OR: Career Information System.
- Council of Chief State School Officers. (1988). *School success for students at-risk: Analysis and recommendations of the council of chief state school officers*. Washington DC: CCSSO.
- Mertens, D., Seitz, P., & Cox, S. (1982). *Vocational education and the high school dropout*. Columbus: The National Center for Research in Vocational Education, The Ohio State University. (ERIC Document Reproduction Service No. ED 228 397).
- Miller, J. V., & Imel, S. (1987). Some Current Issues in Adult Career and Vocational Education. In E. Flaxman (Ed.), *Trends and issues in education*. Washington, DC: Council of ERIC Directors, Educational Resources Information Center, Office of Educational Research and Improvement, U. S. Department of Education.
- Nash, M. A. (1990). *Improving their chances: A handbook for designing & implementing programs for at-risk youth*. Madison, WI: Vocational Studies Center, University of Wisconsin-Madison.
- National School Boards Association. (1989). *An equal chance: Educating at-risk children to succeed*. Alexandria, VA: National School Board Association.
- Rouenstein, J. (1990). *Children at-risk*. Madison, WI: Wisconsin Department of Public Instruction.

Specific Needs of Children At-Risk
Module 10
Resources

- Author Unknown. (1988, October 19). Study urges dropout-prevention efforts in middle grades. *Education Week*, 7, 7.
- Bishop, J. (1989, May). Making vocational education more effective for at-risk youth. *Vocational Education Journal*, pp. 14-19.
- Bloch, D. P. (1988). *Reducing the risk: Using career information with at-risk youth*. Eugene, OR: Career Information System.
- Bowman, B. (1988, July 31-August 5). *Early intervention and the public schools*. Paper prepared for the Council of Chief State School Officers Summer Institute, Boston.
- Business Advisory Commission, Education Commission of the States. (1985). *Reconnecting youth: The next stage of reform*. Denver, CO: ECS. (Paper No. AR85-1).
- Business Week Special Report*. (1988). Human capital: The decline of America's work force. Highstown, NJ: author.
- California State Department of Education. (1990). *Toward a state of esteem: Report of the California task force to promote self-esteem and personal and social responsibility*. Sacramento: author.
- Charles Stewart Mott Foundation. *Youth in crisis: Living on the jagged edge*. Flint, MI: Charles author.
- Children's Defense Fund. (1989). *Key facts about children in Wisconsin*. Washington, DC: author.
- Children's Defense Fund. (1989). *A vision for America's future*. Washington, DC: author.
- Comer, J. P. (1988). Effective schools: Why they rarely exist for at-risk elementary school and adolescent students. In *School success for students at risk*. Washington, DC: Council of Chief State School Officers.
- Council of Chief State School Officers. (1987). *Elements of a model state statute to provide educational entitlements for at-risk students*. Washington, DC: author.
- Council of Chief State School Officers. (1987). *Early childhood and family education*. Washington, DC: author.
- Council of Chief State School Officers. (1988). *School success for students at risk: Analysis and recommendations of the council of chief state school officers*. Washington, DC: author.
- DeLone, R.H. (1989). *Mobilizing state level systems to better serve children at-risk*. Summarized by J. Rodenstein. Madison, WI: Wisconsin Department of Public Instruction.
- Eastman, G. (1988). *Family involvement in education*. Paper prepared for the Wisconsin Department of Public Instruction, Madison, WI.
- Fine, M. (1988). De-institutionalizing education inequity: Contests that constrict the lives and minds of public school adolescents. In *School success for students at risk*. Washington, DC: Council of Chief State School Officers.
- Ford Foundation. (1989). *The common good: Social welfare and the american future*. New York: author.
- Graham, P. A. (1988). Achievement for at-risk students. In *School success for students at risk*. Washington, DC: Council of Chief State School Officers.
- Green Bay Area School District. (1987). *The children at-risk task force report*. Green Bay, WI: author.
- Heleen, O., & Miller F. T. (1989). *Mobilizing local coalitions and collaborations to better serve children at-risk*. Madison, WI: Wisconsin Department of Public Instruction.
- Hilliard, A. G. (1988). Public support for successful instructional practices for at-risk students. In *School success for students at risk*. Washington, DC: Council of Chief State School Officers.
- Hispanic Policy Development Project. (1986). 1980 high school sophomores: Whites, blacks, Hispanics--where are they now? *Research Bulletin*, 1.1, 1.
- Johnston, M. E. & Williams, P. B. (n.d.). *Building a community business/education partnership: A tool kit*. Salem: Oregon Student Retention Initiative.

ICDM

10-6

- Joyner, E. T. (1989). *Mobilizing resources within the schools to serve children at-risk*. Mobilizing resources to better serve children at-risk series (Paper No. 1). Madison: Wisconsin Department of Public Instruction.
- Levin, H. M. (1988). *Accelerated schools for children at-risk students*. (Research Report Series RR-010). New Brunswick, NJ: Rutgers University Center for Policy Research in Education.
- Levin, H. M. (1988). Accelerating elementary education for disadvantaged students. In *School success for students at risk*. Washington, DC: Council of Chief State School Officers.
- Lowry, C. M. (1990). *Helping at-risk youth make the school-to-work transition*. Contract No. RI88062005). Columbus, OH: Ohio State University, Center on Education and Employment. (ERIC Document No. EDO-CE-90-101)
- Maeroff, G. I. (1988, May). Withered hopes, stillborn dreams: The dismal panorama of urban schools. *Phi Delta Kappan*, 69(2), 632-638.
- Martin, D. (1988, February) Wake up: The american dream is fading and our future is at risk. *The American School Board Journal*, 175(2), 21-24.
- Massachusetts Advocacy Center and the Center for Early Adolescence. (1988). *Before it's too late: Dropout prevention in the middle grades*. Boston: Massachusetts Advocacy Center.
- National Association of Social Workers.(1985). *The human factor: A key to excellence in education*. Silver Springs, MD: author.
- Naylor, M. (1987). *Reducing the dropout rate through career and vocational education*. (Contract No. 800-84-0011). Columbus, OH: Ohio State University, Center on Education and Training for Employment. (ERIC Digest No. 63)
- Naylor, M. (1989). *Retaining at-risk students in career and vocational education*. (Contract No. RI88062005). Columbus, OH: Ohio State University, Center on Education and Training for Employment. (ERIC Document No. EDO-CE-89-87)
- Ohio Department of Education. (1988). *Ohio's formula for education success*. Columbus: author.
- Olson, L. (1988, September 21). Despite years of rhetoric, most still see little understanding, inadequate efforts. *Education Week*, 3, 1 & 14-16.
- Olson, L. (1988, November 2). You've got to demonstrate that there's another way. *Education Week*, 3, 9.
- Orfield, G. (1988). Race, income and education inequality: Students and schools at risk in the 1980's. In *School success for students at risk*. Washington, DC: Council of Chief State School Officers.
- Patterson, J. H. (1989, March). Impact of higher academic standards on youth at risk of academic failure. Paper presented at the American Educational Research Association conference in San Francisco, CA.
- Rumberger, R. W. (1987). High school dropouts: A review of issues and evidence. *Review of Educational Research*, 57(2), 101-121.
- Sagor, R. (1988). Teetering on the edge of failure. *Learning*, 18(8), 28-34.
- Sandoval, G. T. (1988). *A compendium of what works for vocational educators in dropout prevention*. Columbus, OH: The National Center for Research in Vocational Education.
- Schorr, L. B.; with D. Schorr. (1988). *Within our reach: Breaking the cycle of disadvantage*. New York: Anchor Press, Doubleday.
- Search Institute. (1989). *The Wisconsin study: Alcohol and other drug abuse*. Madison: Wisconsin Department of Public Instruction.
- Smith, G. A. (1989). *Mobilizing academic resources to better serve children at-risk*. Mobilizing resources to better serve children at-risk series (paper no. 3). Madison: Wisconsin Department of Public Instruction.
- United Action Council for Public Education. (1988). *Public education in Wisconsin--a long term commitment*. Monroe, WI: author.
- U.S. Department of Education. (n.d.). *Schools that work: Educating disadvantaged children*. Washington, DC: author.

- U.S. Department of Education. (1989). *Dropout rates in the United States: 1988*. NCES #89-609. Washington, DC: Office of Educational Research and Improvement, author.
- U.S. Department of Labor, U.S. Department of Education, & U.S. Department of Commerce. (1988). *Building a quality work force*. Washington, DC: Office of Public Affairs.
- University of Illinois Champaign-Urbana. (1989). *Technical assistance for special populations brief*. Champaign-Urbana: University of Illinois.
- Vocational Studies Center. (1979). *Staying in*. Madison: University of Wisconsin.
- Wehlage, G. G., et al. (1989). *Reducing the risk*. Philadelphia: Falmer Press.
- White, B. L. (1989). *Mobilizing the public to better serve children at-risk*. Mobilizing resources to Better serve children at-risk series (paper no. 5). Madison: Wisconsin Department of Public Instruction.
- Willis, M. J. (1989). *Mobilizing parents to better serve children at risk*. Mobilizing resources to better serve children at-risk series (paper no. 4). Madison: Wisconsin Department of Public Instruction.
- Wisconsin Department of Public Instruction. (1988). *Final recommendations of the statewide advisory committee of the year of the family in education*. Madison: author.
- Wisconsin Department of Public Instruction. (1988). *Planning for state solutions to the problems of youth at risk*. Madison: author.
- Wisconsin Department of Public Instruction. (1987). *Wisconsin educational standards: A blueprint for excellence*. Madison: author.

Notes

Applications and Activities



National Career Development Guidelines-Counselor Competencies

Knowledge of counseling and career development theories and techniques.

Skills to use appropriate individual and group counseling techniques to assist individuals with career decision and career development concerns.

Skills to assist individuals in identifying influencing factors in career decision making, such as family, friends, educational opportunities, and finances.

Skills to assist individuals in changing biased attitudes that stereotype others by gender, race, age, and culture.

Knowledge of changing gender roles and how these impact on work, family, and leisure.

Knowledge of employment information and career planning materials.

Skills to use career development resources and techniques designed for specific groups.

Knowledge of unique career planning needs of minorities, women, persons with disabilities, and older persons.

Knowledge of alternative approaches to career planning needs for individuals with specific needs.

Signature Activity

Type of Activity: Icebreaker

Teaching Objective(s):

To help participants become better acquainted by illustrating the diversity of attributes, experiences and work roles among them.

Behavioral Objective(s):

Each participant will try to find persons in the group who fit given descriptions on the "Signature Activity" worksheet by conversationally asking other people direct or indirect questions.

Estimated Time to Complete: 20 minutes

Points to Introduce Activity:

1. The purpose of this activity is to acquaint you with one another by exploring some of your diverse attributes, experiences and work roles.
2. Please find the "Signature Activity. The directions at the top will instruct you to find other people in the group who fit the descriptions that are given. Please note the two columns. One is for female signatures; the other for males.
3. Please use the next 20 minutes to find as many men and women who will agree to the descriptions by signing the appropriate places on your "Signature Activity" work sheet. You may have only one signature from each participant on your work sheet.
4. You may ask others these questions either directly or indirectly as you walk around the room and engage your fellow participants in conversations.

Materials and Preparation:

1. Participants will need the "Signature Activity" worksheet.

Activity:

The participants will have a worksheet "Signature Activity," that lists approximately 20 descriptive statements about a person, such as, "Someone who is athletic." The participants will engage one another in conversation to find out if any of the descriptions match the person to whom they are speaking. If the person does match any of the descriptions on the "Signature Activity" sheet, the person should sign his/her name next to it. Women should sign the sheet on the left hand side; men on the right.

Adaptations:

The descriptions on the "Signature Activity" sheet could be changed to fit the audience.

A prize could be awarded to the person who collects the most signatures or "Autographs of Distinguished People."

Questions for Discussion:

1. As you asked questions of your fellow participants, were you aware of any of your own sex role stereotypes? Why/why not?
2. Did you sense that others had preconceived ideas about members of the other sex? Why/why not?
3. How might some stereotypical ideas about sex roles interfere with a career development facilitator's effectiveness?
4. What can career development facilitators do to overcome their sex role stereotypes?

Trainer's Notes:

Signature Activity

The purpose of this activity is for you to explore the diverse attitudes and work roles that exist in our society. You will use the time allotted to you by your trainer to find as many women and men as you can who will agree to a description of themselves on the lines below. You can do this by asking people directly or indirectly about themselves in a conversational style.

Women

Men

_____	A person who strives to outdo others, never admitting defeat	_____
_____	A person who thinks men should not show affection for other men	_____
_____	Someone who is a gourmet cook	_____
_____	Someone who is athletic	_____
_____	Someone who likes to take bubble baths	_____
_____	Someone who has chopped wood for a fire	_____
_____	Someone who shows emotions freely	_____
_____	Someone who is not ashamed to cry in front of others	_____
_____	Someone who feels men and women are equal in all respects	_____
_____	Someone who feels men and women have different roles in life	_____
_____	Someone who likes to garden	_____
_____	Someone who feels their own behavior is appropriate for their gender	_____
_____	Someone who feels the other sex has it made	_____
_____	Someone who found their career by chance	_____
_____	Someone who has used a Career Information Delivery System	_____

Applications-3

Women

Men

_____	Someone who would like to change their career	_____
_____	Someone who follows the stock market	_____
_____	Someone who has held or holds a nontraditional work position	_____
_____	Someone who feels that women should be protected by men	_____
_____	Someone who feels that you are a failure if you do not marry	_____
_____	Someone who likes to clean house	_____
_____	Someone who thinks the nurturing instinct belongs only to women	_____
_____	Someone who would like to be the other gender	_____
_____	Someone who is a single parent	_____
_____	Someone who supervises others in the work place	_____
_____	Someone who works or has worked in a service industry	_____
_____	Someone who works or has worked in a highly technical area	_____
_____	Someone who has been unemployed in the past two years	_____
_____	Someone who has changed their career within the past five years	_____
_____	Someone who is politically active within the community	_____
_____	Someone who started a business	_____
_____	Someone who is mechanical	_____
_____	Someone who can create a computer program	_____

Career Keno

Type of Activity: Icebreaker

Teaching Objective(s):

The purpose of this activity is to introduce participants to one another and to identify those who have special fields of interest or expertise. It will also help the participants begin to think about the types and uses of labor market information that are covered during this training.

Behavioral Objective(s):

The participants will look for persons in the room who fill the career-related descriptions on their list and ask them to sign the appropriate squares. The objective is to meet the other participants and get to know something about their backgrounds by getting as many squares signed as possible during the time period allotted.

Estimated Time to Complete: 20 minutes

Points to Introduce Activity:

1. This is a get acquainted activity called "Career Keno" that can be found on page--of your Participant's Guide. The purpose of this activity is to acquaint you with others and find out more about their interests and experiences.
2. The object of this activity is to find people who match the 25 descriptions given in the squares on your Keno sheet. For example, when you have found a person who regularly uses the *DOT*, please have him/her sign that square. Only one signature is needed in each square, do not get more than one. (If there are at least 30 participants, there should be 30 different signatures on each sheet. If there are less than 30, each person can sign two squares.) Trainers may participate, if they wish.

Materials and Preparation:

1. Each participant needs a "Career Keno" sheet from the Participant's Guide on page----.
2. Participants need pencils and adequate space to move around the room.

3. A board or flip chart on which to list certain interest groups, if desired.

Activity:

Participants will have a worksheet of 25 squares, each with a description on it that is related to careers. The participants will look for persons in the room who fit the descriptions on their sheet and ask them to sign the appropriate squares. The participants should not sign more than one square on anyone's list. The objective is to get as many squares signed as possible during the time period allotted (15 minutes).

Adaptations:

1. Items listed in the squares may be changed to fit the backgrounds/work settings of the participants.
2. A prize may be offered, such as play money, for the first participant to fill all 20 squares.
3. A completed "Career Keno" sheet could be posted in the room for future reference during the workshop, or, copies could be made for all the participants.

Questions for Discussion:

1. What were some of the interesting things that you found out about your fellow participants?
2. Did you meet anyone who holds a position similar to yours?
3. Who has experience or information that you would like to hear more about? Why?

Trainer's Notes:

Career Keno

Your Name: _____

Below are 25 squares, each with a description. At the signal to begin, please move around the room, find individuals who meet each of the descriptions, and ask them to sign their names in the appropriate squares. You should have 25 different signatures on your sheet.

Someone who:

does placement	works with youth under age 21	regularly uses labor market information	assists special needs clients	has worked in a non-traditional occupation
uses creative career counseling techniques	regularly reads local business news	has worked with at-risk youth	has held a full-time job in the private sector	has provided school to work transition services to clients
has created a Career Center	has collected unemployment benefits	helps clients acquire career development competencies	has been a member of a labor union	has developed partnerships with local businesses or industries
regularly uses the <i>Dictionary of Occupational Titles</i>	follows local economic development activities	hopes to have new occupation within the next two years	uses a classification system to organize labor market information	works with retired adults
uses a computerized career information system	has participated in a job orientation program in industry	does career counseling from a theoretical framework	has had more than 3 occupations in the last 5 years	is a baby boomer

Dyadic Encounter

Type of Activity: Icebreaker

Teaching Objective(s):

To have participants feel more at ease in the training session by giving them the opportunity to interact in an informal discussion of their own careers.

To illustrate how our personal characteristics may be related to job satisfaction.

To illustrate the differences between a job and a career.

To help participants begin thinking about goal setting and a final action plan.

Behavioral Objective(s):

Participants will discuss their personality traits and their jobs with one another; they will share their job related frustrations, concerns and goals.

Estimated Time to Complete: 30 minutes

Points to Introduce Activity:

1. The purpose of this activity is to get to know another person by discussing your career.
2. You will be assigned a partner and given a list of questions to ask one another. Follow the numbered list of questions, with first one person responding to a question and then the other.
3. Do not write your responses.

Materials and Preparation:

1. Be prepared to assign or randomly select pairs of participants.
2. Direct participants to the list of questions titled Dyadic Encounter in their Guide.

Activity:

Participants will discuss a list of 20 career-related questions in pairs.

Adaptations:

Some of the discussion questions could be changed to focus on specific career issues or groups of people.

Questions for Discussion:

1. What are we best at on the job?
2. What do we dislike the most in our work?
3. What are some of the characteristics of the best supervisors?
4. What are some of the things that we hope to accomplish in our jobs?
5. What barriers do we anticipate?
6. Who/what can help us to overcome these barriers?
7. As you answered these questions, what did you note about the differences between a job and a career?

Trainer's Notes:

Dyadic Encounter

Complete the following sentences with your partner.

1. **My name is**
2. **Basically, my job is**
3. **The reason I am here is to**
4. **Usually I am the kind of a person who**
5. **I'm happiest when**
6. **The thing I dislike the most is**
7. **On the job, I'm best at**
8. **My greatest limitation on the job is**
9. **Characteristics of the best supervisor I ever had:**
10. **Characteristics of the worst supervisor I ever had:**
11. **I like people who**
12. **I began working at this job because**
13. **The next thing I am going to try to accomplish in my career is**
14. **The barriers I anticipate are**
15. **I would look to _____ for some support.**
16. **When I am challenged to overcome barriers what has worked best for me in the past is**
17. **The kinds of clients who are the most difficult for me to work with are**
18. **The kinds of coworkers who are the most difficult for me to work with are**
19. **To work better with them, I have tried to**
20. **The thing that worries me about my job is**
21. **The thing that worries me about my career is**
22. **Briefly discuss your reactions to this conversation. Time permitting, you may wish to discuss other topics of your own choosing. Several possibilities are: projects at work, leadership practices, employee needs and the future.**

Source: Based on the work of John E. Jones and Johanna J. Jones.

Icebreaker Interviews

Type of Activity: Icebreaker

Teaching Objective(s):

The participants will get to know one another and feel more comfortable as they begin the inservice program.

The participants will verbalize their expectations of the inservice program to the persons who interview them. In so doing, they will clarify their goals and provide the instructor with an overview of the participants' needs.

Behavioral Objective(s):

Participants will get to know one another by meeting in pairs to interview one another about their jobs and peak career experiences for five minutes in order to introduce one another to the class.

The participants will tell one another what they expect from the class.

Estimated Time to Complete: 25-45 minutes, depending on class size.

Points to Introduce Activity:

1. One of the most pleasurable aspects of taking a class such as this is meeting other professionals who share some of your challenges and concerns on the job.
2. For the next 10 minutes you will be divided into pairs. One person will interview the other for five minutes about his/her job, a peak experience in his/her career and what might be different or interesting about his/her expectations of the inservice program. After five minutes, please change roles.
3. Encourage participants to be clever and creative in the interviews. Their goal is to come up with a fresh and lively introduction of their partner to the other members of the class.

Materials and Preparation:

1. Be prepared to divide participants in pairs; avoid placing people together who already know each other.
2. Model the activity by introducing yourself to the class in a creative/humorous way, and discussing a peak experience in your

career and your expectations of the inservice, or, have a member of the class do the honors and introduce you according to your planned script.

3. Names of the participants, their jobs, and their class expectations as they are introduced to the class should be written on a flip chart and kept in a visible location during the workshop.

Activity:

Each participant will be interviewed by a classmate who, in turn, will interview him/her. Each participant will then creatively introduce his/her partner to the class by telling what work the person does, a peak experience in his/her career, and what he/she expects from the inservice program.

Adaptations:

1. Other items could be included in the introduction, such as how the participants made their career choices, what influenced them to make their choices, what obstacles did they have to overcome, etc.
2. For interviews of greater depth, allow longer time periods.

Questions for Discussion:

1. Are there similar training needs that were expressed by the class?
2. Is there a common thread or theme to these needs? Why? Why not?
3. Have you met any potential networking resources as a result of the introductions?

Trainer's Notes:

Career and LMI Continuum

Type of Activity: Large group

Teaching Objective(s):

To display some of the career and LMI resources available to the participants and their comfort/discomfort level with using them.

To plan future training activities based on the participants' use of career and LMI resources.

Behavioral Objective(s):

Participants will place themselves at strategic points around the room to indicate their levels of comfort or discomfort in using resources such as the DOT, SOC, SIC, etc.

The participants will become more aware of the career and LMI resources available to them.

Estimated Time to Complete: 20 minutes

Points to Introduce Activity:

1. Some commonly used sources of career and LMI (name them) are displayed around the room. The purpose of this activity is to express your feelings about using the resources that are displayed. You will note that there are signs placed near the resources reading: EASY TO USE, SOME PARTS OK and HARD TO USE.
2. Your trainer will ask you some common questions that career counselors need to answer. After each question, please walk to the resource that you would choose to help you answer the question. If you are unsure, take an educated guess and walk to that resource.
3. When you reach the resource that you think would best answer the question that is asked, place yourself near the sign that best describes your comfort level in using the resource; EASY, SOME PARTS OK or HARD TO USE.
4. Repeat this procedure with each question that is asked.

Materials and Preparation:

1. Select five or six sources of career and LMI such as: the *Dictionary of Occupational Titles* (DOT), the *Guide for Occupational Exploration* (GOE), the *Standard Industrial Classification Manual* (SIC), the *Occupational Outlook Handbook* (OOH), and state information from the State Employment Security Agency (SESA). Set these volumes on tables around the room. Place signs

next to each resource reading **EASY TO USE, SOME PARTS OK and HARD TO USE.**

2. Have a set of questions ready to read, for example:
 - a. I've never really given much thought to what I want to do when I finish high school. What choices do I have?
 - b. My mom works for Sarah Lee and she's always liked it there--what jobs might I find in a big company like Sarah Lee?
 - c. I really like living in Vermont and I don't want to leave. What jobs are available in this area?
 - d. I've always been fascinated by electronics, but I'm not sure exactly what I'd like to do--any ideas?
 - e. I've always wanted to be a carpenter, but I'm worried about being able to make enough money--do you think I can?
 - f. I've worked as a tool and die maker for 15 years and liked my job very much. I was recently in a car accident and I've lost the use of my left arm. I need a good paying job. What can I do?
 - g. I work with black male teenagers in a group home who have had little exposure to positive career role models in the community. How can I help them?

Activity:

Participants will listen to several questions relating to common career counseling concerns. Upon hearing the questions read by the instructor, the participants will choose a resource that is displayed in the room to answer the question. They will walk over to the resource and position themselves according to their comfort/discomfort level using the resource.

Adaptations:

The continuum could be constructed to reveal the participants' attitudes, values or feelings on any issue.

Additional questions could be developed, depending upon the resources available.

Questions for Discussion:

1. What kinds of career and LMI do you most frequently need in your work? Is it readily available? Why/why not?
2. What specific difficulties do you have locating or using career and LMI?

Trainer's Notes:

Future Metaphors

Type of Activity: Large Group

Teaching Objective(s):

To illustrate how a person's view of the future may affect their decision making and the career counseling process.

Behavioral Objective(s):

After hearing the trainer read a description of four metaphors to describe the future, each participant will choose one that best describes his/her own view. The metaphors of the future will be discussed in a large group. In conclusion, the participants will verbalize their own metaphors of the future.

Estimated Time to Complete: 20 minutes

Points to Introduce Activity:

1. While there is no "right way" to do career counseling, there are a number of strategies and techniques that can help clients personalize and internalize labor market information. Using metaphors, developing images of the future, examining thinking and information processing styles, and checking out client belief systems are all examples of techniques effective career counselors should develop.
2. The purpose of this exercise is to examine our images of the future. Think about how you see the future. What best describes your vision or image of the future? I am going to ask you to listen to four metaphors of the future. A metaphor is a figure of speech in which a word or phrase that denotes one object or idea is used in place of another to suggest a likeness between them. As you listen to the metaphors that I read, pick the one that best describes your view of the future. Consider this a forced choice. There are no right or wrong answers. A particular metaphor may not be the best one for you, but pick the one that comes the closest. You will have the opportunity to develop your own metaphor later on.
3. Read "Four Metaphors for the Future."

Materials and Preparation:

1. Description of "Four Metaphors for the Future."
2. A board or flip chart on which to list the four metaphors, participant comments and the concluding metaphors developed by the participants.

Activity:

The trainer will read "Four Metaphors for the Future." Each participant will choose one metaphor that best describes his/her view of the future. The choices of the participants will be discussed in a large group. In conclusion, the participants will offer their own metaphors of the future.

Adaptations:

Other metaphors to describe the future could be written by the trainer.

The metaphors created by the participants could be written individually or in pairs. This could be a five minute contest to write the best metaphor as judged by all the participants.

Questions for Discussion:

1. Why are a person's beliefs about the future important considerations in career counseling? What part do these beliefs have in determining a client's future?
2. Why might a person who has a "Roller Coaster" view of life be a challenging client?
3. Is it important for a client to examine his/her views of the future? Why/why not? Should a counselor be aware of a client's views? Why/why not?
4. What role, if any, does culture play in a person's views of the future? Should counselors be aware of cultural differences? Why/why not?
5. Is it possible that career development facilitators have stereotypes about what kind of counseling certain client populations "need?" Why/why not?
6. Can a person's view of the future change? How? Should career development facilitators attempt to change a client's view of the future? Why/why not?

Trainer's Notes:

Source: ICDM Training Materials developed by the Washington SOICC

Four Metaphors for the Future

Roller Coaster

The future is a great roller coaster on a moonless night. It exists, twisting ahead of us in the dark, although we can only see each part as we come to it. We can make estimates about where we are headed, and sometimes see around a bend to another section of track, but it doesn't do us any real good because the future is fixed and determined. We are locked in our seats and nothing we may know or do will change the course that is laid out for us.

Mighty River

The future is a mighty river. The great force of history flows inexorably along, carrying us with it. Most of our attempts to change its course are mere pebbles thrown into the river; they cause a momentary splash and a few ripples, but they make no difference. The river's course CAN be changed, but only by natural disasters like earthquakes or landslides, or by massive concerted human efforts on a similar scale. On the other hand, we are free as individuals to adapt to the course of history, either well or poorly. By looking ahead, we can avoid sandbars and whirlpools and pick the best path through any rapids.

Great Ocean

The future is a great ocean. There are many possible destinations, and many different paths to each destination. Good navigators take advantage of the main currents of change, adapt their courses to the capricious winds of chance, keeps a sharp lookout posted, and move carefully in fog or uncharted waters. If they do these things, they will get safely to the destination (barring a typhoon or other natural disaster that they can neither predict nor avoid).

Colossal Dice Game

The future is entirely random, a colossal dice game. Every second, millions of things happen that could have happened another way and produced a different future. A bullet is deflected by a twig and kills one person instead of another. A scientist checks a spoiled culture and throws it away, or looks more closely at it and discovers penicillin. A spy at Watergate removes a piece of tape from a door and gets away safely, or he forgets to remove the tape and changes American political history. Since everything is chance, all we can do is play the game, pray to the gods of fortune and enjoy what good luck comes our way.

Source: ICDM Training Materials developed by the Washington SOICC

Career Planning Metaphors

Type of Activity: Individual

Teaching Objective(s):

To illustrate the various steps in the career planning process by comparing it to other accomplishments in our lives. This exercise follows the Future Metaphors activity. Both activities also can be used with clients.

Behavioral Objective(s):

Participants will mentally clarify the career planning process by writing five metaphors comparing the process to another experience, accomplishment or skill that they have developed. By becoming familiar with this technique, counselors can use it to encourage their clients to discuss career planning.

Estimated Time to Complete: 30 minutes

Points to Introduce Activity:

1. Research has shown that we are more likely to internalize, learn and remember something if it can be linked to our direct experiences. The purpose of this exercise is to show how career planning and decision making are much like many other activities in our lives.
2. Recall the Future Metaphors activity when we compared our vision of the future with other images, such as a mighty river, etc.
3. Think of an accomplishment, hobby or interest in your life. It could be playing a musical instrument; or a sport, such as golf; or an interest, such as stamp collecting; or a work place activity, such as a leadership role. Visualize all the steps, elements, practice, or components surrounding the topic you have chosen. Using your topic, create a metaphor for career planning. For example, a soccer player might choose the following metaphors:

Career planning is like soccer because you must be alert and stay in shape.

Career planning is like soccer because you must understand the rules.

Career planning is like soccer because you are competing with others.

4. Using the "Career Planning Metaphors" worksheet, write down the topic you have selected and create five metaphors to describe it within the next ten minutes. Be prepared to present your metaphors in a large group discussion to follow.

Materials and Preparation:

1. Participants will need the "Career Planning Metaphors" worksheet.
2. A board or flip chart on which to list some of the most expressive metaphors.

Activity:

After the metaphor concept is reviewed by the trainer, the participants will think of a personal accomplishment, interest, hobby, or work place activity in their own lives. When the participants have chosen a topic, e.g., playing golf, they will compare it to career planning and write five metaphors describing it, which will be discussed in a large group.

Adaptations:

Other subjects could be selected for metaphorical comparisons, e.g., decision making, changing careers, finding a nontraditional job, etc.

Questions for Discussion:

1. What similarities did you find between your topic and planning a career? What contrasts?
2. How did you feel as you wrote your metaphors? Did the experience make you feel more or less confident of planning your career? Why/why not?
3. How could you use this exercise with clients? How might it help them? What groups, if any, would find this exercise especially valuable and why?

Trainer's Notes:

Source: ICDM Training Materials developed by the Washington SOICC

Career Planning Metaphors

Directions: Think of something that is important or meaningful to you that you would be willing to discuss in a large group. It can be a hobby, pastime, a work place activity, a skill, a relationship, a major accomplishment, or anything else of significance in your life. Visualize all the elements, steps, or components surrounding this topic. How is the topic that you have chosen like planning a career? List five metaphors to describe comparisons that can be made.

Example: Playing golf is like planning a career because you must keep your eyes on the ball and keep moving ahead toward your goals.

1. _____

2. _____

3. _____

4. _____

5. _____

Source: ICDM Training Materials developed by the Washington SOICC

Career and LMI Visualization

Type of Activity: Small or large group

Teaching Objective(s):

To make the participants more aware of the sources of career and LMI that are part of their daily lives.

To illustrate how participants can use this exercise with their clients.

Behavioral Objective(s):

By taking an imaginary walk through one of their typical days, the participants will become more aware of the various sources of career and LMI that are readily available to them and their clients.

Estimated Time to Complete: 15 minutes

Points to Introduce Activity:

Close your eyes, get comfortable and walk with me through your day. Imagine your typical routine. Think of awakening and looking around the room, getting up and dressing for the day. Be aware of all of the products surrounding you or that you are using. What information do these items give you about the labor market? Now imagine yourself having breakfast or doing whatever you do before you leave home. When you leave, where do you go and how do you get there? As you travel to your destination, what do you see? What information does that give you about the labor market in your community? Nationally?

Now you are at your destination. If you are at your work place, what kind of work do you do and what do you use to get it done? If you are somewhere else, what kinds of work are people doing and what are you doing there? If you are at work, what are others doing and how are they accomplishing their jobs? Think for a moment about all the information you are gathering about the work place.

It's lunchtime and you meet a friend at a local restaurant. What can you notice about the labor market while you are having lunch? The afternoon goes on, and soon it's time to go home. On the way you might stop to get gas or groceries, or at your health club. You might go shopping at a local mall, or be a chauffeur to some youngsters. Eventually you reach home, read the newspaper before dinner and perhaps watch some TV afterwards, or read the most recent news magazine. Maybe it's play time and you go out to a movie or nightclub. Do you pick up any other information about your labor market?

What have you learned about the marketplace, the world of work, your labor market? Think about the economy, job descriptions, industries, people eating out, the problems you see while working or going to work, shopping, your own purchases, your salary, etc. This is all useful information about the labor market.

Now, imagine yourself in your client's shoes and walk through a day in his/her role. Imagine getting up, leaving the house, coming to see you (how do you get there?). How might the information your client sees be different from your own? What kinds of labor market information might your client collect that is different from your own? How can you and your client use that information in career counseling?

Materials and Preparation:

1. Trainer should be prepared to read the above statement to the participants.

Activity:

While hearing the trainer's introduction, the participants will imagine that they are walking through their typical day and will recall the sources of career and LMI that they encounter. Secondly, they will imagine that they are walking through a day in a client's shoes and compare the career and labor market information collected by themselves and their clients.

Adaptations:

Have the participants go through the visualization exercise as members of special populations. For example, "You are a minority male looking for work." "You are a person with a disability trying to choose a career." "You are a displaced homemaker seeking to reenter the labor market after a 20 year absence."

Questions for Discussion:

1. As you walked through your day, what sources of career and LMI did you find?
2. As you imagined yourself in the shoes of one of your clients, what sources of career and LMI were available to you? What sources were not available to you? Why not?
3. How was the information to which you were exposed different from that to which your client might be exposed?
4. Might these informational differences affect your counseling and your client's decision making process? If so, how? If not, why?
5. What might be the effects of your exposure to labor market information that is different from your client's?

Trainer's Notes:

Earning Power

Type of Activity: Small Group

Teaching Objective(s):

To show participants how to find the average earnings of specific occupational groups by using the *Occupational Outlook Handbook* (OOH).

Behavioral Objective(s):

Working in pairs, the participants will research information in the OOH.

Estimated Time to Complete: 20 minutes

Points to Introduce Activity:

1. Clients are often concerned about how much money they might earn in a particular occupation.
2. One of the best sources for this information is the OOH. This exercise helps to familiarize us with the OOH.
3. For each of the groups listed, see if you can "guess" which occupations have the highest earnings. When you have finished, use the OOH to check your answers. Please keep in mind that the earnings depend on a number of factors; they are not absolute. Look upon the earnings as a clue to the attractiveness of certain occupations and their potential for long-term monetary rewards.

Materials and Preparation:

1. *Occupational Outlook Handbook* for each small group.
2. "Who Earns the Most?" work sheet.

(Answers: 1-b, 2-c, 3-a, 4-c, 5-b, 6-a, 7-c, 8-a.)

Activity:

Using the "Who Earns the Most?" work sheet, the participants will: 1) make guesses from the list of occupational groups and 2) check their answers in the OOH.

Adaptations:

More occupations could be added to the list to make the activity longer; occupations can be deleted to make the activity shorter.

Additional information from the OOH could be researched.

THIS PAGE INTENTIONALLY LEFT BLANK

THIS PAGE INTENTIONALLY LEFT BLANK

Different resources, such as CIDs, and state and local wage information could be used. A comparison could be made of the resources.

Questions for Discussion:

1. What factors influence the amount of salary that is paid for a given occupation?
2. Do you think some occupations are overpaid or underpaid? Why?
3. Is salary the most important consideration when choosing a career? Why/why not?
4. What are the most important considerations in making a career choice?
5. Where are the high-paying jobs of the future?
6. How can career development facilities use this information to help their clients?

Trainer's Notes:

Who Earns the Most?

For each of the groups listed below, see if you can "guess" which occupations have the highest earnings.

1. A file clerk, fire fighter or licensed practical nurse.
2. An aircraft pilot, TV announcer or veterinarian.
3. An urban planner, architect or lawyer.
4. A bartender, mail carrier or secondary school teacher.
5. A physical therapist, physician's assistant or dental hygienist.
6. A statistician, forester or meteorologist.
7. A building inspector, middle school principal or hospital administrator.
8. A hotel manager, insurance underwriter or retail buyer.

Lost Job

Type of Activity: Individual

Teaching Objective(s):

By simulating the career decision making process, the participants will become more aware of how personal interests, values and the availability of information influence the process.

The participants will gain some practice in using both formal and informal sources of career and LMI in their decision making process.

Behavioral Objective(s):

Imagining that they have lost their jobs, the participants will be given the names of three available jobs by the trainer. The participants will research the jobs, gathering as much information as possible about each one. They will then choose one of the three jobs, based on their interests and values. They will be prepared to share their decisions and the rationale behind them with the large group.

Estimated Time to Complete: 40 minutes

Points to Introduce Activity:

1. Imagine you have lost your job and that you are now a part of the nation's unemployment statistics. You see an employment counselor at Job Service who gives you titles of three positions that are presently available in your community. They are: TRAINING REPRESENTATIVE, VOCATIONAL REHABILITATION COUNSELOR and PERSONNEL RECRUITER.
2. Gather as much information as possible about these three positions within the next 20 minutes, using any and all resources available to you in this room. Don't forget to include the other participants in the room as resources.
3. Be prepared to communicate your career choice to the class, explaining the rationale behind your decision; include considerations such as personal interests, values and family considerations.
4. After 20 minutes, we will meet in a large group to discuss your career choices and the role "information" played in making them.

Materials and Preparation:

1. Have federal sources of career and LMI available in the classroom, such as the *Dictionary of Occupational Titles (DOT)*, the *Standard Industrial Classification (SIC) Manual*, the *Standard Occupational Classification (SOC) Manual*, a

CIDS, occupational projections, wage surveys, and state and local information. Be sure to have enough resources for all the participants to research the jobs. Some informal sources of information would also be highly desirable, such as professional journals, newspapers and current periodicals related to the occupational areas.

2. Be prepared to list the career choices on a board for discussion purposes.
3. Make sure participants have comfortable work areas for research purposes.

Activity:

Participants will imagine that they have lost their jobs and research three possible a career choice with the resource materials in the room for 20 minutes. Participants will make a career choice based on their interests, values, and the information available. They will be prepared to discuss their choices and the rationale behind them in a large group discussion for approximately 15 minutes.

Adaptations:

Different or additional careers could be selected for research, depending on the audience, the time allowed and the resources available.

Questions for Discussion:

1. What were the most important factors in making your career choice? What were the least important?
2. Why is this particular career (whatever career is named) a popular choice? Why is this career (whatever career) the least popular choice?
3. Was information easy to find on these careers? Why/why not? Was the information understandable once you found it? Why/why not? Do you believe it is reliable?
4. Would your clients be able to locate and understand the information you have used today? Why/why not? What could you do to help make this information more accessible to your clients?
5. What have you learned from this activity that you could use in your work with clients?

Trainer's Notes:

Carousel of Careers

Type of Activity: Small group/Roundtables

Teaching Objective(s):

Participants will be able to select certain topics of interest and participate in small group discussions led by resource persons who can address their specific concerns.

Behavioral Objective(s):

Participants will develop skills to describe and locate a variety of labor market information.

Estimated Time to Complete: One and a half hours (three 20 minute sessions with a five minute break between discussions and a wrap-up). Sample schedule:

2:00 - 2:20 p.m.	Session One
2:20 - 2:25 p.m.	Rotate
2:25 - 2:45 p.m.	Session Two
2:45 - 2:50 p.m.	Break
2:50 - 3:10 p.m.	Session Three
3:10 - 3:20 p.m.	Wrap-up

Points to Introduce Activity:

1. This activity will allow you to select three career and LMI topics of interest from the six tables that are located around the room. You will have 20 minutes at each table with a resource person. After 20 minutes, please move to the second table. Please repeat the procedure for a third 20 minute session.
2. When we conclude the carousel, you will have the opportunity to ask any final questions you may have.
3. Trainers: Give a lively and informative introduction of the resource persons to stimulate participant interest.

Materials and Preparation:

1. Six tables that are clearly marked by Career and LMI topics and chairs for all participants.
2. Six articulate and well prepared resource persons to lead discussions at each table.
3. Ask resource persons if any materials are necessary for their presentations.

4. A listing of all the topics and resource persons on a board or flip chart to introduce the activity.
5. An introduction of all the resource persons, with a background sketch of their qualifications.

Activity:

The participants will move three times from one 20 minute discussion to another, allowing them to select specific topics of interest. There will be six discussion tables headed by resource persons on topics such as:

What Can CIDs Do for Us? What Are the National Career Development Guidelines? How Can a SOICC Help Career Counselors? What Is Gender Equity? How Can We Help Students with Disabilities? What Are Some Commonly Used LMI Resources? Where Are the Jobs of the Future? How Do We Meet the Needs of Adults in Transition? Multicultural Counseling--What Does It Mean? What Careers Does the Military Offer? What Opportunities Are Available in this Community?

The activity concludes with a large group wrap-up session to address any final concerns.

Adaptations:

The Career Carousel could be made larger, with more topics and tables to choose from, and more time allowed.

Have one product available at each table. Instead of discussing an issue, demonstrate how to use a product such as the CIDS, OOH, OIS, SOC, DOT, GOE, occupational projections, wage surveys, or Unemployment Compensation (UC) data.

Questions for Discussion:

1. Are there any final questions or comments that you would like to address to our resource persons?
2. Is there any information that you found to be particularly valuable? What specific information will you use in your work place?
3. Are there any other topics that you would like to see covered in a carousel format such as this?

Trainer's Notes:

Adapted from Oklahoma ICDM Workshops

Advertising Career and LMI Resources

Type of Activity: Small groups

Teaching Objective(s):

To familiarize the participants with federal and state government sources of information: to know where to find them, what is in them and how they can be used in career counseling.

Behavioral Objective(s):

Participants will work in small groups to develop a creative advertisement to be presented to the class for some of the more widely used sources of information, such as: the *Dictionary of Occupational Titles (DOT)*, the *Standard Occupational Classification (SOC) Manual*, the *Standard Industrial Classification (SIC) Manual* and the *Guide for Occupational Exploration (GOE)*.

Participants will be more familiar with the use and content of the information resources that are advertised to the class.

Estimated Time to Complete: 45-60 minutes (depending on the number of small groups)

Points to Introduce Activity:

1. This is an exercise to test your advertising creativity. Imagine that you have to sell one of our source books. How can you excite others about the wealth of information in your publication? Most importantly, how can you entice them to buy it?
2. You will have the opportunity to try your hand at advertising an information resource today. You will work with a small group to develop an ad to sell the resource that you are given, such as the DOT or SIC. You will present your ad to the class. It can be in the form of a poster, a newspaper ad, a television or radio commercial, a poem, a song, or even a door-to-door sales pitch. Be clever and creative!
3. In your ad, please try to be as informative as possible; your objective is to sell your classmates on the value of your LMI resource.

Materials and Preparation:

1. An information resource for each small group, such as the DOT, SIC, SOC, CIDS, etc.
2. Materials to create ads, such as paper, markers, tape recorders, etc.

Activity:

Participants will work in small groups to create an ad for an information resource.

Adaptations:

With video taping equipment, each group could make a 30 second commercial for their resource.

An "Addy Award" (a humorous certificate, small statue, bag of jelly beans, etc.) could be given for the best advertisement by having participants vote for their choices.

Questions for Discussion:

1. What information did your team try to project about your resource?
2. If you had more time and materials, what additional information would you present to the class about your resource?
3. What questions do you have about any of these resources?
4. Which of these resources have you used? Does the resource provide you with the information that you need? Why? Why not?
5. What resources have you not used? Why not?
6. Have you been enticed to use any new products as a result of the ads you have seen today? How will you use them?

Trainer's Notes:

Career and LMI Scavenger Hunt

Type of Activity: Individual

Teaching Objective(s):

To demonstrate that we are surrounded by career and labor market information in our everyday lives.

To evaluate the validity or reliability of certain kinds of career and labor market information.

To illustrate the various categories of career and LMI.

Behavioral Objective(s):

During their lunch break, participants will gather one piece of career and labor market information from the environment that they can share with the group.

The participants will cite the sources of their information when it is presented.

The participants will evaluate the information that is presented to the group.

The participants will categorize the kinds of information they have reported.

Estimated Time to Complete: 30 minutes

Points to Introduce Activity:

1. As we move through a typical day, we unconsciously absorb a great deal of career and labor market information in various forms from different sources.
2. When you return from lunch, we will ask each of you to share with the class one piece of information that you picked up during your break, along with the source of your information.
3. You cannot use any of the materials in this room as a source.
4. You may write your information and source on a piece of paper, if you wish.
5. Give an example of career and LMI that might be found, such as the HELP WANTED sign in the restaurant window. What kind of help is needed? What are the wages, hours and conditions of employment? Are benefits offered? Any special training needed?

Materials and Preparation:

1. A board to summarize the career and LMI that is found, and a rating scale for the information, such as **QUESTIONABLE, PROBABLY RELIABLE, WELL DOCUMENTED.**
2. (Optional) A list of categories that could be discussed as outlined below in Adaptations.

Activity:

The participants will find one piece of career and labor market information during their lunch break to bring back to class. The information will be summarized on a board and evaluated for its reliability.

Adaptations:

The information could be broken into categories, such as occupational, demographic and labor force information. The information could be divided into federal, state and local information.

The participants could work in teams in a contest to see which team could collect the most information over the lunch hour.

Working in competitive teams in the classroom for a period of 20 minutes, participants could be given copies of the daily newspaper to scan and hunt for career and LMI to report back to the large group.

Questions for Discussion:

1. Were you surprised by the amount and availability of the information?
2. What forms of career and LMI did you find--any labor force information? Demographic? Occupational? Federal? State? Local?
3. How would you rate the reliability of each of these pieces of information?
4. What conclusion can we come to about career and LMI in general?
5. How can you use this in career counseling?
6. How might your clients use this information?
7. What career and LMI did you look for, but could not find?

Trainer's Notes:

Adapted from Florida ICDM Workshops

Classification Systems and Resources

Type of Activity: Small group

Teaching Objective(s):

To show participants how career and labor market information is classified to make it manageable, accessible and useable.

Behavioral Objective(s):

Working in small groups, the participants will look at copies of the *Dictionary of Occupational Titles* (DOT) on their tables. They will list all of the occupations that made it possible for the DOT to be here at the training session.

Estimated Time to Complete: 30 minutes

Points to Introduce Activity:

1. Career and labor market information comes in an assortment of configurations and formats. Before it can be used effectively by either counselors or clients, it must be organized or classified in some way, so it becomes manageable. The purpose of this activity is to illustrate how classification systems work.
2. In small groups of five or six, look at a *Dictionary of Occupational Titles* (DOT) which is placed on the tables around the room. Working as a group, as quickly as possible, write down all the occupations you can think of that made it possible for the DOTs to be here at the training session today.
3. After you have completed your list of occupations, divide your list into at least three, but no more than five, categories of occupations.
4. You will have approximately 20 minutes to develop your list and occupational categories. Be prepared to share your work with the large group when you are asked to do so.

Materials and Preparation:

1. A DOT for each small group, a comfortable seating arrangement for group work, paper and pencils.
2. A board or flip chart on which to list the categories reported by each group.
3. Be prepared to discuss other LMI classification systems, such as the SIC, SOC, GOE, etc.

Activity:

Working in small groups and using the DOT as their resource, the participants will list all the occupations that made it possible for the DOT to be used in the training session. After listing the occupations, the participants will classify them into categories of not less than three and not more than five.

Adaptations:

Other books could be used as resources, such as telephone books or a city directory, a university timetable, encyclopedias, etc.

Have each small group use a different resource such as the SOC, SIC, GOE, etc., and share the results of their research with others. Why are the classification systems different? How can we relate the various systems to one another?

Questions for Discussion:

1. How many occupations did your group have on the first list?
2. How many categories did your group develop?
3. What similarities are found between the categories listed by each group?
4. How are occupations classified in other LMI sources, such as the SIC, SOC, GOE, etc.?
5. How can an understanding of classification systems help you in your work?
How can it help your clients?

Trainer's Notes:

Implications Wheel

Type of Activity: Small group

Teaching Objective(s):

To illustrate ways in which the change from a manufacturing economy to a service economy has had a ripple effect on the U.S. labor market.

Behavioral Objective(s):

Participants will have a greater awareness of the declining work opportunities in manufacturing industries and the growing number of positions in the service industries. They will incorporate this knowledge into their career counseling.

Estimated Time to Complete: 45 minutes

Points to Introduce Activity:

1. Change does not occur in a vacuum; each cause has an effect that produces a chain reaction.
2. The change from a manufacturing to a service economy has many effects, or implications, especially for career counselors.
3. Let's begin with the premise that most new jobs will be in the services; make this statement in the large center circle, or hub, of your wheel.
4. There are many implications, or effects, of this economic trend; write them in the medium-sized circles that are attached to the center.
5. Add new circles to the diagram as you consider the implications (for counselors and their clients) to each circle that you add; the objective is to widen the circle by generating as many ideas as possible.
6. Be specific when you list your implications. For example, "more computers" is not as helpful as "computers will play a greater role in the work place and in the career counseling process."

Materials and Preparation:

1. Illustration of large wheel on blackboard or flip chart to introduce wheel concept.
2. Large sheets of paper and markers for each group to construct their own wheels.
3. Board or flip chart to summarize the outcomes of the activity.

Activity:

The participants will brainstorm to consider the many implications of the economic forecast that most new jobs will be in the service industries.

The participants will break up into small groups of three or four to discuss and design "Implication Wheels" that will portray the many effects of this economic change from a manufacturing to a service economy.

Adaptations:

The implications wheels can be constructed around any change in the labor market, such as: more women in the work force, more technical skills needed, more minority participation, an older work force, a plant closing, a large business relocation, etc.

This can also be done as an individual or large group activity.

Questions for Discussion:

1. What are some of the most important implications on your wheel?
2. At what points on your wheel might career development facilitators or their clients exert some influence or control?
3. What implications on your wheel are controlled by outside influences? What are they? Why?
4. What are some of the more desirable implications on your wheel? What can be done to implement them?
5. What are some of the undesirable implications? What can be done to diminish them?
6. How could you use this activity with your clients?

Trainer's Notes:

Adapted from the ICDM Materials developed by the Washington SOICC

State and Local Resources

Type of Activity: Individual

Teaching Objective(s):

To demonstrate the importance of state and local career and labor market information for clients who plan to remain and find work in their home towns.

To point out some of the sources of state, county and local career and labor market information.

Behavioral Objective(s):

Participants will imagine that they are taking a walk around the communities in which they are presently living. As they do so, they will make a list of: the occupations they encounter; what career and labor market information was necessary for people to work in those occupations; and where one might find that information.

Estimated Time to Complete: 30 minutes

Points to Introduce Activity:

1. Many of your clients plan to find work and remain in the areas in which they have grown up. You may find that career and labor market information describing the national scene is of limited use to them. They need information about the local labor markets.
2. The purpose of this activity is to stimulate your thinking about some of the occupations in your communities and the sources of labor market information about these occupations. (Give an example of an occupation from your community and describe how people would find information about work within it.)
3. Please find the "State and Local Resources" work sheet and complete it according to the directions. You will have 20 minutes. Be prepared to discuss your responses in a large group.

Materials and Preparation:

1. "State and Local Resources" work sheet.
2. Examples of state and local sources of LMI.
3. A board or flip chart on which to list state and local resources.
4. A state/local resource person to answer any questions.

Activity:

After a brief introduction with some examples from the trainer, participants will complete the worksheet, "State and Local Resources."

Adaptations:

Participants could work in pairs.

If the participants come from a large and diverse work place, this activity could be applied to that environment.

Questions for Discussion:

1. What were some of the occupations you listed from your community?
2. How might people find work in these occupations?
3. What specific LMI is needed for these occupations? Where can it be found?
4. Is state and local information accessible to you and your clients? Is it readily available? Is it easy to use? Why/why not?
5. How can you use state and local resources in your work? How can your clients use state and local resources? What could be done to make these resources more available or useable in your community?

Trainer's Notes:

State and Local Resources

Think about the community in which you presently live. As you imagine yourself walking around town, pick an interesting block. As you walk that block, make a list of all the occupations that are represented within its boundaries.

Now, imagine the block in which you live. Walk that block. What kind of jobs do the people on your block have? Where do they work?

What do they do?

What kinds of career and labor market information do you suppose they needed to get their jobs?

If you were to enter any of the occupations in which these people are working, what would you need to know and where would you find it?

If someone in your block were unemployed, what must they do to find work? What resources are available to them?

Helping Anna Find Work

Type of Activity: Small group

Teaching Objective(s):

To simulate the ways in which career development facilitators can use career and labor market information to help their clients.

Behavioral Objective(s):

The participants will work in small groups of three or four on an exercise that requires them to use several sources of labor market information in a simulated job search for a client.

Estimated Time to Complete: 45 minutes

Points to Introduce Activity:

1. This activity, "Helping Anna Find Work," is completed by answering questions 1-13 on the worksheet. You will work in pairs to research the questions for approximately 30 minutes. You will need to refer to several LMI resources that are here in the room. If you are unable to locate a particular resource, someone else may be using it, so please go on the next question. When you are finished using materials, please replace them promptly for others who may need them.

Materials and Preparation:

1. The following LMI resources:

*Dictionary of Occupational Titles (DOT),
Standard Occupational Classification Manual (SOC),
Career Information Delivery System (CIDS),
Occupational Projections,
Occupational Employment Statistics (OES)
Occupational Outlook Handbook (OOH),
Standard Industrial Classification Manual (SIC),
State/National Projections,
State Employment Review,
State Employment Picture,
State Covered Employment by Industry and County,
Classified Directory of State Manufacturers,
State Service Directory,
State/local area wage surveys, economic indicators, etc.,
Local resources such as telephone books, etc.*

Activity:

Using the LMI resources that are provided, the participants will work in small groups to assist Anna, a woman who has lost her job. This activity simulates many of the steps career development facilitators need to take in using LMI resources with their clients.

Adaptations:

The person seeking work could have special needs, such as a person with a disability, a teen parent, a displaced homemaker, a retiree or an adult with limited English proficiency.

The beginning job description could be changed from a salesperson to a computer programmer, an auto mechanic, etc.

Questions for Discussion:

1. What resources were the most valuable in helping Anna find work? Why?
2. Did you have difficulty using any of the resources? Which ones? Why?
3. Were you surprised by the amount of information you were able to find within the time period? Do you think it was time well spent? Why? Why not?
4. What resources would you be most likely to use in counseling your clients? Why? What additional resources do you recommend? Why?

Trainer's Notes:

Helping Anna Find Work

Occupation Questions	Sources	Answers
<p>1. Anna sells electronic equipment and related supplies at Radio Shack. She has an associate degree in marketing.</p> <p>Select an occupational title for Anna from the following LMI publications and list its numerical code.</p>	<p><i>Dictionary of Occupational Titles (DOT)</i></p> <p><i>Standard Occupational Classification Manual (SOC)</i></p> <p><i>Guide for Occupational Exploration (GOE)</i></p> <p><i>State Career Information Delivery System (CIDS)</i></p> <p><i>Occupational Employment Statistics (OES): See State Occupational Projections for list of occupations</i></p>	<p>DOT Title:</p> <p>DOT Code:</p> <p>SOC Title:</p> <p>SOC Code:</p> <p>GOE Title:</p> <p>GOE Code:</p> <p>CIDS Title:</p> <p>CIDS Code:</p> <p>OES Title:</p>
<p>2. Anna has been laid off and is looking for other work. What are some occupations that are related to Anna's?</p>	<p>SOC</p> <p>CIDS</p> <p>GOE</p>	<p>List related occupations:</p>

Occupation Questions**Sources****Answers**

3. What occupational descriptions can you find of Anna's work? Please include the major tasks and skills required.

OOH

DOT

CIDS

Brief description, include major tasks and skills:

List the occupational characteristics of Anna's job, the physical demands and environmental conditions.

Selected Characteristics of Occupations defined in the DOT

Physical demands:
Environmental conditions:

Industry Questions

4. Determine the industries that employ Anna's occupation. (These are places where she may find work)

SIC

DOT

OOH

CIDS

List employing industries (kinds of businesses):

Local and state resources

Use your own knowledge (be expansive and creative, take a clue from some of the variant occupational titles)

5. Identify the specific industry title(s) and numerical codes.

SIC - use alphabetical index to get into the classification scheme

Major industry title and SIC code:
2 digit title and code:

Look at definition and example

3 digit title and code:

Look at the hierarchy of the classification manual

4 digit title and code:

Occupation Questions**Sources****Answers**

6. What are the projections for these industries?

State and National Occupational Projections, 1988-2000: (Prepublication pages)

Projections:

CIDS

Local information resources

Geography and Industry

7. Review the industrial base in the local labor market to assess job opportunities for Anna.

Employment Review

Give industry employment:

State Employment Picture

How many businesses are in the industry?

State Covered Employment

Number of businesses:

Are they large or small?

Large or small?

8. List specific companies or businesses in your area.

Use your own knowledge.

List two or three business establishments:

Classified Directory of State Manufacturers

State Service Directory

Local telephone books

259

More about the Occupation**Sources****Answers**

9. Examine projections to determine employment opportunities for Anna.

State and National Occupational Projections

10. If you identified related occupations, list the occupational preparation and training requirements for Anna, determine whether Anna will need to supplement her current education and training.

OOH

CIDS

DOT

Selected Characteristics Occupations Defined in the DOT

List levels of education needed or specific training programs:

What is the specific vocational preparation (SVP):

What are requirements in Math (M) and Language (L):

11. Look for wage rates.

CIDS

State Wage Survey

Occupational wage rate:

Questions	Sources	Answers
12. Examine advancement opportunities (or lack thereof) and career ladders available to Anna.	OOH CIDS	List any information found:
What are the implications for Anna's career development?	Local Resources	Implications:
13. Examine job openings in the occupations you identified.	State and National Occupational Projections CIDS State or SDA reports	Average annual openings:

Around the House

Type of Activity: Small group

Teaching Objective(s):

To demonstrate the use of the *Standard Industrial Classification* (SIC) Manual and state and national occupational projections.

To broaden the participants' awareness and understanding of the concept of an "industry."

To discuss industrial projections and the growth or decline of occupations commonly found within them by referencing state and national projections and/or the *Occupational Outlook Handbook* (OOH).

Behavioral Objective(s):

Working in small groups, the participants will brainstorm to develop a list of industries involved in the production of several common household items. After a list of industries has been developed, the participants will make some projections concerning their future growth patterns. The participants will select one industry and describe it in detail to the large group from information taken from the SIC, state and national occupational projections, the OOH and other related sources.

Estimated Time to Complete: 45 minutes

Points to Introduce Activity:

1. The production of even the most common items around our homes is often a complex process that requires the work of many people in diverse occupations in far-reaching places. Working in a small group, you will be given a household item as a topic for brainstorming about the many industries involved in its production and the future growth patterns in these industries.
2. Your group will choose one of the industries to investigate in greater detail, using the SIC and state and national occupational projections as your resources. You will discuss the projections for the industry and the occupations commonly found within it. A spokesperson should be prepared to report your findings in a large group discussion.
3. Assign one of the following items to each group:

Your favorite pair of shoes or slippers
A piece of cookware from your kitchen
A towel from the bathroom
Notepaper from your desk
A plastic food container from your refrigerator
The laundry soap you use

Materials and Preparation:

1. *Standard Industrial Classification (SIC) Manuals* or reprints of the classification index for each small group.
2. State and national occupational projections, industry projections and/or the *Occupational Outlook Handbook (OOH)*.
3. Participant worksheets "Around the House."
4. A board, overhead or flip chart for group reporting.

Activity:

Working in small groups, the participants will brainstorm about the industries involved in the production and distribution of a common household item. Using state and national occupational projections as resources, they will make some group projections concerning future growth and occupational needs in the industries they have listed. Finally, they will select one of the industries to report on to the large group using SIC data, offering their own comments about the industry, its economic future and its occupational projections.

Adaptations:

The list of household items could be changed.

Questions for Discussion:

1. What relationships among industries can be seen in the SIC Manual?
2. How could you use the SIC with your clients? What information does it provide that you could not find in the DOT? OOH? SOC? GOE?, etc.?
3. Why would an understanding of an industrial classification system increase employment opportunities for clients?
4. Why are national and state projections an important component of career planning?

Trainer's Notes:

Around the House

Directions: Your group will be assigned a common household item to research the industries involved in its production and distribution. You also will make some industrial growth and occupational projections. The sources of information are the SIC and State and National Projections.

Take five minutes to brainstorm about the various industries that were involved in the production of your item. List them in the blanks below.

Choose one of the industries from the above list to research in greater depth in the *Standard Industrial Classification (SIC) Manual*. Give the name of the industry as it appears in the SIC: _____

What is its Major Group number? (e.g., Agricultural Services is 07) _____

How is the Major Group as a whole described in the SIC (be brief)?

List the industries that are grouped with the one you have chosen and give their SIC classification numbers. In your small group, discuss the industries and occupations that you would expect to grow or decline and the reasons for your projections. Place a plus (+), minus (-) or an equal (=) next to the industries and occupations that you have listed to indicate the pattern of growth or decline. As resources, use state and national projections, common sense, etc.

_____ number	_____ number
_____ number	_____ number
_____ number	_____ number
_____ number	_____ number
_____ number	_____ number

List ten occupations found in these industries:

_____	_____
_____	_____
_____	_____
_____	_____
_____	_____

Choose a spokesperson to report your findings to the large group.

Public and Private Self

Type of Activity: Large group

Teaching Objective(s):

To illustrate cultural differences by demonstrating that what is considered to be a public topic in one culture may be a private topic in another.

To make participants more aware of and sensitive to cultural differences.

Behavioral Objective(s):

Given questionnaires that list a variety of topics, participants will check responses to indicate their public or private views on the subjects listed.

Estimated Time to Complete: 30 minutes

Points to Introduce Activity:

1. We often assume that topics we consider to be public information will also be considered public by others; therefore, we may unintentionally violate the privacy of others.
2. On the "Public/Private Questionnaire," check the topics that you consider to be public and those that you consider to be private. For example, the first question on the questionnaire asks you about your views on religion. If you feel your views are private, meaning that you can only discuss this topic with those close to you, mark the Private Column. If you would feel comfortable if your views on religion were made public, check the Public Column.
3. We will discuss our differences when you have completed the questionnaire.

Materials and Preparation:

1. The "Public/Private Questionnaire" from the Participant's Guide for each participant.
2. The definition of public and private written on board or flip chart.

Activity:

Participants will individually complete the Public/Private Questionnaires and discuss the results in a large group.

Adaptations:

Additional topics related to career development could be added to the questionnaire.

Questions for Discussion:

1. How many people checked public items in the six categories?
2. What categories had the fewest number of public checks? Why?
3. Were differences found between the participants' responses, or were the responses fairly uniform? Why? Why not?
4. In what situations might we find a greater variance in responses? Why?
5. What are the implications for career counseling?
6. What is the effect of learning about individual and cultural differences and respecting the privacy of others?

Trainer's Notes:

Adapted from Pedersen, P. (1988). *A Handbook For Developing Multicultural Awareness*. Alexandria, VA, American Association for Counseling and Development.

Private/Public Questionnaire

Please mark each of the following topics as:

Private: if it is comfortable to discuss only with intimates, such as close friends or members of your immediate family.

Public: if it is comfortable to discuss with casual friends, acquaintances or strangers.

Public	Private	Attitudes and Opinions
		<ol style="list-style-type: none"> 1. What I think and feel about my religion. 2. My views on Communism. 3. My views on racial integration. 4. My views on sexual morality. 5. The things I regard as desirable for a person to be.
		Tastes and Interests
		<ol style="list-style-type: none"> 1. My favorite foods. 2. My likes and dislikes in music. 3. My favorite reading matter. 4. The kinds of movies and tv programs I like best. 5. The kind of party or social gathering I like best.
		Work or Studies
		<ol style="list-style-type: none"> 1. What I feel are my shortcomings that prevent me from getting ahead. 2. What I feel are my special strong points for work. 3. My goals and ambitions. 4. How I feel about my career. 5. How I really feel about the people I work for or with.

Public	Private	Money
		<ol style="list-style-type: none"> 1. How much money I make at work. 2. Whether or not I owe money. 3. My total financial worth. 4. My most pressing need for money right now. 5. How I budget my money.
		Personality
		<ol style="list-style-type: none"> 1. Aspects of my personality I dislike. 2. Feelings I have trouble expressing or controlling. 3. Facts of my present sex life. 4. Things I feel ashamed or guilty about. 5. Things that make me feel proud.
		Body
		<ol style="list-style-type: none"> 1. My feelings about my face. 2. How I wish I looked. 3. My feelings about parts of my body. 4. My past illnesses and treatment. 5. Feelings about my sexual inadequacies.

Source: Pedersen, P. (1988). *A Handbook For Developing Multicultural Awareness*. Alexandria, VA, American Association for Counseling and Development.

Label Awareness

Type of Activity: Small group

Teaching Objective(s):

To demonstrate how each of us may wear a culturally assigned label on our forehead.

Behavioral Objective(s):

Participants will be more aware of how culturally assigned labels influence the ways in which others perceive and interact with us.

Estimated Time to Complete: 20 minutes

Points to Introduce Activity:

1. The purpose of this activity is to illustrate how others perceive us according to our cultural background or group identification.
2. Discuss the examples of labeling that you have seen in your own life or in the media.
3. Each participant will have a label placed on his/her forehead or back with a one word adjective or noun to describe him/her. He/she will not know what the label says.
4. Break into small groups of four to six and discuss an assigned topic, e.g., the impact of more women in the work force, for 10-15 minutes.
5. Interact with each participant in your group as if the label assigned to him/her were true, e.g., INTELLIGENT, HOMEMAKER, TRANSIENT, etc.
6. At the end of the activity, participants will try to guess what their labels might be.

Materials and Preparation:

1. Labels for participants to be placed on their foreheads or pinned on their backs, such as: bright, stupid, homeless, wealthy, uneducated, teacher, sneaky, at-risk, agreeable, philosophical, bus driver, school principal.
2. Select an interesting topic that will generate group discussion.

Activity:

Participants will break up into small groups and discuss an interesting topic for 15-20 minutes. Each participant will wear a label on his/her forehead; the others will treat him/her as if that label were true. The participant will not know what his/her label

says. When the discussion period ends, each participant will try to guess what his/her label says. Group members will then reveal their labels to one another and discuss their feelings during this exercise.

Adaptations:

Could be done for a longer period of time.

Could repeat activity twice with a different label for each participant.

Questions for Discussion:

1. When did you first feel that you had a special label?
2. What happened to make you feel that you had a positive or negative label?
3. Did you try to do anything to overcome your label? If so, what? Did it help?
4. What were your feelings as the discussion progressed?
5. How might this be compared to real life?
6. How might you use this activity in your work?
7. What does this say about how we stereotype individuals to fit our expectations?

Trainer's Notes:

Decision Making

Type of Activity: Large group

Teaching Objective(s):

To illustrate individual differences by showing that what seems logical to one person may not seem logical to another person.

Behavioral Objective(s):

Participants will gain an understanding of individual differences in how decisions are made.

Participants will identify the decision outcomes and be aware of the rationale surrounding it.

Participants will have a better understanding of the decision making process from another cultural perspective, instead of from their own point of view.

Estimated Time to Complete: 45 minutes

Points to Introduce Activity:

1. What seems logical to one person may not seem logical to another.
2. Our resource person for this activity is (introduce speaker). Our resource person will describe a difficult decision in his/her life wherein personal values were an important factor. Our speaker will describe the background and circumstances leading up to his/her final decision.
3. After he/she has completed telling you about his/her decision making experience, you will have the opportunity to ask him/her any questions you may have.
4. Our resource person will not tell what his/her final decision was. We will ask each participant to: 1) predict the resource person's final decision, and, 2) provide the rationale that guided the decision. (The predictions of the participants can be written anonymously on a piece of paper or be given orally in a large group.)
5. Our resource person will then disclose his/her decision and the rationale behind it.

Materials and Preparation:

1. A resource person who is willing to share an important decision making experience in his/her life wherein values were an important factor.
2. If participants' responses are written, paper and pencils will be needed. If responses are given orally, a board or flip chart to record them.

Activity:

A resource person who is culturally different from the majority of the participants will discuss an important decision that he/she has made wherein personal values were an important factor. The resource person will discuss the background and circumstances leading up to the decision. The final decision that the resource person made will not be revealed. The participants can ask the resource person questions to provide them with more background, but they may not ask questions related to the final decision. The participants will guess what the final decision of the resource person was and the rationale behind it. The resource person will then share his/her decision and the reasons behind it with the participants.

Adaptations:

More than one resource person could address the group.

Questions for Discussion:

1. Why did you guess that the resource person came to a particular decision?
2. How does the resource person's background relate to your guess?
3. Has your background been a factor in your decision making? To what extent?
4. Are there universally "right" or "wrong" patterns of logic leading to decision making? What evidence can you offer?
5. How can individual differences in logical decision making affect career counseling?
6. How might you use this exercise in your work?

Trainer's Notes:

Past Challenges

Type of Activity: Individual

Teaching Objective(s):

To illustrate the steps in one's decision making process.

Behavioral Objective(s):

The participants will reflect upon difficult or important decisions that have resulted in major changes in their lives. By recalling the steps in their decision making processes and the outcomes of their decisions, the participants will be better able to help their clients make career-related decisions based on their own past experiences.

Estimated Time to Complete: 20 minutes

Points to Introduce Activity:

1. At one time or another, most of us have been faced with making a difficult or important decision that had a major impact on our lives. During this activity we will review one of those decisions and the process we went through in making it. We will look for any similarities between that decision and the decisions you are currently considering about career changes.
2. Find the worksheet "Past Challenges." Please answer the 12 questions and we will discuss them when you are finished.

Materials and Preparation:

1. Participants will need the "Past Challenge" worksheet.
2. A board or flip chart on which to list common decision making steps and outcomes.

Activity:

The participants will answer 12 questions from the "Past Challenges" Worksheet about difficult or important decisions they have made that resulted in major changes in their lives. The participants will share their experiences in a large group discussion.

Adaptations:

Participants could discuss the questions in pairs.

Questions for Discussion:

- 1. From your own experience, what steps in the decision making process did you find to be the most difficult?**
- 2. What helped you to reach your decision? What assistance is generally available to people who are struggling to make decisions?**
- 3. What specific roles can career development facilitators play to assist their clients in the decision making process?**
- 4. Does culture play a role in the decision making process? How?**
- 5. What differences and similarities in decision making have you found in your work?**
- 6. Is there anything that career development facilitators should avoid doing in their efforts to help their clients?**

Trainer's Notes:

Past Challenges

Directions:

Take a few minutes to think about a situation in which you were faced with a difficult or important decision that involved a major change in the direction of your life. After you have identified the issue, proceed with the following 12 questions.

1. What was the decision?
2. What major change did the decision involve?
3. Did the decision represent a loss or gain for you? For another individual? Why? How?
4. What were your feelings at the time you were initially aware of your need to make the decision?
5. Did your feelings remain the same or did they change during the decision process?
6. How did you proceed in making the decision?
7. Did anyone help you in the decision making process? Who? How?
8. What was the outcome of the decision?
9. How did you feel about yourself after you made the decision? Why?
10. If you had an opportunity to remake the decision, would you make any changes? What changes, if any?
11. Do you see any similarities between the way you handled the past decision and the way you are handling your current decision about a career change?
12. What did you learn from the past decision making process that could be applied to your present situation?

Adapted from Loretta Bradley, *Counseling Midlife Career Changers*, NCDA, 1990.

Career Lifeline

Type of Activity: Individual

Teaching Objective(s):

To help participants identify their past, present and future career paths. To illustrate how this exercise can be used with clients in career counseling.

Behavioral Objective(s):

Participants will be more aware of the directions their careers have taken in the past and the risks that were involved in making certain choices. As a result of reviewing their career lifelines, participants will be better able to make future career decisions.

Estimated Time to Complete: 30 minutes

Points to Introduce Activity:

1. The purpose of this activity is to help you identify your past, present and future career paths.
2. Illustrate how to draw approximate time lines of a person's paid work life on the board with a horizontal line, using 10 year intervals up to eighty years.

0 10 20 30 40 50 60 70 80

The trainer should use his/her own career experience as an example.

3. At the approximate point on the line, label the time when your career began with a CB. At the time when you anticipate your full-time career to end, mark a CE. Place an X on the continuum to indicate where you are now.
4. Use felt tip markers to identify and illustrate the following:
 - a. Your best career decision in green
 - b. Your worst career decision in red
 - c. Greatest career risk ever taken in yellow
 - d. Obstacle(s) that prevented you from making a career move you wanted in red
 - e. Career obstacles that you overcame in green
 - f. A lucky break in green
 - g. A person who helped you in green
 - h. Your future career goals in green
 - i. A critical decision in the future in yellow
 - j. Something holding you back at the present time in red.
5. All green entries should be made above the line; all red entries below the line, and all yellow entries on the line.

Materials and Preparation:

1. Large pieces of paper to make horizontal time lines.
2. Be prepared or have a horizontal time line drawn on the board as an illustration.
3. A red, green and yellow felt tip marker for each participant.

Activity:

Participants will draw career lifelines showing their past lives and future career plans, indicating both positive and negative directions that have been taken.

Participants will then break into pairs and discuss their career lines.

Adaptations:

Participants could include more or less on their career lines, such as highest salary earned, greatest responsibilities, etc.

Questions for Discussion:

1. Did you have any difficulty in deciding what items should be placed above the line in green? Below the line in red? Why?
2. Were the risks that you took in the past worthwhile--did they pay off in some way?
3. Would you consider taking risks again? Why? Why not?
4. Can you clearly see where you are headed?
5. Could you change directions if necessary? Why? Why not?
6. Does your career lifeline point out anything to you?
7. What differences do you see among yourselves in the ways in which you look at the risks you've taken and the impact of those risks on your careers?
8. How would an adult career development theorist such as Donald Super look at the career lifeline?
9. How might you use this activity with your clients?

Trainers Notes:

Sex Role Commandments

Type of Activity: Individual

Teaching Objective(s):

To illustrate how people learn their sex roles from their parents as they are growing up.

Behavioral Objective(s):

Participants will list ten commandments that their mothers, older sisters, grandmothers or significant female role models gave them about being boys/girls. They will list ten commandments that their fathers, older brothers, grandfathers or significant male role models gave them about being boys/girls.

Estimated Time to Complete: 30 minutes

Points to Introduce Activity:

1. Parents typically give a variety of commandments that influence the behavior of their children. Sharing these commandments with others can increase our understanding of ourselves, others and cultural norms.
2. Please find the "Sex Role Commandments" work sheet. You will have ten minutes to complete your list of commandments. We will discuss our responses in a large group to compare similarities and differences in sex role commandments.

Materials and Preparation:

1. "Our Mothers' and Fathers' Sex Role Commandments" work sheet.

Activity:

After a brief introduction by the trainer, the participants will have ten minutes to complete "Sex Role Commandments" work sheet. The commandments listed by the participants will then be discussed by the large group.

Adaptations:

The list could also include commandments learned in school, from peer groups or religious groups.

Questions for Discussion:

1. Was it easy or difficult for you to remember the commandments that you have listed? Why? Why not?

2. Were you surprised by these commandments in any way? In your opinion, were there too many or too few commandments? Why? Why not?
3. What commandments have you (or have you not) handed down to your children or other young people that you might influence? Why? Why not?
4. Do you feel that your life was enriched or restricted by any of the sex role commandments that you have listed? Why? Why not?
5. What commandments continue to influence your life?
6. Have you adopted any new commandments? What are they?
7. How can career development facilitators help their clients recognize sex role stereotypes and overcome the barriers they may impose in career development?
8. How are these commandments evident in the work place today?

Trainer's Notes:

Sex Role Commandments

The objective of this exercise is to help you understand how you learned sex roles as part of growing up.

Directions: List ten commandments that your mother, older sisters, grandmothers or significant female role models gave you about being a boy/girl.

1. _____
2. _____
3. _____
4. _____
5. _____
6. _____
7. _____
8. _____
9. _____
10. _____

List ten commandments that your father, older brothers, grandfathers or significant male role models gave you about being a boy/girl.

1. _____
2. _____
3. _____
4. _____
5. _____
6. _____
7. _____
8. _____
9. _____
10. _____

From *Beyond Sex Roles*, Sargent, 1985.

Applications-66

Sentence Completions

Type of Activity: Large Group

Teaching Objective(s):

To illustrate the sex role expectations that many of us maintain.

Behavioral Objective(s):

Participants will become more aware of their sex role stereotypes and seek to eliminate them in their career counseling.

Estimated Time to Complete: 20 minutes

Points to Introduce Activity:

1. Frequently people organize their behaviors around "shoulds" for themselves and their expectations of others. Sometimes we are not conscious of the "shoulds" we carry with us that can lock us into certain ways of thinking and behaving.
2. One way to bring out some of these expectations and feelings about others is to do some rapid verbal free associations by completing sentences that are started for us. We will do some of these free associations in the large group for approximately five minutes. We will discuss our responses after that time.
3. We will begin 15 sentences with a word or two and ask you to quickly shout out a few words to complete the verbal associations. For example, when you hear a noun such as "teachers," please complete the sentence with the first thoughts that come to your mind about teachers.

Materials and Preparation:

1. Ask for a volunteer that can write very quickly to record the verbal responses, or free associations, of the participants.
2. Ask the participants to free associate words in each of the following categories:

- | | | |
|-------------------|-------------------|------------------------------|
| a. Single mothers | f. Businesswomen | k. Male bosses |
| b. Male nurses | g. Bachelors | l. Married women |
| c. Divorced women | h. Old women | m. Female basketball coaches |
| d. Secretaries | i. House husbands | n. Male basketball coaches |
| e. Truck drivers | j. Blondes | o. Businessmen |

Activity:

Participants will be asked to complete sentences by free associating verbal responses to the sentence subjects that are called out by the trainer. After the sentences have had several completions offered by the participants, the large group will discuss the free associations that were called out by the participants, with attention given to the presence or lack of sex role expectations and stereotyping.

Adaptations:

Participants could write their sentence completions and discuss them afterward.

Questions for Discussion:

1. Were you surprised by some of the associations that you made? Why/why not?
2. Where do these "shoulds" and expectations of others come from?
3. Do these stereotypes of others increase or decrease with age or experience?
4. Why is it important for career counselors to be aware of stereotyping?
5. What skills must counselors develop to move beyond stereotyping when working with their clients?
6. How can a client's potential be affected by stereotyping?

Trainer's Notes:

What Do You Know About Women in the Work Force?

Type of Activity: Individual

Teaching Objective(s):

To make participants more aware of the working conditions of women.

Behavioral Objective(s):

Participants will take a quiz, "What Do You Know About Women in the Work Force?"

Estimated Time to Complete: 30 minutes

Points to Introduce Activity:

1. Many people are unaware of the role women play in today's work place. To test your knowledge, please take the quiz, "What Do You Know About Women in the Work Force?". This is a self-test; your score need not be reported. We will use the quiz for discussion purposes when you have completed it.

Materials and Preparation:

1. Participants will need pencils and "What Do You Know About Women in the Work Force?"

2. A board or flip chart on which to write the answers to the quiz.

3. Answers to quiz:

- | | | |
|---------------------|-------------------|----------------|
| 1. (d) 69%, | 8. (b) \$14,485, | 15. (c) 62%, |
| 2. (a) 35-44 years, | 9. (a) \$17,819, | 16. (a) 44.7%, |
| 3. (b) 68%, | 10. (d) \$25,187, | 17. (d) 80%, |
| 4. (c) 29.3 years, | 11. (a) \$26,045, | 18. (d) 9%, |
| 5. (d) 50%, | 12. (d) \$.70, | 19. (b) 53%, |
| 6. (e) 45%, | 13. (c) 30%, | 20. (d) 33% |
| 7. (a) \$27,228, | 14. (c) 56%, | |

(Source: U.S. Department of Labor Women's Bureau, No. 90-2, September, 1990)

Activity:

Participants will take a self-quiz, "What Do You Know About Women in the Work Force?" from the Participant's Guide. The answers to the quiz will be given and discussed in a large group.

Adaptations:

Questions could be added to the quiz to reflect new information or local conditions.

Questions for Discussion:

1. What facts surprised you the most from the quiz? What surprised you the least? Why? Why not?
2. What facts best describe situations that you have encountered?
3. What figures indicate the "Feminization of Poverty?"
4. What figures indicate the conditions of minority working women?
5. What statistics illustrate occupational segregation?
6. What actions could be taken to improve conditions for working women? Will these actions be taken? By whom? How? When?
7. What future do you envision for working women in the year 2000?
8. How can you use this information with your clients?

Trainer's Notes:

What Do You Know About Women in the Work Force?

Is your awareness of women in the work force increasing? Here are some questions to test your knowledge. Circle the answer that you think is correct.

1. In 1989, the percentage of all women, ages 18 to 64, who were in the labor force.
a. 50% b. 60% c. 45% d. 69%
2. In this age group, 76% of the women are working.
a. 35-44 b. 45-54 c. 25-34 d. 16-24
3. Although most women workers are employed full-time, what percentage of all part-time workers are women?
a. 45% b. 68% c. 75% d. 50%
4. The average woman worker of 16 years of age between 1970-80 could expect to spend how many years of her life in the work force?
a. 20.2 b. 24.5 c. 29.3 d. 32.5
5. Among black workers, what percentage are women?
a. 35% b. 42% c. 30% d. 50%
6. Among white workers, what percentage are women?
a. 37% b. 55% c. 45% d. 40%
7. In 1988, the median income for white men working year-round and full-time was:
a. \$27,228 b. \$22,429 c. \$19,405 d. \$29,998
8. In 1988, the median income for Hispanic women working year-round and full-time was:
a. \$16,424 b. \$14,485 c. \$18,093 d. \$12,029
9. In 1988, the median income for white women working year-round and full-time was:
a. \$17,819 b. \$20,413 c. \$15,423 d. \$21,567
10. In 1988, the median income for women who had completed four years of college was:
a. \$21,899 b. \$19,038 c. \$29,765 d. \$25,187

11. In 1988, the median income for men who had a high school diploma was:
a. \$26,045 b. \$29,413 c. \$23,788 d. \$31,129
12. When 1989 median weekly earnings of full-time wage and salary workers were compared, the average woman earned how many cents compared to every dollar earned by the average man?
a. \$.65 b. \$.60 c. \$.75 d. \$.70
13. More women are choosing to start their own businesses. Women's share of all non-farm sole proprietorships rose to what percent in 1986?
a. 15% b. 22% c. 30% d. 39%
14. What percentage of mothers with preschoolers (children under 6 years) was in the labor force in 1988?
a. 20% b. 45% c. 56% d. 38%
15. Of all persons over 16 years of age with poverty level incomes in 1988, what percentage were women?
a. 34% b. 41% c. 62% d. 71%
16. In 1988, the poverty rate for all families maintained by women with children under the age of 18 was:
a. 44.7% b. 36.2% c. 50.3% d. 26.3%
17. In 1989, women represented what percentage of administrative support (clerical) workers?
a. 56.1% b. 68.9% c. 76.8% d. 80.0%
18. In 1989, women represented what percentage of precision production, craft and repair workers?
a. 16.4% b. 21.2% c. 3.2% d. 9.0%
19. In 1988, the percentage of all poor families that were maintained by women:
a. 35% b. 53% c. 47% d. 61%
20. The 1989 unemployment rate for black female teenagers, from 16-19 years, was:
a. 20.7% b. 18.5% c. 26.4% d. 33.0%

Source: U.S. Department of Labor Women's Bureau, No. 90-2, Sept., 1990.

Gender Equity

Type of Activity: Individual

Teaching Objective(s):

To identify some of the trends in business, industry and society that support the need to achieve gender equity.

Behavioral Objective(s):

Participants will list at least five trends in business, industry and society that support the need to achieve gender equity.

Participants will become more aware of gender equity issues as they affect their clients.

Estimated Time to Complete: 20 minutes

Points to Introduce Activity:

1. The unequal treatment of women in the work place has become costly to business, industry and our society as a whole. Discriminatory conditions can no longer be ignored; there are many trends in business and industry today that support the need to achieve gender equity.
2. Think about the social, political and economic changes that have taken place in the last few decades; think of the changes that are ahead. What trends in business and industry support increased opportunities for women? How do these trends support gender equity in the work place?
3. Please list at least five of these trends on a piece of paper. You have ten minutes to compile your list.
4. We will list the trends on the board and discuss them as a large group.

Materials and Preparation:

1. Have a board or flip chart on which to list the trends.
2. Be prepared with your own list of trends to incorporate into the discussion in the event that they are not listed by the participants, such as: more women in the work force, more service jobs, a need for educated/skilled/trained workers, a decline in the number of workers entering the work force, the aging of the work force, more female consumers, women more politically conscious, more businesses catering to female clients, legislation to promote gender equity, more women moving into management positions, gender equity education, wider acceptance of women in the work place, women better

educated and trained, more occupations now open to women, more women supporting families, etc.

3. Be sure to bring out the changes necessary to accommodate the needs of working women, such as: work site day care for dependents, flexible scheduling, policies guaranteeing parental leave, protection from sexual harassment, equity in pay and promotional practices, and a better understanding of the different communication/management styles of men and women.

Activity:

After a brief introduction from the trainer, the participants will list the trends in business, industry and society that support the need to achieve gender equity. These trends will be summarized, written on the board and discussed in a large group.

Adaptations:

This exercise could be done by listing trends in business, industry and society that support the need for: technical education, multicultural counseling, increased opportunities for special populations such as: minorities, children at-risk, older adults, persons with disabilities, etc.

Questions for Discussion:

1. What trends in business, industry and society support the need to achieve gender equity?
2. What changes in the work place do you foresee as a result of greater gender equity?
3. What could career development facilitators do to promote gender equity?
4. What obligations do career development facilitators have to promote gender equity?

Trainer's Notes:

Walk in My Shoes

Type of Activity: Small group

Teaching Objective(s):

To make the participants more sensitive to and aware of the challenges persons with disabilities must meet in the work place.

To create an awareness of the adaptations that can be made in the work place to accommodate the needs of persons with disabilities.

Behavioral Objective(s):

The participants will place themselves in the roles of persons with different disabilities. They will list the ways in which their work places could be altered to accommodate their needs.

Estimated Time to Complete: 45 minutes

Points to Introduce Activity:

1. During this activity you will place yourself in the role of a person with a specific disability. You must imagine that your life has been suddenly changed by an automobile accident or a medical diagnosis. What effect would your disability have on your present career? What adaptations would be necessary for you to continue in your present work role? Each small group will discuss the implications of the disability that they are assigned and create a list of adaptations that would be necessary for them to do their jobs. After 20 minutes, we will discuss your findings in a large group.
2. In your discussion, please recall the mandates of the Americans with Disabilities Act of 1990.

Materials and Preparation:

1. Participants will need to be assigned a scenario from "Walk in My Shoes," worksheet.

Activity:

Working in pairs or small groups, the participants will take on the roles of persons with disabilities. They will make a list of the adaptations that would be needed in their work places to enable them to continue in their present roles.

Adaptations:

Short scenarios could be written describing different disabilities.

Participants could work individually.

Using the scenarios of disabilities, the participants could research alternative career choices using labor market information.

After the list of adaptations are made, the participants could role play their requests to their employers regarding the adaptations needed.

Questions for Discussion:

1. How did you feel as you took on the role of a person with disabilities? Would some/any/all of the disabilities affect your level of self-confidence? In what ways? Why? Why not?
2. How would the disabilities affect your social life? Would your friends remain the same or would they change?
3. What work place adaptations would be necessary? Would you anticipate any problems, such as funding or supervisory support? Why? Why not?
4. What work tasks, if any, do you feel that you would be unable to complete, despite the available modifications? How might this affect your job?
5. How has the Americans with Disabilities Act of 1990 opened doors for persons with disabilities?
6. How can you incorporate the ADA into your career counseling of persons with disabilities?

Trainer's Notes:

Walk in My Shoes

Directions: Each small group should work with a different scenario. Placing themselves in the roles of the persons with disabilities, the group should make a list of the ways their present career would be effected and the ways in which their work places would need to be adapted in order to accommodate their needs.

1. As a result of an automobile accident, you have lost the use of both legs and are now confined to a wheelchair.
2. As a result of a head trauma suffered in a bicycle fall, you are now subject to convulsive epileptic seizures.
3. Your vision has been severely impaired as a result of cataracts.
4. You have developed an asthmatic condition. You need to carry an inhaler, medication, and be alert for allergic reactions at all times.
5. Your cancerous larynx has been surgically removed. You must speak through an artificial voice box.
6. Your hearing is impaired due to a severe respiratory infection.
7. After suffering a stroke, you have poor handwriting and written work is difficult for you.
8. You have a chronic disease that makes it painful and difficult for you to move your body.

Questions for Discussion:

1. How did you feel as you took on the roles of a persons with disabilities? Would some/any/all of the disabilities affect your level of self-confidence? In what ways? Why/why not?
2. How would the disabilities affect your social life? Would your friends remain the same or would they change?
3. In what ways might you experience growth as a person with a disability?
4. What work place adaptations would be necessary? Would you anticipate any problems, such as funding, supervisory support, etc.? Why? Why not?
5. What work tasks, if any, do you feel that you would be unable to complete, despite the available modifications? How might this affect your job?
6. How has the Americans with Disabilities Act of 1990 opened doors for persons with disabilities?
7. How can you incorporate the ADA into your career counseling of persons with disabilities?

The Most That I Think I Could Handle

Type of Activity: Individual

Teaching Objective(s):

To demonstrate an activity that can be used to assess and build the self-confidence of children at-risk.

Behavioral Objective(s):

Given the worksheet, "The Most That I Think I Could Handle," the participants will take on the roles of at-risk students and answer questions that are related to their personally perceived capabilities in school, social situations and future job searches. The participants will assess levels of self-confidence of at-risk students in the situations that are described.

Estimated Time to Complete: 20 minutes

Points to Introduce Activity:

1. The purpose of this activity is to help us understand how children at-risk would assess their capabilities in certain school, social and job search situations by answering the questions, "The Most That I Think I Could Handle."
2. You will have five to ten minutes to answer the questions on the work sheet. We will discuss your answers in a large group after that time.

Materials and Preparation:

1. Participants will need "The Most That I Think I Could Handle."
2. A board or flip chart on which to list strategies for building self confidence in specific areas of concern, such as speaking in front of an audience.

Activity:

Taking on the roles of children at-risk, the participants will answer the questions from "The Most That I Think I Could Handle", a brief self-assessment of their self-confidence in school, social and job search situations. After the questions have been answered, the participants will discuss them in a large group and identify some strategies for building self-esteem.

Adaptations:

Questions could be designed for any special needs group, persons with disabilities, older adults, displaced homemakers, teen parents, etc.

Questions for Discussion:

1. How did you feel about yourself after answering the questions? Why?
2. In what areas do you have the most self-confidence? Why? In what areas do you have the least? Why?
3. Is having self-confidence an important personal quality? Why? Why not? What qualities do you think are necessary to succeed in school? In social situations? In searching for a job?
4. What can we do to improve the self-confidence of our at-risk students in school? In social situations? In searching for a job?
5. Who are some of the people who could help at-risk students? What public and private facilities or institutions might help at-risk students develop their confidence? How?
6. If you could do one thing to boost the self-confidence of at-risk students, what would it be? Can you do it? Why? Why not?

Trainer's Notes:

The Most That I Think I Could Handle

Read each phrase and fill in the blank following it to describe how much of each activity you feel is the most you can handle.

Hours of homework in a day

Parties or dates during a weekend: parties dates

Phone calls in a day

Boyfriends or girlfriends at one time

Chores at home in a day: How many? How much time?

People living in my house at once

Slices of pizza to eat at one sitting

Pounds I could lift

Tests to take in one day

Number of people in an audience to whom I could speak

How long I would wait patiently for anything without complaining

The number of business establishments that I could walk into on a given day to ask about employment opportunities

The number of people I could telephone in one day to inquire about employment opportunities

The number of job applications I could fill out during a job search

The amount of time I would set aside to read the Help Wanted ads in the Sunday paper

How many adults I would ask to be a reference for prospective employers

How many hours I could work during the week and still complete all my school work

How many reprimands could I take from my employer within a four hour period

Adapted from *Personal Growth and Development Workbook*, Winneconne High School, Winneconne, Wisconsin.

Case Study - Carl Young

(Developed by the New Mexico SOICC)

Carl Young is a high school dropout. You are trying to find him a job in one of the large local motels or hotels but it appears to be a stagnant industry, employment-wise. Is this true? Is there any hiring at all? What are the long-term prospects? Name some jobs found in the industry. Does he meet the educational qualifications? Who are the largest local employers?

Major Labor Market Information Topics by Reports

	Outlook		Requirements		Job Hunting			Economic Trends			Wages
	National	State	Education	Work Environment	Employers' Area	Occupation	Resume & Interview	Unemployment	Employment	Industry	
<i>Occupational Outlook Handbook</i>	x		x	x							x
<i>State Occupational Outlook to 1995</i>		x									
<i>State Supply/Demand</i>		x									
<i>State Job Hunter's Guide</i>					x		x				
<i>Prospects</i>		x	x		x		x				
<i>Large Employers</i>					x						
<i>Industries-Companies-Occupations</i>						x					
<i>Employers with most hires</i>					x						
<i>Employers by Occupation</i>						x					
<i>Jobs for Graduates</i>						x					
<i>State Labor Market Review</i>								x	x	x	
<i>Regional Wage Surveys</i>											x
<i>Other:</i>											

Case Study - Marie Alvarez

(Developed by the New Mexico SOICC)

Marie Alvarez is a recent high school graduate considering possible employment fields and wants your advice on the Automotive Mechanic field. What she knows about the job interests her. Previous testing indicates she has an aptitude for mechanical work. She would like a job offering favorable employment opportunities nationally, but would prefer staying in a metropolitan area and working for a local company. She wants to know if formal training or on-the-job training is preferable. Any additional school would need to be available locally. Salary levels, both beginning and experienced, are also a consideration. What can you tell her about job opportunities, employers, training and pay?

Major Labor Market Information Topics by Reports

	Outlook		Requirements		Job Hunting			Economic Trends			Wages
	National	State	Education	Work Environment	Employers' Area	Occupation	Resumes & Interview	Unemployment	Employment	Industry	
<i>Occupational Outlook Handbook</i>	x		x	x							x
<i>State Occupational Outlook to 1995</i>		x									
<i>State Supply/Demand</i>		x									
<i>State Job Hunter's Guide</i>					x		x				
<i>Prospects</i>		x	x		x		x				
<i>Large Employers</i>					x						
<i>Industries-Companies-Occupations</i>						x					
<i>Employers with most hires</i>					x						
<i>Employers by Occupation</i>						x					
<i>Jobs for Graduates</i>						x					
<i>State Labor Market Review</i>								x	x	x	
<i>Regional Wage Surveys</i>											x
<i>Other:</i>											

Case Study - Marie Alvarez

(Developed by the New Mexico SOICC)

Marie Alvarez is a recent high school graduate considering possible employment fields and wants your advice on the Automotive Mechanic field. What she knows about the job interests her. Previous testing indicates she has an aptitude for mechanical work. She would like a job offering favorable employment opportunities nationally, but would prefer staying in a metropolitan area and working for a local company. She wants to know if formal training or on-the-job training is preferable. Any additional school would need to be available locally. Salary levels, both beginning and experienced, are also a consideration. What can you tell her about job opportunities, employers, training and pay?

Major Labor Market Information Topics by Reports

	Outlook		Requirements		Job Hunting			Economic Trends			Wages
	National	State	Education	Work Environment	Employers' Area	Occupation	Resume & Interview	Unemployment	Employment	Industry	
<i>Occupational Outlook Handbook</i>	x		x	x							x
<i>State Occupational Outlook to 1995</i>		x									
<i>State Supply/Demand</i>		x									
<i>State Job Hunter's Guide</i>					x		x				
<i>Prospects</i>		x	x		x		x				
<i>Large Employers</i>					x						
<i>Industries-Companies-Occupations</i>						x					
<i>Employers with most hires</i>					x						
<i>Employers by Occupation</i>						x					
<i>Jobs for Graduates</i>						x					
<i>State Labor Market Review</i>								x	x	x	
<i>Regional Wage Surveys</i>											x
<i>Other:</i>											

Case Study Activity - Jane Williamson
(Developed by the Montana SOICC)

Includes:

- 1. The Problem and the Plan**
- 2. Jane's high school transcript and ASVAB test scores**
- 3. CIDS questions and answers**
- 4. Thoughts on ASVAB interpretations**
- 5. Occupational Profile**
- 6. Occupational Information Resource Matrices - National and State**

1. The Problem and the Plan

The Problem

You have a client that desperately needs your help. Her name is Jane Williamson. She arrived at your office this morning with a set of ASVAB scores, a CIDS questionnaire, her high school transcript, and a list of questions. She desperately wants to know what kind of careers to look into.

You were unable to see her when she was in your office. She left the information and made an appointment to see you tomorrow morning. You can only spend a few minutes getting to know her in the morning. You plan to spend tomorrow afternoon researching available resources. You also made another appointment with Jane later in the week to go over your recommendations with her.

After reviewing her questions, you decide you could use some help. You arrange for several "experts" to be available to answer your questions. You also contact several colleagues who agree to work with you.

Most importantly, you have developed a plan.

The Plan

I. Review Information Jane left at the Office.

Review the ASVAB test scores, CIDS answers and Jane's high school transcript.

Even though you have not met Jane, describe her strengths and weaknesses.

II. Interview Jane. (A volunteer from the group or the trainer) All small groups will interview Jane at the same time.

As a group, decide what you want to find out from Jane.

Select a spokesperson in your group to interview Jane.

Try to find out more about Jane than is shown by the documents. Are there any conflicts between her expectations and the results of her test scores, CIDS answers and her high school record?

All the groups will interview Jane at the same time. Jane can stay only for about 20 minutes.

III. Run a CIDS Program to Get a List of Occupations.

Contact the CIDS representative and make arrangements to run Jane's CIDS answers through the occupational search program. This will give you a list of occupations with which you can begin working. Remember that Jane is a teenager.

IV. Choose Possible Occupations.

As a group, use all the information you now have to choose three occupations to research further. You have decided to limit your research to three occupations for time's sake. You can always recommend others she should research. The possibilities should be based upon the ASVAB, CIDS results, high school record, and your interview with Jane. You realize that Jane should be doing some of this work with you, but because of time limitations, complete the tasks without her.

You also realize there are many other testing and evaluation instruments that could be helpful. However, you do not have time to give any other tests. So, you decide to use the ASVAB and CIDS in this case. If you feel other tests would be useful, you can tell Jane when you present your findings.

When choosing the occupations, try not to consider anything but Jane's skills, abilities, aptitudes and interests. You will be looking at many other factors as your research progresses.

V. Research the Occupations

Now divide your group into pairs of "researchers." Each pair will take one of the occupations chosen and complete the occupational profile for that occupation.

You can complete the parts of the profile in any order. We suggest that you do Part I, Section A first. This will give you the basic codes to access the other data.

VI. Prepare & Present Recommendations to Jane.

You need to prepare a presentation of your findings for Jane. Prepare the presentation as a group. You may do the presentation however your group chooses.

Jane will be in your office at 8:00 tomorrow morning. Your group will only have about 5 minutes to talk to her because she has several other groups working on her problem and must see them also.

#2 JANE'S HIGH SCHOOL TRANSCRIPT AND ASVAB TEST SCORES
PERMANENT RECORD

BETA HIGH SCHOOL

Anytown, IL

Student Name: Public, Jane Q. M/F Father's Name (Guardian) John Z. Public
 Address: 1234 Maple Avenue Mother's Name (Guardian) Mary L. Public
 Telephone: 123-4567 Parents' Address (if different) _____

Grade 9: 1981-82

English I	C	1	English I	C-	1
Soc. Stu.	C-	1	Soc. Stud.	D+	1
P. E.	A	1/2	P.E.	A	1/2
Alg. I	B+	1	Alg. I	A-	1
Gen. Sci.	A-	1	Gen. Sci.	B	1
Typing I	C	1	Typing I	C+	1

TOTAL CR: 5 1/2 TOTAL CR: 5 1/2

Grade 10: 1982-83

English II	D+	1	English II	C	1
Wld Hist	C-	1	Wld History	C-	1
Softball	A	1/2	Basketball	A	1/2
Geometry	B+	1	Geometry	A-	1
Biology	B-	1	Biology	B	1
Computer Sk.	A-	1	Dr. Ed.	B-	1

TOTAL CR: 5 1/2 TOTAL CR: 5 1/2

Grade 11: 1983-84

Comp. III	B-	1	Am. Lit
U.S. Hist.	C-	1	U.S. Hist.
Alg. II	B+	1	Alg. II
Woodwork I	A	1	Drafting
Speech	B	1	Drama
Chemistry	B-	1	Chemistry

TOTAL CR: 6

Grade 12:

Activities: (* = letter)
 Basketball 10, 11
 Track 10*, 11
 Drama Club 11

BETA HIGH SCHOOL TERM REPORT CARD

Jane Q. Public 11
 Student Name) (Grade)

1234 Maple Avenue
 (Address)

	1	2	Sem.		1	2	Sem.
Comp III	C	B	B-	Am. Lit.	C		
U.S. Hist.	D+	C	C-	U.S. Hist.	C		
Alg. II	A-	B	B+	Alg. II	A		
Woodwork I	A	A	A	Drafting	A-		
Speech	B-	B	B	Drama	B		
Chemistry	C	B+	B-	Chemistry	B		

ASVAB ALPHA ROSTER REPORT
 STANDARD SCORES
 PUBLIC JANE Q

GS 57	CS 48
AR 60	AS 66
WK 43	MK 57
PC 40	MC 53
NO 49	EI 54

Categories of Occupational Characteristics

SCHOOL SUBJECTS

Check 1 to 3 School Subjects that you like.

- 201. **Language Arts:** literature, composition, grammar, speech, foreign language
- 202. **Mathematics:** general math, geometry, algebra, trigonometry, calculus
- 203. **Chemistry**
- 204. **Physics**
- 205. **Biology**
- 206. **Social Studies:** history, geography, government, sociology, psychology
- 207. **Economics**
- 208. **Music/Art/Drama:** drawing, painting, sculpture, textile art, music
- 209. **Physical Education/Health Fitness:**
- 211. **Industry/Technology:** drafting, graphic arts, metalworking, mechanics, woodworking, electronics, construction, manufacturing, transportation
- 212. **Family/Consumer Science:** foods and nutrition, clothing, housing, parenting and child development, community service, consumer education, independent living
- 213. **Agriculture:** agricultural production, services, mechanics
- 214. **Marketing:** merchandising, marketing, services, entrepreneurship
- 215. **Business/Accounting:** accounting, bookkeeping, business math, management and finance
- 216. **Office/Clerical:** typing, shorthand, wordprocessing,
- 217. **Health/Medical**
- 218. **Computers/Applications:** computer programming, systems design and analysis, electronic spreadsheets, data bases, etc.

EDUCATIONAL PROGRAMS

Check 1 to 3 Educational Programs you would like to pursue.

- 221. **Agriculture/Natural Resources**
- 222. **Business**
- 223. **Computers/Applications**
- 224. **Education**
- 225. **Engineering/Architecture**
- 226. **Family, Food, and Consumer Sciences**
- 227. **Fine Arts**
- 228. **Health Sciences**
- 229. **Industry/Technology**
- 230. **Language/Communication Arts/Interdisciplinary Studies**
- 231. **Mathematics**
- 232. **Personal and Protective Services**
- 233. **Sciences**
- 234. **Social Sciences/Services**

INDUSTRIES

Check 1 to 3 Industries where you want to work.

- 691. Agriculture - Production and Services
- 692. Forestry, Fishing, Hunting, and Trapping
- 693. Mining
- 694. Construction
- 695. Manufacturing
- 696. Transportation
- 697. Communications
- 698. Electric, Gas, and Sanitary Services
- 699. Wholesale Trade
- 700. Retail Trade
- 701. Finance, Insurance, and Real Estate
- 702. Lodging and Personal Services
- 703. Business Services
- 704. Automotive and Other Repairs and Services
- 705. Motion Picture, Amusement, and Recreation Services
- 706. Health and Legal Services
- 707. Education, Social, and Membership Services
- 708. Professional Services
- 709. Public Administration

APTITUDES

Check 1 to 3 Skill(s) that you want to use at work.

- 141. Verbal: speak well and write clearly
- 142. Numerical: work quickly and accurately with numbers
- 143. Visual: see shades of colors, important details, and relationships among shapes and objects
- 147. Coordination: quickly and accurately control movements with your body
- 152. Clerical Perceptions: understand details in spoken and written communications, proofread words and numbers, understand basic math

INTERESTS

Check 1 to 3 of the following that most interest you.

- 131. Data: making judgments and decisions based on facts or figures
- 132. People: directing, helping, or influencing people
- 133. Objects: operating machines, using equipment to perform tasks
- 134. Ideas: using information or concepts to solve problems and make decisions
- 135. Living Things: working with plants, animals, and living organisms

EDUCATION

Check 1 to 3 levels of Education that you are considering.

- 401. No High School Diploma
- 402. High School Diploma or G.E.D.
- 406. Associate degree (2-year program)
- 410. Vocational or Technical Training
- 407. Bachelor's degree (4-year program)
- 408. Master's degree
- 409. Doctoral degree (Ph.D., M.D., etc.)
- 411. Four years or more of college

WORK METHODS

Check 1 or 2 Work Methods that you think match your work style.

- 121. **Structured:** Work activities are clearly defined. Specific procedures or instructions must be followed. Consistency and precision may be required. You may do similar tasks each day.
- 122. **Creative:** Work activities involve developing new solutions to produce products or thinking up new themes or ideas. Each work day may be different, but you may work on one project for several months.
- 123. **Problem-Solving:** Work activities require thinking about problems and choosing solutions that may affect many people. Quick decisions may be required, so you must feel comfortable making decisions with incomplete information.

TRAVEL

Check 1 or 2 styles of Travel that you would like.

- 351. Work at the same place every day
- 352. Travel to different places during the day, but come home each evening
- 353. Travel regularly, stay overnight often

JOB LOCATION

Check one Job Location you prefer.

- 551. Urban: big cities and suburbs
- 552. Rural: small towns and country areas

WORKING CONDITIONS

Check the Working Conditions you prefer.

- 361. Mostly outside
- 362. Mostly inside
- 363. Both inside and outside

PHYSICAL EFFORT

Check 1 to 3 amounts of Physical Effort you prefer.

- 301. Lift up to 10 lbs.
- 302. Lift up to 25 lbs. or more; carry up to 10 lbs.
- 303. Much lifting or physical exertion
- 304. Lift up to 50 lbs. or more; carry up to 25 lbs.
- 305. Lift up to 100 lbs. or more; carry up to 50 lbs.

SALARY

Check 1 to 3 levels of starting Salary you would like.

(If you pick higher salaries, you might not have as many occupations to choose from.)

- 521. Up to \$8,000 per year (to \$4.00 per hour)
- 522. \$10,000 per year (\$5.00 per hour)
- 523. \$12,000 per year (\$6.00 per hour)
- 524. \$14,000 per year (\$7.00 per hour)
- 525. \$16,000 per year (\$8.00 per hour)
- 526. \$18,000 per year (\$9.00 per hour)
- 527. \$20,000 per year (\$10.00 per hour)
- 528. \$24,000 per year (\$12.00 per hour)
- 529. \$28,000 per year (\$14.00 per hour)
- 530. \$32,000 per year (\$16.00 per hour)
- 531. \$36,000 per year (\$18.00 per hour)
- 532. \$40,000 per year (\$20.00 per hour)
- 533. Above \$40,000 per year (over \$20.00 per hour)

WORK FIELDS

Check 1 to 3 Work Field(s) that you might like.

- 661. Artistic: Literary and visual arts, drama, music, dance, and crafts
- 662. Scientific: Physical and life sciences, medicine, and laboratory technology
- 663. Plants and Animals: Animal care and training, plant care, and related areas
- 664. Protective: Safety and law enforcement and security services
- 665. Mechanical: Engineering, quality control, transportation, and related work
- 666. Industrial: Production work, production technology, and elemental work
- 667. Business Detail: Administration, math and finance related work, clerical work, etc.
- 668. Selling: General sales and related work
- 669. Accommodating: Hospitality services, personal care services, and passenger and customer services
- 670. Humanitarian: Social services, nursing, therapy, specialized teaching services, etc.
- 671. Leading-Influencing: Education, law, management and administration, communications, etc.
- 672. Physical Performing: Sports and related areas

READING, WRITING, AND SPEAKING

Check 1 or 2 Reading levels that you want on the job.

- 161. Reading level 1 - Little or no reading required. Read simple words or compare names and numbers.
- 162. Reading level 2 - Read simply written material, such as recipes, invoices, charts, labels, or rules.
- 163. Reading level 3 - Read specialized terms and understand concepts, such as methods of mechanical drawing, or medical terms.
- 164. Reading level 4 - Read service manuals, legal documents, blueprints, instructions on care of equipment, or methods of preparing solutions.
- 165. Reading level 5 - Read scientific or technical material related to specialized fields, such as medicine, chemistry, or law.

Check 1 or 2 Writing levels that you want on the job.

- 171. Writing level 1 - Little or no writing required. Print simple words and series of names, numbers, and addresses.
- 172. Writing level 2 - Write some sentences using proper style and punctuation.
- 173. Writing level 3 - Write short reports and keep records using forms.
- 174. Writing level 4 - Write reports or letters using a specific format. Prepare business letters, summaries, and reports.
- 175. Writing level 5 - Write speeches and technical material. This level involves the ability to be able to write precisely, creatively, and clearly so that others can understand the material.

Check 1 or 2 Speaking levels that you want on the job.

- 181. Speaking Level 1 - Speak simple sentences. Includes following simple oral instructions, and asking co-workers and supervisors simple questions.
- 182. Speaking Level 2 - Speak clearly using correct English, such as conversing with customers at a restaurant, answering customer questions, and discussing work to be done with a supervisor.
- 183. Speaking Level 3 - Speak confidently to a small group, such as greeting customers and answering questions, calling on new customers, talking to patients, giving orders to other workers, and presenting reports to supervisors.
- 184. Speaking Level 4 - Discuss a variety of subjects in a group, such as consulting with a number of people working on different parts of a project, and participating in debates and discussions at business meetings.
- 185. Speaking Level 5 - Talk effectively to a group using persuasive techniques and a well-trained voice, such as discussing technical material with supervisor and workers, speaking to community organizations, speaking before television audiences, or teaching students to speak effectively.

THOUGHTS ON ASVAB INTERPRETATIONS

by

Gene M. Harris

ASVAB Test Specialist

Butte Military Entrance Processing Center

It is useful in a school ASVAB testing situation if the counselor is able to schedule a group presentation to cover basic definitions and concerns general to the particular class. Then, a short individual session to review specific scores or developments can be scheduled with students wishing specific counseling. Group work is appropriate for explaining standard scores, percentile scores, confidence intervals, the Youth Population norming group and sub-groups, the Grade/Sex Percentile, the Grade/Opposite Sex Percentile, and the Grade Percentile. Interpretive materials that can be explained in group format include the Military Career Guide, the ASVAB Student Workbook, Department of Labor publications, and career information in computer format.

Group session could cover the following:

Standard Scores:

The ten subtests of the ASVAB are reported on the counselor's alphabetical roster in standard score format. The tests are: General Science (GS), Word Knowledge (WK), Paragraph Comprehension (PC), Arithmetic Reasoning (AR), Numerical Operations (NO), Math Knowledge (MK), Auto and Shop Information (AS), Mechanical Comprehension (MC), Electronics Information (EI), and Coding Speed (CS). These tests are combined in various ways to achieve the composite scores on the student results sheet. While the composite scores have reliability coefficients ranging from .90 to .96, utilization of individual subtests would not due to fewer items resulting in lower reliability. Counselors must keep in mind this fact when showing students subtest scores and realize potential variation from these subtest scores can occur. Also, the standard scores (T-Scores) do not measure the same as percentile scores. They must be converted with use of a normal curve format to arrive at approximate percentile equivalents. Rough approximations are:

T Score:	30	40	50	60	70
ile:	2.5	15	50	85	97.5

Students should be encouraged to see the counselor since the only source of specific sub-test scores rests there and care must be used to not over interpret a sub-test score.

Percentile Scores:

A percentile score tells not how a student scored on a test, but rather how many people in a particular group, out of one hundred, the student's score has beaten. Thus, a Youth Population percentile score of 72 indicates that 72 out of 100 people aged 18-23 were beaten by the individual student's score. The Grade/Sex, Grade/Opposite Sex, and Grade Percentile scores usually differ due to the fact that different groups of people are used as a comparison or standard for the student's score. As a group, the sophomore norm group will not do as well on the ASVAB as the junior norm group, therefore, the same score will beat more sophomores than juniors.

It should be noted that percentile scores should be used to indicate probable levels of competitiveness in the measured areas rather than trying to judge whether a student will be successful in a program. The various percentile scores are listed on the Counselor's Portion of the Student Results Sheet. In parentheses, the abbreviations for the sub-tests included in the composite scores are listed. Please note the parentheses within parentheses as these scores are added together and divided by 2 to weigh verbal tests accurately.

Academic Ability	$((WK + PC) + AR)$
Verbal	$(GS + WK + PC)$
Math	$(AR + MK)$
Mechanical-Crafts	$(AR + AS + MC + EI)$
Business-Clerical	$((WK + PC) + MK + CS)$
Electronics-Electrical	$(GS + AR + MK + EI)$
Health, Social, & Technology	$((WK + PC) + AR + MC)$

Use of sub-test scores with composite scores will show students which skills were measured for each composite, and they might indicate what skills were tested higher or lower within a composite. Care must be used here, however, as the reliability of a subtest is less than a composite. Questions might be raised, but other information should be used to verify potential answers.

It is sometimes informative for students to see how the academic tests are used within the Occupational Composites. Thus, they can see the importance of academics and realize that high school courses offer advantages for later employment in chosen fields.

Youth Population Norm Group:

This group is aged 18-23 and represents the beginning work force in America. It is a compilation of people from a Department of Labor study which set out to define parameters of America's entering labor force. The Department of Defense sampled the group with the ASVAB and developed the ASVAB-14 norms. Students can see how they compare with these people early and plan accordingly.

Grade/Sex Percentile and Grade/Opposite Sex Percentiles:

These percentile scores are used to show students how they compete with people of their grade and sex or opposite sex. As students choose possible careers or training programs, they should be aware that many are still dominated by one sex or the other. While this is in flux, the dominance still remains, and students might want to see how they compare in areas with either the same sex if entering traditional employment or opposite sex if entering a non-traditional career. These scores are not to be construed as limiting options. They are used to help indicate truer comparisons of scores with people actually in the work fields.

Individual sessions could cover the following:

Students who might wonder how individual test scores might reflect their abilities should receive additional counseling. Other sources of information available to counselors such as school grades could be consulted to see if sub-test scores seem to reflect actual performance. With verification from other information, counselors might be able to suggest specific courses that will help the student achieve skills and

abilities most beneficial to the future.

At either a general or individual session, students should be acquainted with the Military Career Guide, at least briefly. The chart of scores for the enlisted programs helps give guidance to how scores relate to training programs in the military. Of course, like everything else, this must be taken with a grain of salt. The Military Career Guide is three years old now, and that is quite old for career information. The newest edition will contain updated information on enlisted programs along with a section of several officer programs. Instead of a chart indicating probability of being accepted into a training program, the officer section will list collegiate coursework appropriate for the particular program in question.

The charts for the enlisted programs help counselors who are uncomfortable with predicting success in non-academic training programs. Since counseling is an academic area, counselors often are more comfortable discussing this type of preparation. Thus, the charts for enlisted training is a start to approximate difficulty of various programs students might consider. Of course, other material regarding each program should serve as a beginning to help narrow the search for additional material regarding specific civilian or military careers and programs.

Of course, much more than academic or skill ability should be considered in a career choice. At this point, the ASVAB Student Workbook could be used to let students explore their values, interests and skills, "must avoid" areas, and education level after high school. These topics have been related to over one hundred careers in the civilian job market by Educational Testing Service through their SIGI Plus program. Students are encouraged to pick three values, three interests and skills, and a level of education that they aspire to. They are not encouraged to take any of the "must avoid" areas, however, in extreme cases, they should pick one to avoid careers that contain public speaking, sitting still, or heavy labor if these are impossible or dreadful for them. The major advantage of the workbook is that all of this information is presented in one place so the student can do some comparison shopping in his/her own time and pace. Decisions made with this information can later be discussed with counselors, parents, or teachers if desired. This material will also help limit the huge variety of careers so the students can better pinpoint the careers apparently best suited for them.

After use of the ASVAB materials, students can go to the counselor to use Department of Labor information, computer based information, or other sources the school has available. The materials are intended to help students find a list of suitable careers and learn the proper process of gathering information for informed choice making. Future classes in school and future programs that are available after high school can then be studied in a context of informed choice.

Occupational Profile

Outline of Contents

(Developed by the Montana SOICC. Substitute local information where appropriate.)

PART I - OCCUPATIONAL DESCRIPTION

- A. Occupation name and related occupations.**
- B. Duties of the occupation.**
- C. Aptitudes and skills needed for the occupation.**
- D. Earnings in the occupation.**
- E. Health hazards related to the occupation.**
- F. Employee organizations for workers in the occupation.**

PART II - EDUCATION AND TRAINING REQUIREMENTS

- A. Recommended high school or postsecondary preparatory courses.**
- B. Educational and experience requirements**
- C. Schools that offer training for this occupation.**
- D. Schools outside the state that offer training for this occupation.**

PART III - INDUSTRIES AND BUSINESSES THAT EMPLOY THIS OCCUPATION

- A. Industry employment and trends.**
- B. Projected employment in this occupation.**
- C. Current events affecting the outlook for this occupation.**
- D. Supply of workers for this occupation.**

OCCUPATIONAL PROFILE

GROUP _____ **DATE** _____

PARTICIPANT NAMES _____

Complete the blanks or check either Yes or No. Use additional pages if necessary.

SUGGESTED RESOURCES are listed at the end of each question. A space is also provided for additional resources that contain the information. Some other resources can be found by using the Occupation Information Resource Matrix. Sources of information for a local area or town could be the local Job Service office, the local Chamber of Commerce, the local newspaper, and others suggested by your trainers.

PART I - OCCUPATIONAL DESCRIPTION

I.A. OCCUPATION NAME AND RELATED OCCUPATIONS:

Occupation Name: _____

Code Numbers: **DOT** _____ **OES** _____
 SOC _____ **Other** _____

Related Occupations and/or specialties (for further study if desired):

Name _____	Number _____
Name _____	Number _____
Name _____	Number _____
Name _____	Number _____

Source/s used to answer section I.A.:

OCCUPATIONAL OUTLOOK HANDBOOK (OOH)
STANDARD OCCUPATIONAL CLASSIFICATION MANUAL (SOC)
DICTIONARY OF OCCUPATIONAL TITLES (DOT)
INDUSTRY/OCCUPATIONS PROJECTIONS
STATE CAREER INFORMATION SYSTEM (CIS)
OTHER CAREER INFORMATION SYSTEMS (CIS)
FILL IN OTHER SOURCES:

I.B. DUTIES OF THE OCCUPATION:

Duties of the job (list minimum of five duties):

1. _____
2. _____
3. _____
4. _____
5. _____
6. _____
7. _____

Source/s used to answer section I.B.:

DICTIONARY OF OCCUPATIONAL TITLES (DOT)
STANDARD OCCUPATIONAL CLASSIFICATION MANUAL (SOC)
OCCUPATIONAL OUTLOOK HANDBOOK (OOH)
STATE CAREER INFORMATION SYSTEM (CIS)
OTHER CAREER INFORMATION SYSTEMS (CIS)
FILL IN OTHER SOURCES:

I.C. APTITUDES AND SKILLS NEEDED FOR THE OCCUPATION:

List at least six.

1. _____
2. _____
3. _____
4. _____
5. _____
6. _____
7. _____
8. _____
9. _____
10. _____

Source/s used to answer section I.C.:

OCCUPATIONAL OUTLOOK HANDBOOK (OOH)
STATE CAREER INFORMATION SYSTEM (CIS)
OTHER CAREER INFORMATION SYSTEMS (CIS)
FILL IN OTHER SOURCES:

I.D. EARNINGS AND HOURS WORKED BY THIS OCCUPATION:

Earnings:

National Wages _____
State Wages _____
(indicate per hour, week, or year)

Other benefits:

1. _____
2. _____
3. _____

Hours of Work:

On the average, how many hours would one work at this job?

1. Hours Worked Daily _____

2. Hours Worked Weekly _____
Are there seasonal layoffs? ___ Yes ___ No

Source/s used to answer section I.D.:

OCCUPATIONAL OUTLOOK HANDBOOK (OOH)
OCCUPATIONAL OUTLOOK QUARTERLY (OOQ)
CAREER INFORMATION SYSTEM (CIS)
STATE OCCUPATIONAL INFORMATION SYSTEM (OIS)
STATE SUPPLY DEMAND REPORT
STATE FRINGE BENEFIT AND WAGE INFORMATION
ECONOMIC CONDITIONS IN STATE
OTHER CAREER INFORMATION SYSTEM (CIS)
FILL IN OTHER SOURCES:

I.E. HEALTH HAZARDS RELATED TO THE OCCUPATION:

Are there health hazards involved? ___ Yes ___ No
If so, what kinds? _____

Source/s used to answer section I.E.:

SELECTED CHARACTERISTICS OF THE DOT
CAREER INFORMATION SYSTEM
OTHER CAREER INFORMATION SYSTEMS (CIS)
FILL IN OTHER SOURCES:

I.F. EMPLOYEE ORGANIZATIONS IN THE OCCUPATION:

Employee organizations for full-time workers:

Would you be expected to join a union or other employee organizations?
___ Yes ___ No

Source/s used to answer section I.F.:

OCCUPATIONAL OUTLOOK HANDBOOK (OOH)
OTHER CAREER INFORMATION SYSTEMS (CIS)
CAREER INFORMATION SYSTEM (CIS)
UNION REPRESENTATIVES
FILL IN OTHER SOURCES:

PART II - EDUCATION AND TRAINING INFORMATION

II.A RECOMMENDED HIGH SCHOOL AND POSTSECONDARY PREP COURSES:

What general high school or post secondary courses would help to prepare the client for this job?

_____	_____
_____	_____
_____	_____
_____	_____

Source/s used to answer section II.A.:

**GUIDE FOR OCCUPATIONAL EXPLORATION (GOE)
OCCUPATIONAL OUTLOOK HANDBOOK (OOH)
CAREER INFORMATION SYSTEM (CIS)
OTHER CAREER INFORMATION SYSTEMS (CIS)
FILL IN OTHER SOURCES:**

If this client has deficiencies in basic courses needed for this occupation, what courses would you recommend to overcome those deficiencies?

_____	_____
_____	_____
_____	_____

II.B. EDUCATION AND EXPERIENCE REQUIREMENTS:

Number of years of education required _____
Type (high school, college, Vo-Tech, etc) _____

Is this occupation apprenticesable? ____ Yes ____ No

Length of apprenticeship _____

Name of address of organization to contact to find out more about apprenticeships:

Source/s used to answer section II.B.:

**GUIDE FOR OCCUPATIONAL EXPLORATION (GOE)
OCCUPATIONAL OUTLOOK HANDBOOK (OOH)
STATE APPRENTICEABLE OCCUPATIONS
STATE CAREER INFORMATION SYSTEMS (CIS)
OTHER CAREER INFORMATION SYSTEMS (CIS)
STATE OCCUPATIONAL INFORMATION SYSTEM (OIS)
FILL IN OTHER SOURCES:**

II.C. STATE SCHOOLS THAT OFFER TRAINING FOR THIS OCCUPATION:

What schools in the state offer training for this job?

1. _____
2. _____
3. _____

Source/s used to answer section II.C.:

STATE CAREER INFORMATION SYSTEM (CIS)
OTHER CAREER INFORMATION SYSTEMS (CIS)
FILL IN OTHER SOURCES:

II.D. OUT OF STATE SCHOOLS THAT OFFER TRAINING FOR THIS OCCUPATION:

What schools outside your state offer training for this job?

1. _____
2. _____
3. _____

Source/s used to answer section II.D.:

STATE CAREER INFORMATION SYSTEM (CIS)
OTHER CAREER INFORMATION SYSTEMS (CIS)
FILL IN OTHER SOURCES:

PART III - INDUSTRIES & BUSINESSES THAT EMPLOY THIS OCCUPATION

III.A. INDUSTRY EMPLOYMENT AND TRENDS:

1. List FOUR industries that would probably employ this occupation. Use the two digit SIC level.

Industry Name	SIC code
_____	_____
_____	_____
_____	_____
_____	_____

2. Using THE INDUSTRY/EMPLOYMENT OUTLOOK 1984/1990 complete the table below for the FOUR industries identified in 1 above.

SIC CODE	1984 ANNUAL AVG EMPL	1990 ANNUAL CHANGE AVG EMPL	PERCENT IN EMPL	TOTAL PERCENT CHANGE	ANNUAL PERCENT CHANGE

Sources used to answer section III.A.:

STATE INDUSTRY/OCCUPATION EMPLOYMENT OUTLOOK
 OCCUPATIONAL EMPLOYMENT STATISTICS
 STATE OCCUPATIONAL INFORMATION SYSTEM (OIS)
 STANDARD INDUSTRIAL CLASSIFICATION MANUAL (SIC)
 FILL IN OTHER SOURCES:

III.B. INDUSTRIES WITH BEST OPPORTUNITY FOR EMPLOYMENT IN THIS OCCUPATION:

Using the information from the tables above, list the two or three industries that you feel would offer the best opportunities for employment in this occupation.

III.C. LOCAL EMPLOYMENT IN THE INDUSTRIES:

For the county where the inservice is being held, list the Annual Average employment for each industry you listed in Part III.B.

INDUSTRY	COUNTY	AVG EMP
_____	_____	_____
_____	_____	_____
_____	_____	_____

Source/s used to answer section III.A & B.:

STATE EMPLOYMENT WAGES AND CONTRIBUTIONS
 STANDARD INDUSTRIAL CLASSIFICATION MANUAL (SIC)
 FILL IN OTHER SOURCES:

III.D. BUSINESSES TO CONTACT:

For each industry in Part III.C. that shows employment, list a business that could be contacted to find out more about this occupation. If none of the industries show employment in this area, skip Part III.D.1. and complete Part III.D.2.

1. **INDUSTRY NAME:** _____
BUSINESS: _____
NAME: _____
ADDRESS: _____

PHONE: _____
- BUSINESS:** _____
NAME: _____
ADDRESS: _____

PHONE: _____

Source/s used to answer section III.A & B.:

TELEPHONE BOOK
LOCAL JOB SERVICE
CITY DIRECTORY
CHAMBER OF COMMERCE
FILL IN OTHER SOURCES:

2. If there are no businesses employing the occupation in the area what would you advise the client?

PART IV - OUTLOOK FOR THIS OCCUPATION

IV.A. CURRENT EMPLOYMENT IN THIS OCCUPATION:

What is the recent state employment in this occupation?

Date of data _____ Employment _____
(Use most recent data you can find.)

What is the recent U.S. employment in this occupation?

Date of data _____ Employment _____
(Use most recent data you can find.)

Source/s used to answer section IV.A.:

STATE INDUSTRY/OCCUPATION OUTLOOK
STATE CAREER INFORMATION SYSTEM (CIS)
OCCUPATIONAL OUTLOOK HANDBOOK (OOH)
OTHER CAREER INFORMATION SYSTEMS (CIS)

FILL IN OTHER SOURCES:

IV.B. PROJECTED EMPLOYMENT

What is the projected state employment for this occupation to 2000?

2000 Employment _____

What is the projected number of average annual openings in the state for this job to 2000?

Average Annual Openings _____

Source/s used to answer section IV.B.:

**STATE INDUSTRY/OCCUPATION OUTLOOK
STATE CAREER INFORMATION SYSTEM (CIS)
OCCUPATIONAL OUTLOOK HANDBOOK (OOH)
OTHER CAREER INFORMATION SYSTEMS (CIS)
FILL IN OTHER SOURCES:**

IV.C. CURRENT EVENTS AFFECTING THE OUTLOOK FOR THIS OCCUPATION:

What current factors are affecting the outlook for this occupation in the state? in the nation?

Source/s used to answer section IV.C.:

**NEWSPAPERS
OTHER MEDIA
JOB SERVICE OFFICES
LOCAL CAREER PROFESSIONALS
CHAMBER OF COMMERCE
FILL IN OTHER SOURCES:**

IV.D. SUPPLY OF WORKERS FOR THIS OCCUPATION:

Occupational supply is information on workers who have completed training or are job ready in this occupation.

Occupations are grouped into "clusters" based on their relationships to each other. For example: File clerk and typist would be in the "clerical office practice" cluster, number OF2.

Write the name of the occupation you are researching: _____

What is the supply for this occupation? _____

What source(s) provided training for this occupation? _____

What is the name and number of the cluster that includes this occupation?

NAME _____ NUMBER _____

What is the cluster total or all related supply total for the cluster including this occupation? _____

During the past year how many people have applied for work in this occupation through the Job Service? _____

Source/s used to answer section IV.D.:

SOICC
STATE SUPPLY DEMAND REPORT
STATE OCCUPATIONAL INFORMATION SYSTEM (OIS)
FILL IN OTHER SOURCES:

Occupational Information Resource Matrix

Categories of Information

State Information Sources	Occupation Activities	Occupational Characteristics	Preparation for Work	Advancement	Related Occupations	Industry	Employment Outlook	Earnings	Places of Employment	Resource People
County Business Patterns						x	x			
State Employment and Labor Force						x	x			
Statistics in Brief						x	x			
Industry/Occupation Projections						x	x			
Career Information System	x	x	x	x	x		x	x	x	
State Apprenticable Occupations	x	x	x	x			x	x		
Occup. Employment Statistics Publications						x	x		x	
State Occup. Information System (OIS)					x		x	x	x	
State Supply/Demand Report					x		x	x	x	
State Fringe Benefit & Wage Information								x		
Economic Conditions in the State						x		x		

Resource People: (enter names of presenters here)

1. 3.5

3.

5.

3.6

2.

4.

6.

Occupational Information Resource Matrix

Categories of information

Information Sources	Occupation Activities	Occupational Characteristics	Preparation for Work	Advancement	Related Occupations	Industry	Employment Outlook	Earnings	Places of Employment	Resource People
<i>Dictionary of Occupational Titles (DOT)</i>	x				x	x				
<i>Standard Industrial Classification (SIC)</i>						x				
<i>Standard Occupational Classification (SOC)</i>	x				x					
<i>Occupational Outlook Handbook (OOH)</i>	x	x	x	x	x	x	x	x	x	
<i>Occupational Outlook Quarterly (OOQ)</i>	x	x	x	x	x	x	x	x		
<i>Guide for Occupational Exploration (GOE)</i>			x		x					
<i>Exploring Careers</i>	x	x								
<i>U.S. Industrial Outlook</i>						x	x			
<i>Occupational Projections and Training Data</i>			x				x			
<i>Selected Characteristics of Occupations-DOT</i>		x								
<i>Career Information System</i>	x	x	x	x	x	x	x	x	x	

Resource People: (enter names of presenters here)

- | | | |
|----|----|----|
| 1. | 3. | 5. |
| 2. | 4. | 6. |

327

328

Case Study - Bernie Maas
(Developed by the Maine SOICC)

My name is Bernie Maas. Since leaving the military a year ago, I have been living in _____ . I married my high school sweetheart, and now we have two little girls. I never was afraid of anything when I was in the Army, but I am now. I'm afraid that I won't be able to make enough money to provide for my family.

I never liked school much. Oh, I loved playing sports. I was the second best swimmer on the school team. I even taught a swim class for young kids in the summer. I really liked Automotive Shop, too. I spent a lot of time tinkering with cars. But I just couldn't seem to pass English. I dropped out of school in December of my senior year and joined the Army. After basic training I was assigned to the motor pool. I learned to drive and fix just about everything the Army had on wheels or tracks. Eventually, I became the personal driver for the CO (Commanding Officer), because he knew I could fix the jeep if it broke down out in the boonies.

When I got out of the Service, I got a truck driving job for a construction company. I ran the dozer sometimes, too. The company helped me convert my military operator licenses to civilian licenses. But work got real slack so they had to lay me off. I've tried working with other construction companies, and I have worked on specific jobs, but they haven't paid enough for a family to live on.

I've thought about getting a different job, or moving to an area that might have more jobs. But everywhere I look either the employer wants a high school graduate or the job doesn't pay enough. I just don't know what to do.

Reprinted with permission from:

Kenneth Bridges, Senior Economic Analyst
Division of Economic Analysis and Research
Bureau of Employment Security

and

Maine SOICC
State House Station 71
Augusta, ME 04333

Applications-109

1. **Where would you begin with Bernie? List the first three steps you would take:**
 - a.
 - b.
 - c.
2. **What are three job titles that match Bernie's skills or interests?**
 - a.
 - b.
 - c.
3. **What is the outlook for these occupations in your state?**
 - a.
 - b.
 - c.
4. **How much can Bernie earn in each of these occupations?**
 - a.
 - b.
 - c.
5. **How many people are employed in each of these occupations in one of your local counties?**
 - a.
 - b.
 - c.
6. **In what counties are the highest numbers employed for each of these occupations?**
 - a.
 - b.
 - c.
7. **What are the overall economic conditions like in the county you selected compared to the state in terms of employment, and the unemployment rate?**
8. **Who can Bernie contact for more labor market information about the local and statewide labor market area?**

Trainer's Answer Sheet - Bernie Maas

(Answers are given for the state of Maine. Determine answers for your particular state and enter the data on your answer sheet. Provide state, local and national resources that contain answers to these questions.)

1. Where would you begin with Bernie?

*Review interests, work history
Get GED or Equivalency Diploma
Explore options*

2. What are three job titles that match Bernie's skills or interests?

- a. *Automotive Mechanic*
- b. *Delivery/Route Worker*
- c. *Tractor-Trailer-Truck Driver*
- d. *Heavy Equipment Operator*

3. What is the outlook for these occupations in your state?

(Resources used - Occupational Outlook to 1995, Occupational Matrices)

- a. *Faster than average, annual openings 292, Growth 24.5%*
- b. *About as fast, annual openings 130, Growth 15.1%*
- c. *About as fast, annual openings 294, Growth 16.2%*
- d. *About as fast, annual openings 103, Growth 18.4%*

4. How much can Bernie earn in each of these occupations? (Reported as hourly wage)

	Occ. Matrices	Manf. Wage Surv.	Nmfg. Wage Surv.
a.	\$8.47	\$8.57	\$8.46-8.97-9.97
b.	7.47		6.58
c.	8.94	6.90-8.40	7.17-8.54
d.	7.66	7.66	

5. How many people are employed in each of these occupations in one of your local counties?

	County 1	County 2	County 3
a.	131	131	51008
b.	94	94	55A87
c.	65	65 All Truck 271	54003 54000
d.		80	54B52

6. In what counties are the highest numbers employed for each of these occupations?

- a. *Cumb. 1352 Pen. 848 Ken. 622*
- b. *Cumb. 1687 Pen. 672 Ken. 533*
- c. *Cumb. 661 Pen. 430 Aroos. 238*
- d. *Cumb. 551 Pen. 246 York 190*

Applications-111

What are overall economic conditions like in the county you selected compared to the state in terms of employment, unemployment, and the unemployment rate?

Resource - Labor Market Digest and local information resources

Who can Bernie contact for more labor market information about the local and statewide Labor Market Area?

LMI Directory, CIDS and local information resources

Case Study Activity--Thomas Lee

Your client, Thomas Lee, has been referred to you by a social service agency. Tom is a minority male, age 26, who is out of work. Tom dropped out of school in the tenth grade; he claims that he could not read well and no one seemed to care about kids like him. Tom has done odd jobs since that time. As you question Tom about his work history, the information that you get is sketchy and he appears reluctant to offer details. He tells you that he has worked in service stations, restaurants and work for a landscaping service. The job he liked the best was laying sod, because he likes doing physical work out-of-doors. Despite his many jobs, he can provide only one employment reference from three years ago, when he worked in a fast-food restaurant. Upon questioning, Tom admits to personality conflicts with supervisors on several jobs. Tom claims that the conflicts were largely due to his drug and alcohol abuse on those occasions. Tom has been in trouble with the law and has recently completed a court ordered drug and alcohol rehabilitation program. His social worker is encouraging Tom to enroll in a community sponsored reading program. As you try to get to know Tom, he appears to be withdrawn and angry. When you question him about his apparent hostility toward you, he says that he does not trust persons from your culture.

Tom has multiple barriers to employment and he is working with personnel from several agencies to help him address his problems. Your responsibility as a career development facilitator is to help Tom explore his career options.

1. As a career development facilitator, where would you begin with Tom?
2. With what other individuals or agencies would you need to work to help Tom become ready for employment?
3. Using the following resources: CIDS, OOH, SOC, DOT, and GOE, see if you can identify three job titles that might be of interest to Tom.
 - a.
 - b.
 - c.
4. How much can Tom earn in each of these occupations?
 - a.
 - b.
 - c.
5. Will these earnings be sufficient to cover his basic needs and allow him to live independently?
6. How many people are employed in each of these occupations in your county?

7. **In what counties are the highest numbers employed in each of these occupations?**

8. **What are the overall economic conditions like in your county compared to the rest of the state in terms of employment and the unemployment rate?**

9. **Who can Tom contact for more labor market information about the local and statewide Labor Market Area?**

Activity Evaluation

(Developed by the Montana SOICC)

Name of Activity:

We would appreciate your thoughts on the activity you have just completed. Please answer the questions below. More importantly, use the rest of the sheet for your comments, positive and negative. We are constantly searching for ways to improve. Tell us what you think.

Although optional, your name and phone number would be appreciated. Then we can contact you if we need clarification on your ideas. We promise not to send anyone with a violin case to see you.

NAME _____ PHONE _____

- 1. Which part of the activity did you like the best?**
- 2. Which part did you like the least?**
- 3. Did you have enough time to complete the activity?**
- 4. Were the instructions clear?**
- 5. Were the trainers available when you needed them?**
- 6. Did you have sufficient resource materials? If no, please explain.**
- 7. Can you use this activity in your work?**
- 8. On a scale of one to ten, how would you rate this activity? (Ten is the highest rating.)**
- 9. Comments and suggestions for improvement:**

Applications-115

Appendices

- Appendix A: NCDA Career Counseling Competencies**
- Appendix B: SOICC Offices**
- Appendix C: NOICC Staff**
- Appendix D: Directory of State-Based Career Information Delivery Systems**
- Appendix E: National Career Development Guidelines**
- Appendix F: State Guidance Supervisors**
- Appendix G: Guidelines for the Use of Computer-Based Career Information and Guidance Systems**
- Appendix H: Career Software Review Guidelines**
- Appendix I: Guidelines for the Preparation and Evaluation of Career and Occupational Information Literature**
- Appendix J: Government Printing Offices**
- Appendix K: Sources of State and Local Job Outlook**
- Appendix L: Annotated List of Selected Printed References**
- Appendix M: Overview of Equal Opportunity Legislation**
- Appendix N: Labor Market Information Directors**
- Appendix O: State Data Center Program Coordinating Organizations**
- Appendix P: Acronyms**

Appendix A

NCDA Career Counseling Competencies



Appendix A
Introduction to Competency Statements

The following statements were considered as the attached standards were being constructed:

1. **Definition of career counseling.** Career counseling consists of vocational counseling and those activities performed or coordinated by individuals who have the professional credentials to work with and counsel other individuals or groups of individuals about occupations, careers, life/career roles and responsibilities, career decision making, career planning, leisure planning, career pathing, and other career development activities, e.g., resume preparation, interviewing and job search techniques, and issues or conflicts associated with the preceding items. (This definition is a slight revision of the definition found on page 3 of NCDA's **The Professional Practice of Career Counseling and Consultation: A Resource Document**, and it includes additional revisions, noted by brackets, by a board member.)
2. The statements provide guidance for those professionals at or above the master's degree level. Specifically, they are for those counseling individuals who are completing or have completed at least a master's in counseling and desire a career counseling concentration or advanced certificate in career counseling.
3. The statements are revised with regard to the following specialties (taken from NCDA's **The Professional Practice of Career Counseling and Consultation: A Resource Document**): Career Counselors (Private and Public Settings); Human Resources/Career Development Specialist (Organizational Setting); and Job Placement Specialists (Public Setting).
4. The statements do not reflect competency guidelines for the following specialties (because professionals in these areas should not be counseling): Career/Employment Search consultant (Private Setting); Employment Agent (Private Setting); Cooperative Education Instructors (Educational Setting). These specialties, along with NEW job titles such as Career Aides, Career Librarian, or Career Resource Specialist (in industry), Career Librarian, or Career Resource Specialist (in industry), should have a separate set of competency statements that would include some of the career counseling statements, but also include a stronger emphasis on the administrative, planning, guidance, and resource aspects of career development.

With the above information in mind, Larry Burlew, Ed.D., selected 3 career counseling professionals to work on a subcommittee to the Standards Committee to revise the NCDA competency statements. The subcommittee members included: Dr. James Benshoff, a university professor who teaches career counseling; Dr. Linda Gast, a practitioner who directs a university career counseling center; and Dr. Janet Treichel, a practitioner working for the Federal government who helped construct the NOICC standards for career counseling. Once this group was formed, the following procedures were followed:

- A. Each member was requested to be part of the subcommittee and told what their responsibilities would be.

- B. The following competency statements/standards were forwarded to each member: NCDA, NBCC, NOICC, CAS Standards and Guidelines for Services/Development Programs, and NECA.
- C. Members were asked to review the career counseling literature and suggest competency categories that were not presently part of the NCDA standards. Although other categories were suggested, the following were new categories mutually agreed upon: career development theory, special populations, supervision, ethical/legal issues, and research/evaluation.
- D. Each member was then assigned 2-3 competency categories with the following goals in mind: 1) review all current standards and revise NCDA's to reflect the most complete requirements in each category and 2) review the current career counseling literature and add new terminology and theory as necessary.
- E. The subcommittee met in mid-May of 1989 and carefully reviewed/critiqued the work of each member. Final statements were agreed upon.
- F. Dr. Burlew had the statements rewritten and forwarded to each subcommittee member for final approval.
- G. Once approved, the statements were forwarded to Dr. Edwin Herr, Chair of the NCDA Standards Committee.

The committee still feels that a clear introduction statement related to professional issues (e.g., training and practicums) must be included in a final document.

In the attached document, the competency statements have not been placed in any particular order. However, the original six competency areas (i.e., Individual and Group Counseling Skills, Information /Resources, Individual and Group Assessment, Program Management and Implementation, Consultation) are grouped together and first; the new categories (i.e., Career Development Theory, Special Populations, Ethical/Legal Issues, Research/Evaluation) follow.

Introduction to Career Counseling Competency Statements

The competency statements are for those professionals interested and trained in the field of career counseling. For the purpose of these statements, career counseling is defined as counseling individuals or groups of individuals about occupations, careers, life/career roles and responsibilities, career decision making, career planning, leisure planning, career pathing, and other career development activities (e.g., resume preparation, interviewing and job search techniques), together with the issues or conflicts that individuals confront regarding their careers.

These statements are a revised version of the "Vocational/Career Counseling Competencies" of 1982. They were revised by counselor educators and career counseling practitioners, then reviewed and approved by the Board of Directors of the National Career Development Association (NCDA). Career development competency statements developed by other groups, such as the National Occupational Information Coordinating Committee (NOICC), the National Board for Certified Counselors (NBCC), the Council for the Advancement of Standards for Student Services/Development Programs (CAS), and the Council for Accreditation of Counseling and

Related Educational Programs (CACREP), were reviewed prior to the NCDA competency statements being revised. The NCDA Standards Committee responsible for this review and revision was led by Dr. Edwin Herr, Dr. James Sampson and Dr. Larry Burlew. Other committee members were Dr. Linda Gast, Dr. James Benshoff, and Dr. Janet Treichel.

The "Career Counseling Competencies" are intended to represent minimum competencies for those professionals at or above the master's degree level of education. They can also serve as guidelines for any professional or paraprofessional working in a career development setting. However, for those practitioners without a master's degree in counseling, additional competency statements may be required (e.g., a career librarian may need competency in cataloging); in addition, basic educational requirements for other competencies (e.g., counseling-related statements) may be lacking.

Purpose

Professional competency statements provide guidance for the minimum competencies necessary to effectively perform a particular occupation or job within a particular occupation. Professional career counselors (a master's degree or higher), or persons in career development positions, must demonstrate the knowledge and skills for a specialty in career counseling that the generalist counselor might not possess. These skills and knowledge are represented by designated competency areas which have been developed by professional career counselors and counselor educators. The Career Counseling Competency Statements can serve as a guide for career counseling training programs or as a checklist for persons wanting to acquire or to enhance their skills in career counseling.

Minimum Competencies

In order to work as a professional engaged in Career Counseling, the individual must demonstrate minimum competencies in ten designated areas. These ten areas are: Career Development Theory, Individual and Group Counseling Skills, Individual/Group Assessment, Information/Resources, Program Management and Implementation, Consultation, Special Populations, Supervision, Ethical/Legal Issues, Research/Evaluation.

Career Development Theory: Theory base and knowledge considered essential for professionals engaging in career counseling and development.

Individual and Group Counseling Skills: Individual and group counseling competencies considered essential to effective career counseling.

Individual/Group Assessment: Individual/group assessment skills considered essential for professionals engaging in career counseling.

Information/Resources: Information/resource base and knowledge essential for professionals engaging in career counseling.

Program Management and Implementation: Skills necessary to develop, plan, implement, and manage comprehensive career development programs in a variety of settings.

Consultation: Knowledge and skills considered essential in enabling individuals and organizations to effectively impact upon the career counseling and development process.

Special Populations: Knowledge and skill: considered essential in providing career counseling and development processes to special populations.

Supervision: Knowledge and skills considered essential in critically evaluating counselor performances, maintaining and improving professional skills, and seeking assistance from others when needed in career counseling.

Ethical/Legal Issues: Information base and knowledge essential for the ethical and legal practice of career counseling.

Research/Evaluation: Knowledge and skills considered essential in understanding and conducting research and evaluation in career counseling and development.

Professional Preparation

The competency statements were developed to serve as guidelines for persons interested in career development occupations. They are intended for persons training at the master's level or higher with a specialty in career counseling. However, this does not prevent other types of career development professionals from using them as guidelines for their own training. The competency statements provide counselor educators, supervisors, and other interested groups with guidelines for the minimum training required for counselors interested in a career counseling specialty.

The statements might also serve as guidelines for those professional counselors who seek in-service training to qualify as career counselors.

Ethical Responsibilities

Career development professionals must only perform the job for which they "possess or have access to the necessary skills and resources for giving the kind of help that is needed" (see AACD Ethical Standards). If a professional does not have the appropriate training or resources for the type of career problem presented, then an appropriate referral must be made. No person should attempt to use skills within these competency statements for which he/she has not been trained. For additional ethical guidelines, refer to NCDA Ethical Standards for career counselors.

Career Counseling Competencies

Individual and Group Counseling Skills

Individual and group counseling competencies considered essential to effective career counseling.

Demonstration of:

1. Ability to establish and maintain productive personal relationships with individuals.
2. Ability to establish and maintain a productive group climate.
3. Ability to collaborate with clients in identifying personal goals.
4. Ability to identify and select techniques appropriate to client or group goals and client needs, psychological states, and developmental tasks.
5. Ability to plan, implement and evaluate counseling techniques designed to assist clients to achieve the following:
 - a. Identify and understand clients' personal characteristics related to career.
 - b. Identify and understand social contextual conditions affecting clients' careers.
 - c. Identify and understand familial, subcultural and cultural structures and functions as they are related to clients' careers.

- d. Identify and understand clients' career decision making processes.
 - e. Identify and understand clients' attitudes toward work and workers.
 - f. Identify and understand clients' biases toward work and workers based on gender, race and cultural stereotypes.
6. Ability to challenge and encourage clients to take action to prepare for and initiate role transitions by:
- a. Locating sources of relevant information and experience.
 - b. Obtaining and interpreting information and experiences.
 - c. Acquiring skills needed to make role transitions.
7. Ability to support and challenge clients to examine the balance of work, leisure, family and community roles in their careers.

Individual/Group Assessment

Individuals/Group assessment skills considered essential for professionals engaging in career counseling.

Demonstration of:

1. Knowledge about instruments and techniques to assess personal characteristics (such as aptitude, achievement, interests, values and other personality traits).
2. Knowledge about instruments and techniques to assess leisure interests, learning style, life roles, self-concept, career maturity, vocational identity, career indecision, work environment preference (e.g., work satisfaction), and other related life style/development issues.
3. Knowledge about instruments and techniques to assess conditions of the work environment (such as tasks, expectations, norms and qualities of the physical and social settings).
4. Ability to evaluate and select instruments appropriate to the client's physical capacities, psychological states, social roles and cultural background.
5. Knowledge about variables such as ethnicity, gender culture, learning style, personal development, and physical/mental disability which affect the assessment process.
6. Knowledge of and ability to effectively and appropriately use computer-assisted assessment measures and techniques.
7. Ability to identify assessment (procedures) appropriate for specified situations and populations.
8. Ability to evaluate assessment (procedures) in terms of their validity, reliability, and relationships to race, gender, age, and ethnicity.
9. Ability to select assessment techniques appropriate for group administration and those appropriate for individual administration.
10. Ability to administer, score and report findings from career assessment instruments.

11. Ability to interpret data from assessment instruments and present the results to client and to others designated by client.
12. Ability to assist client and others designated by the client to interpret data from assessment instruments.
13. Ability to write a thorough and substantiated report of assessment results.

Program Management and Implementation

Management/Implementation skills necessary to develop, plan, implement, and manage comprehensive career development programs in a variety of settings.

Demonstration of:

1. Knowledge of designs that can be used in the organization of career development programs.
2. Knowledge of needs assessment and evaluation techniques and practices.
3. Knowledge of organizational theories, including diagnosis, behavior, planning, organizational communication, and management, useful in implementing and administering career development programs.
4. Knowledge of leadership theories, evaluation and feedback approaches, organizational change, decision-making and conflict resolution approaches.
5. Knowledge of professional standards for accreditation and program development purposes.
6. Knowledge of personal and environmental barriers affecting the implementation of career development programs.
7. Knowledge of using computers for forecasting, budgeting, planning, communicating, and policy analysis and resource allocation.
8. Knowledge of educational trends and state and federal legislation that may influence the development and implementation of career development programs.
9. Ability to implement individual and group programs in career development for specified populations.
10. Ability to train and/or inform teachers and others about the use and application of computer-based systems for career information.
11. Ability to plan, organize, and manage a comprehensive career resource center.
12. Ability to work as a lead person in developing and implementing career development programs involving collaborative arrangements with teachers and other professionals or paraprofessionals.
13. Ability to prepare budgets and time lines for career development programs.
14. Ability to identify staff competencies needed to remain current in the field of career counseling and development.
15. Ability to identify, develop, and use record keeping methods.

16. Ability to implement a public relations effort in behalf of career development activities and services.

Consultation

Knowledge and skills considered essential in relating to individuals and organizations that impact the career counseling and development process.

Demonstration of:

1. Knowledge of and ability to use consultation theories, strategies, and models.
2. Ability to establish and maintain a productive consultation relationship with people in roles who can influence the client's career such as the following: parents, teachers, employers, business and professional groups, community groups, and the general public.
3. Ability to convey career counseling goals and achievements to business and professional groups, employers, community groups, the general public, and key personnel in positions of authority, such as legislators, executives, and others.
4. Ability to provide data on the cost effectiveness of career counseling and development intervention.

Information/Resources

Information/resource base and knowledge essential for professionals engaging in career counseling.

Demonstration of:

1. Knowledge of employment information and career planning resources for client use.
2. Knowledge of education, training, and employment trends; labor market information and resources that provide information about job tasks, functions, salaries, requirements and future outlooks related to broad occupational fields and individual occupations.
3. Knowledge of the changing roles of women and men and the implications for work, education, family and leisure.
4. Knowledge of and the ability to use computer-based career information delivery systems (CIDS) and computer-assisted career guidance systems (CACGS) to store, retrieve and disseminate career and occupational information.
5. Knowledge of community/professional resources to assist clients in career/life planning, including job search.

Career Development Theory

Theory base and knowledge considered essential for professionals engaging in career counseling and development.

Demonstration of:

1. Knowledge about counseling theories and associated techniques.
2. Knowledge about theories and models of careers and career development.

3. **Knowledge about differences in knowledge and values about work and productive roles associated with gender, age, ethnic and race groups, cultures and capacities.**
4. **Knowledge about career counseling theoretical models, associated counseling and information techniques, and sources to learn more about them.**
5. **Knowledge about developmental issues individuals address throughout the lifespan.**
6. **Knowledge of the role relationships to facilitate personal, family, and career development.**
7. **Knowledge of information, techniques, and models related to computer-assisted career guidance systems and career information delivery systems and career counseling.**
8. **Knowledge of the information, techniques, and models related to career planning and placement.**
9. **Knowledge of career counseling theories and models that apply specifically to women or are inclusive of variables that are important to women's career development.**

Special Populations

Knowledge and skill, considered essential in relating to special populations that impact career counseling and development processes.

Demonstration of:

1. **Knowledge of the intrapersonal dynamics of special population clients while understanding resistances and defenses that may occur naturally during the counseling process.**
2. **Sensitivity toward the developmental issues and needs unique to minority populations.**
3. **Sensitivity toward and knowledge of various disabling conditions and necessary assistance and requirements.**
4. **Ability to define the structure of the career counseling process to accommodate individual cultural frames of reference and ethnic and racial issues.**
5. **Ability to distinguish between the special needs of the culturally different, immigrants, the disabled, the elderly, persons with the AIDS virus, and minority populations.**
6. **Ability to find appropriate methods or resources to communicate with limited-English proficient individuals.**
7. **Ability to identify alternative approaches to career planning needs for individuals with specific needs.**
8. **Ability to identify community resources and establish linkages to assist clients with specific needs.**

9. **Ability to assist other staff members, professionals and community members in understanding the unique needs/characteristics of special populations with regard to career exploration, employment expectations and economic/social issues.**
10. **Ability to advocate for the career development and employment of special populations.**
11. **Ability to deliver and design career development programs and materials to hard-to-reach special populations.**

Supervision

Knowledge and skills considered essential in critically evaluating counselor performance, maintaining and improving professional skills, and seeking assistance from others when needed.

Demonstration of:

1. **Knowledge of supervision models and theories.**
2. **Ability to provide effective supervision to career counselors at different levels of experience.**
3. **Ability to utilize supervision on a regular basis to maintain and improve counselor skills.**
4. **Ability to consult with supervisors and colleagues regarding client and counseling issues and issues related to one's own professional development as a career counselor.**
5. **Ability to recognize own limitations as a career counselor and to seek supervision or refer clients when appropriate.**

Ethical/Legal Issues

Information base and knowledge essential for the ethical and legal practice of career counseling.

Demonstration of:

1. **Knowledge about the code of ethical standards of the American Association for Counseling and Development, the National Career Development Association, NBCC, CACREP, and other relevant professional organizations.**
2. **Knowledge about current ethical and legal issues which affect the practice of career counseling.**
3. **Knowledge about ethical issues related to career counseling with women, cultural minorities, immigrants, the disabled, the elderly, and persons with the AIDS virus.**
4. **Knowledge about current ethical/legal issues with regard to the use of computer-assisted career guidance.**
5. **Ability to apply ethical standards to career counseling and consulting situations, issues, and practices.**
6. **Ability to recognize situations involving interpretation of ethical standards and to consult with supervisors and colleagues to determine an appropriate and ethical course of action.**

7. **Knowledge of state and federal statutes relating to client confidentiality.**

Research/Evaluation

Knowledge and skills considered essential in understanding and conducting research and evaluation in career counseling and development.

Demonstration of:

1. **Knowledge about and ability to apply basic statistics and statistical procedures appropriate to research related to career counseling and development.**
2. **Knowledge about and ability to use types of research and research designs appropriate to career counseling and development research.**
3. **Knowledge about and ability to convey major research findings related to career counseling and development processes and effectiveness.**
4. **Knowledge about and ability to apply principles of proposal writing.**
5. **Knowledge about major evaluation models and methods.**
6. **Ability to design, conduct, and use the results of evaluation programs.**
7. **Ability to design evaluation programs which take into account the needs of special populations, minorities, the elderly, persons with the AIDS virus, and women.**

Appendix B

SOICC Offices



SOICC ADDRESSES

Dr. Mary Louise Simms, Director
Alabama OICC
Bell Building, Suite 400
207 Montgomery Street
Montgomery, AL 36130
TEL: 205/242-2990

Ms. Brynn Keith, Executive Director
Alaska Department of Labor
Research and Analysis Section
P. O. Box 25501
Juneau, AK 99802
TEL: 907/465-4518

Mr. Patolo Mageo, Program Director
American Samoa State OICC
Office of Manpower Resources
American Samoa Government
Pago Pago, AS 96799
TEL: 684/633-4485

Mr. Stan Butterworth, Executive Director
Arizona State OICC
P. O. Box 6123, Site Code 897J
1789 W. Jefferson St., 1st Floor N.
Phoenix, AZ 85005
TEL: 602/542-3680
FAX: 602/542-6474

Mr. C. Coy Cozart, Executive Director
Arkansas OICC
Arkansas Employment Security Division
Employment and Training Services
P. O. Box 2981
Little Rock, AR 72203
TEL: 501/682-3159
FAX: 501/682-3713

Mr. Sigurd Brivkains, Executive Director
California OICC
1116 - 9th Street, Lower Level
Sacramento, CA 94244-2220
TEL: 916/323-6544

Mr. James L. Harris, Director
Colorado OICC
State Board Community College
1391 Speer Boulevard, Suite 600
Denver, CO 80204-2554
TEL: 303/866-4488

Dr. Prudence Brown Holton
Executive Director
Connecticut OICC
Connecticut Department of Education
25 Industrial Park Road
Middletown, CT 06457
TEL: 203/638-4042

Mr. James K. McFadden, Executive Director
Office of Occupational and LMI/DOL
University Office Plaza
P. O. Box 9029
Newark, DE 19714-9029
TEL: 302/368-6963
FAX: 302/368-6748

Ms. Etta Williams, Executive Director
District of Columbia OICC
Department of Employment Services
500 C Street, NW, Room 215
Washington, DC 20001
TEL: 202/639-1090
FAX: 202/639-1765

Mr. Garry L. Breedlove, Manager
Bureau of LMI/DOL and ES
Suite 200, Hartman Building
2012 Capitol Circle, SE
Tallahassee, FL 32399-0673
TEL: 904/488-7397
FAX: 904/488-2558

Mr. Clifford L. Granger, Executive Director
Georgia OICC/Department of Labor
148 International Boulevard-Sussex Place
Atlanta, GA 30303
TEL: 404/656-9639
FAX: 404/651-9568

Mr. Jose S. Mantanona, Executive Director
Guam OICC
Human Resource Development Agency
Jay Ease Building, 3rd Floor
P. O. Box 2817
Agana, GU 96910
TEL: 671/646-9341 thru 9344

Mr. Patrick A. Stanley, Executive Director
Hawaii State OICC
830 Punchbowl Street, Room 315
Honolulu, HI 96813
TEL: 808/586-8750
FAX: 808/586-9099

Mr. Charles R. Mollerup, Director
Idaho OICC
Len B. Jordan Building, Room 301
650 West State Street
Boise, ID 83720
TEL: 208/334-3705
fax: 208/334-2365

Mr. Jan Staggs, Executive Director
Illinois OICC
217 East Monroe, Suite 203
Springfield, IL 62706
TEL: 217/785-0789
FAX: 217/785-6184

Ms. Linda Piper, Executive Director
Indiana OICC
309 W. Washington St., Room 309
Indianapolis, IN 46204
TEL: 317/232-8528
FAX: 317/232-1815

Penelope Shenk, Acting Executive Director
Iowa OICC
Iowa Department of Economic Development
200 East Grand Avenue
Des Moines, IA 50309
TEL: 515/242-4890
FAX: 515/242-4859

Mr. Randall Williams, Director
Kansas OICC
401 Topeka Avenue
Topeka, KS 66603
TEL: 913/296-2387
FAX: 913/296-2119

Mr. Don Sullivan, Information Liaison
Kentucky OICC
275 E. Main Street - 1 East
Frankfort, KY 40621-0001
TEL: 502/564-4258 or 5331

Mr. George Glass, Coordinator
Louisiana OICC
P. O. Box 94094
Baton Rouge, LA 70804-9094
TEL: 504/342-5149
FAX: 504/342-5115

Ms. Susan Brown, Executive Director
Maine OICC
State House Station 71
Augusta, ME 04333
TEL: 207/289-2331

Ms. Jasmin M. Duckett, Coordinator
Maryland SOICC
State Department of Employment & Training
1100 N. Eutaw Street, Room 600
Baltimore, MD 21201
TEL: 301/333-5478
FAX: 301/333-5304

Mr. Robert Vinson, Director
Massachusetts OICC
MA Division of Employment Security
C.F. Hurley Building, 2nd Floor
Government Center
Boston, MA 02114
TEL: 617/727-6718
FAX: 617/727-8014

Mr. Robert Sherer, Executive Coordinator
Michigan OICC
Victor Office Center, Third Floor, Box 30015
201 N. Washington Square
Lansing, MI 48909
TEL: 517/373-0363
FAX: 517/335-5822

Mr. John Cosgrove, Director
Minnesota OICC
Department of Jobs & Training
390 N. Robert Street
St. Paul, MN 55101
TEL: 612/296-2072
FAX: 612/297-5820

Ms. Liz Barnett, Acting Executive Director
Dept. of Economic & Community Dev.
SOICC Office
301 West Pearl Street
Jackson, MS 39203
TEL: 601/949-2002
FAX: 601/359-3605

Ms. Kay Raithel, Director
Missouri OICC
421 E. Dunklin Street
Jefferson City, MO 65101
TEL: 314/751-3800
FAX: 314/751-7973

Mr. Robert N. Arnold, Program Manager
Montana OICC
1327 Lockey Street, 2nd Floor
P. O. Box 1728
Helena, MT 59624
TEL: 406/444-2741
FAX: 406/444-2638

Mr. Phil Baker, Administrator
Nebraska OICC
P. O. Box 94600
State House Station
Lincoln, NE 68509-4600
TEL: 402/471-4845

Ms. Valerie Hopkins, Director
Nevada OICC
1923 N. Carson Street, Suite 211
Carson City, NV 89710
TEL: 702/687-4577
FAX: 702/883-9158

Dr. Victor P. Racicot, Director
New Hampshire State OICC
64B Old Suncook Road
Concord, NH 03301
TEL: 603/228-3349
FAX: 603/228-8557

Mr. Laurence H. Seidel, Staff Director
New Jersey OICC
1008 Labor & Industry Building
CN 056
Trenton, NJ 08625-0056
TEL: 609/292-2682
FAX: 609/292-6692

Mr. Charles Lehman, Director
New Mexico OICC
401 Broadway, NE-Tiwa Building
P. O. Box 1928
Albuquerque, NM 87103
TEL: 505/841-8455

Mr. David Nyhan, Executive Director
New York State OICC/DOL
Research & Statistics Division
State Campus, Building 12 - Room 400
Albany, NY 12240
TEL: 518/457-6182
FAX: 518/457-0620

Ms. Nancy H. MacCormac, Executive Director
North Carolina OICC
1311 St. Mary's Street, Suite 250
P. O. Box 27625
Raleigh, NC 27611
TEL: 919/733-6700

Dr. Dan Marrs, Coordinator
North Dakota SOICC
1720 Burnt Boat Drive
P. O. Box 1537
Bismarck, ND 58502-1537
TEL: 701/224-2733

Mr. Konrad Reyes, Executive Director
Northern Mariana Islands OICC
Northern Mariana College
Room 12, Building A
P. O. Box 149
Saipan, CM 96950
TEL: 671/234-7394

Mr. Mark Schaff, Director
Ohio OICC/Division of LMI
Ohio Bureau of Employment Services
1160 Dublin Road, Building A
Columbus, OH 43215
TEL: 614/644-2689
FAX: 614/481-8543

Mr. Curtis Schumaker, Executive Director
Oklahoma OICC
Department of Voc/Tech Education
1500 W. Seventh Avenue
Stillwater, OK 74074
TEL: 405/743-5198
FAX: 405/743-5142

**Ms. Virlena Crosley, Asst. Administrator for
Research & Statistics
Employment Division
875 Union Street, NE
Salem, OR 97311
TEL: 503/378-5490
FAX: 503/373-7515**

**Mr. Fritz J. Fichtner, Jr., Director
Pennsylvania OICC
Pennsylvania Dept. of Labor and Industry
1224 Labor and Industry Building
Harrisburg, PA 17120
TEL: 717/787-8646 or 8647
FAX: 717/772-2168**

**Mr. Jesus Hernandez Rios, Executive Director
Puerto Rico OICC
202 Del Cristo Street
P. O. Box 6212
San Juan, PR 00936-6212
TEL: 809/723-7110
FAX: 809/724-6374**

**Ms. Mildred Nichols, Director
Rhode Island OICC
22 Hayes Street - Room 133
Providence, RI 02908
TEL: 401/272-0830**

**Ms. Carol Kososki, Director
South Carolina OICC
1550 Gadsden Street
P. O. Box 995
Columbia, SC 29202
TEL: 803/737-2733
FAX: 803/737-2642**

**Mr. Phillip George, Director
South Dakota OICC
South Dakota Department of Labor
420 S. Roosevelt Street
P. O. Box 4730
Aberdeen, SD 57402-4730
TEL: 605/622-2314**

**Dr. Chrystal Partridge, Executive Director
Tennessee OICC
11th Floor Volunteer Plaza
500 James Robertson Parkway
Nashville, TN 37219
TEL: 615/741-6451
FAX: 615/741-3203**

**Mr. Richard Froeschle, Director
Texas OICC
Texas Employment Commission Building
12th and Trinity, Room 526T
Austin, TX 78778
TEL: 512/463-2399**

**Ms. Tammy Stewart, Director
Utah OICC
c/o Utah Department of Employment Security
P. O. Box 11249
140 East 300 South
Salt Lake City, UT 84147
TEL: 801/536-7806 or 7861
FAX: 801/533-2466**

**Mr. Tom Douse, Director
Vermont OICC
Green Mountain Drive
P. O. Box 488
Montpelier, VT 05601-0488
TEL: 802/229-0311**

**Ms. Dolores A. Esser, Executive Director
Virginia OICC/VA Employment Commission
703 E. Main Street
P. O. Box 1358
Richmond, VA 23211
TEL: 804/786-7496
FAX: 804/786-7844**

**Mr. Lee W. Eisenhower, Coordinator
Virgin Islands OICC
P. O. Box 3359
St. Thomas, US VI 00801
TEL: 809/776-3700**

**Mr. A. T. Woodhouse, Director
Washington OICC
c/o Employment Security Dept.
P.O. Box 9046
Olympia, WA 98507-9046
TEL: 206/438-4803
FAX: 206/438-3215**

Dr. George McGuire, Executive Director
West Virginia OICC
One Dunbar Plaza, Suite E
Dunbar, WV 25064
TEL: 304/293-5314
FAX: 304/766-7846

Ms. Janet Pugh, Acting Director
The Wisconsin OICC/Division of E&T Policy
201 East Washington Avenue
P. O. Box 7972
Madison, WI 53707
TEL: 608/266-8012
FAX: 608/267-0330

Mr. Michael E. Paris, Executive Director
Wyoming OICC
P. O. Box 2760
100 West Midwest
Casper, WY 82602
TEL: 307/235-3642

Appendix C

NOICC Staff



**THE NOICC STAFF
2100 M Street, NW - Suite 156
Washington, DC 20037
202/653-2123**

**Juliette Lester, Executive Director
653-5665**

**Mary Alston, Management Services Assistant
653-5665**

**James Woods, Coordinator
Occupational Information Systems
653-5665**

***Pamela Frugoli, OIS Specialist
653-5665**

**Harvey Ollis, OIS Specialist
653-5671**

**Rodney Slack, OIS Specialist
653-7680**

**Robert Rittle, IPA
653-7680**

**Billye Armstrong, Secretary
653-5665**

**Walton Webb, Coordinator
State & Interagency Network
653-5671**

**Kay Brawley, IPA
653-7680**

**Burton Carlson, OIS Specialist
653-5671**

**Betty Nicholson, Program Analyst
653-5671**

**Mary Sue Vickers, OIS Specialist
653-7680**

**Mary Williams, Secretary
653-5665**

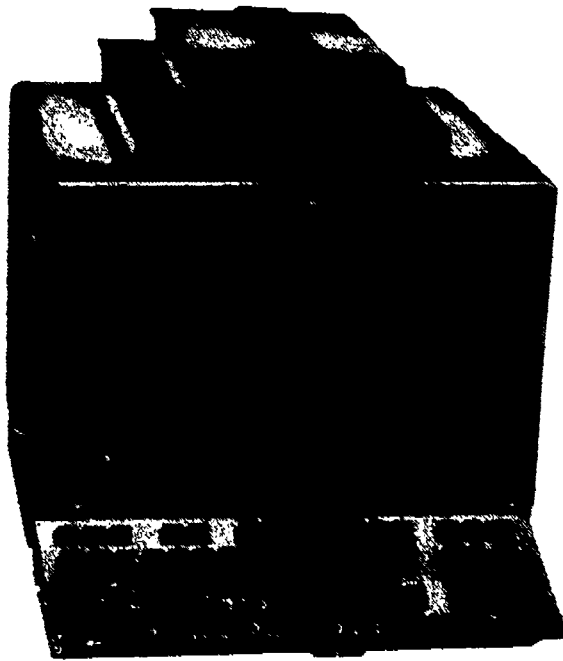
**Mary Margaret Walker, Contractor
(301) 422-0466 ((301) 422-1160)**

***Part-time - Tuesdays through Fridays**

Numbers in () brackets represent fax numbers

Appendix D

Directory of State-Based Career Information Delivery Systems



1991 Directory of State-Based Career Information Delivery Systems

Alabama SOICC

**Bell Building, Suite 400
207 Montgomery Street
Montgomery, AL 36130
TEL: 205/242-2990**

Alaska Career Information System (AKCIS)

**Department of Education
Office of Adult and Vocational Education
(OAVE)
Box F
Juneau, AK 99811
TEL: 907/465-4685
FAX: 907/465-3436**

Occupational Information System of Arizona

**P.O. Box 6123
Site Code 897J
Phoenix, AZ 85005
TEL: 602/542-3680
FAX: 602/542-6474**

**Arkansas Occupational and Educational
Information System**

**P.O. Box 2981
Little Rock, AR 72203
TEL: 501/682-1543
FAX: 501/682-2209**

EUREKA

**The California Career Information System
P.O. Box 647
Richmond, CA 94808-0647
TEL: 415/235-3883**

Colorado Career Information system

**3800 York Street, Unit B
Denver, CO 80205
TEL: 303/837-1000, Ext. 2136
FAX: 303/837-1000, Ext. 2135**

Connecticut Information System (COIS)

**ACES Computer Services
205 Skiff Street
Hamden, CT 06517
TEL: 203/288-1883
FAX: 203/287-8081**

Delaware GIS

**Educational Computing Services Division
Department of Public Instruction
Townsend Building, Federal and Lockerman
Streets
P.O. Box 1402
Dover, DE 19903
TEL: 302/739-3721**

DC Guidance Information System

**DC Occupational Information Coordinating
Committee
500 C Street, NW, Room 215
Washington, DC 20001
TEL: 202/639-1090
FAX: 202/639-1765**

CHOICES

**Bureau of Career Development
Department of Education
Florida Education Center
Tallahassee, FL 32399-0400
TEL: 904/488-0400
FAX: 904/487-3601**

Georgia Career Information System

**Georgia State University
Box 1028, University Plaza
Atlanta, GA 30303-3083
TEL: 404/651-3100**

Career Kokua: The Hawaii Career

**Information Delivery System
615 Piikoi Street, Suite 100
Honolulu, HI 96815
TEL: 808/548-5330
FAX: 808/5866-8633**

Idaho Career Information System

**Room 301, Len B. Jordan Building
650 W State Street
Boise, ID 83720
TEL: 208/334-3705
FAX: 208/334-5315**

**Illinois Career Information Delivery System
HORIZONS**
217 East Monroe Street, Suite 203
Springfield, IL 62706
TEL: 217/785-0789
FAX: 217/785-6184

Career Information System of Iowa
Iowa Department of Education
Grimes State Office Building
Des Moines, IA 50319-0146
TEL: 515/281-5501

Kansas Careers
Room 304, Fairchild Hall
Kansas State University
Manhattan, KS 66506
TEL: 913/532-6540
FAX: 913/532-7304

Kentucky Career Information System (KCIS)
KOICC
275 E Main Street - 2 Center
Frankfort, KY 40621-0001
TEL: 502/564-4258

Louisiana CHOICES
Louisiana State Occupational Information
Coordinating
P.O. Box 94094
Baton Rouge, LA 70804
TEL: 504/342-5151

Maine Career Information Delivery System
Maine Occupational Information
Coordinating Committee
State house Station #71
Augusta, ME 04333
TEL: 207/289-2331

VISIONS
The Maryland Career Information Delivery
System
1700 North Eutaw Street, Room 205
Baltimore, MD 21201
TEL: 301/333-5478

**Michigan Occupational Information System
(MOIS)**
Michigan Department of Education
Vocational-Technical Education Service
P.O. Box 30009
Lansing, MI 48909
TEL: 517/373-0815
FAX: 517/373-2537

Minnesota Career Information System
522 Capitol Square Building
550 Cedar Street
St. Paul, MN 55101
TEL: 612/296-3653
FAX: 612/296-3272

Mississippi CHOICES
P.O. Box 849, Suite 1005
Jackson, MS 39205
TEL: 601/359-3412
FAX: 601/359-2832

Missouri CHOICES
MOICC
421 E Dunklin Street
Jefferson City, MO 65101
TEL: 314/751-3800

Missouri VIEW Program
15875 New Halls Ferry
Florissant, MO 63031
TEL: 314/831-7100

Montana Career Information System
1412 1/2 Eighth Avenue
Helena, MT 59620
TEL: 406/444-1444

Nebraska Career Information System
421 Nebraska Hall
University of Nebraska
Lincoln, NE 68588-0552
TEL: 402/472-2570
FAX: 402/472-5907

Nevada Career Information System
1923 N Carson St, Suite 211
Carson City, NV 89710
TEL: 702/885-4577

New Jersey Career Information Delivery System
Department of Labor Building
CN 056, Room 1008
Trenton, NJ 08625
TEL: 609/292-2626
FAX: 609/292-6692

New Mexico Career Information System
College of Education, Room 111
University of New Mexico
Albuquerque, NM 87131
TEL: 505/277-5137

MetroGuide
The New York City Career Information System
New York City Board of Education
347 Baltic Street
Brooklyn, NY 11201
TEL: 718/935-4155
FAX: 718/935-4178

North Carolina Careers
P.O. Box 27625
1311 St. Mary's Street
Raleigh, NC 27611
TEL: 919/733-6700
FAX: 919/733-2310

North Dakota CHOICES
P.O. Box 1537
Bismarck, ND 58502-1537
TEL: 701/224-2733

Ohio Career Information System
Ohio Departments Building, Room 908
65 S Front Street
Columbus, OH 43266-0308
TEL: 614/644-6771
FAX: 614/644-5702

Oklahoma Career Search
1500 West Seventh Avenue
Stillwater, OK 74074
TEL: 405/377-2000, Ext. 159
FAX: 405/377-9861

Oregon Career Information System
18787 Agats Street
Eugene, OR 97403-5214
TEL: 503/346-3872
FAX: 503/346-5890

Pennsylvania Careers
1224 Labor and Industry Building
Seventh and Forster Streets
Harrisburg, PA 17120
TEL: 717/787-8646
FAX: 717/772-2168

OPCIONES
P.O. Box 366212
San Juan, Puerto Rico
00936-6212
TEL: 809/723-7110

Rhode Island Career Information Delivery System (RICIDS)
22 Hayes Street
Providence, RI 02908
TEL: 401/272-0830

South Carolina Occupational Information System (SCOIS)
1550 Gadsden Street - P.O. Box 995
Columbia, SC 29202
TEL: 803/7377=2733
FAX: 803/737-2642

South Dakota Career Information Delivery System
South Dakota Department of Labor
Labor Market Information Center
Box 4730
Aberdeen, SD 57402-4730
TEL: 605/622-2314
FAX: 605/622-2322

INFOE
(Information Needed For Occupational Entry)
University of Tennessee
438 Claxton Addition
Knoxville, TN 37996-3400
TEL: 615/974-2574
FAX: 615/974-2725

**Texas CIDS
Texas SOICC
TEC Building, Room 526T
15th and Congress Avenue
Austin, TX 78778
TEL: 512/463-2399
FAX: 512/463-2220**

**Wyoming Career Information System
Box 3808, University Station
University of Wyoming
Laramie, WY 82071
TEL: 307/766-6533**

**Utah Career Information Delivery System
Utah SOICC
174 Social Hall Avenue
Salt Lake City, UT 84147
TEL: 801/533-2028
FAX: 801/533-2466**

**Vermont OIS/CIDS
VOICC
P.O. Box 488
Montpelier, VT 05601
TEL: 802/229-0311
FAX: 802/223-0750**

**Virginia VIEW
Virginia State Career Information Delivery
System
Virginia Tech, 205 W Roanoke Street
Blacksburg, VA 24061-0527
TEL: 703/231-7571**

**WOIS/The Career Information System
1415 Harrison Avenue NW, Suite 201
Olympia, WA 98502
TEL: 206/754-6222**

**West Virginia CIDS
One Dunbar Plaza, Suite E
Dunbar, WV 25064
TEL: 304/348-0061
FAX: 304/293-6661**

**Wisconsin Career Information System
University of Wisconsin - Madison
1025 West Johnson Street, Room 964
Madison, WI 53706
TEL: 608/263-2725
FAX: 608/262-9197**

Appendix E

National Career Development Guidelines



Career Development Competencies by Area and Level

Elementary	Middle/Junior High School	High School	Adult
------------	---------------------------	-------------	-------

Self-Knowledge

Knowledge of the importance of self-concept.	Knowledge of the influence of a positive self-concept.	Understanding the influence of a positive self-concept.	Skills to maintain a positive self-concept.
Skills to interact with others.	Skills to interact with others.	Skills to interact positively with others.	Skills to maintain effective behaviors.
Awareness of the importance of growth and change.	Knowledge of the importance of growth and change.	Understanding the impact of growth and development.	Understanding developmental changes and transitions.

Educational and Occupational Exploration

Awareness of the benefits of educational achievement.	Knowledge of the benefits of educational achievement to career opportunities.	Understanding the relationship between educational achievement and career planning.	Skills to enter and participate in education and training.
Awareness of the relationship between work and learning.	Understanding the relationship between work and learning.	Understanding the need for positive attitudes toward work and learning.	Skills to participate in work and life-long learning.
Skills to understand, and use career information.	Skills to locate, understand, and use career information.	Skills to locate, evaluate, and interpret career information.	Skills to locate, evaluate, and interpret career information.
Awareness of the importance of personal responsibility and good work habits.	Knowledge of skills necessary to seek and obtain jobs.	Skills to prepare to seek, obtain, maintain, and change jobs.	Skills to prepare to seek, obtain, maintain, and change jobs.
Awareness of how work relates to the needs and functions of society.	Understanding how work relates to the needs and functions of the economy and society.	Understanding how societal needs and functions influence the nature and structure of work.	Understanding how the needs and functions of society influence the nature and structure of work.

Career Planning

Understanding how to make decisions.	Skills to make decisions.	Skills to make decisions.	Skills to make decisions.
Awareness of the interrelationship of life roles.	Knowledge of the interrelationship of life roles.	Understanding the interrelationship of life roles.	Understanding the impact of work on individual and family life.
Awareness of different occupations and changing male/female roles.	Knowledge of different occupations and changing male/female roles.	Understanding the continuous changes in male/female roles.	Understanding the continuous changes in male/female roles.
Awareness of the career planning process.	Understanding the process of career planning.	Skills in career planning.	Skills to make career transitions.



National Occupational Information Coordinating Committee • Suite 156, 2100 M Street, N.W., Washington, D.C. 20037 • (202) 653-5665

National Career Development Guidelines

Counseling

Knowledge of developmental issues individuals address throughout the life span.
Knowledge of counseling and career development theories and techniques.
Knowledge of decision-making and transition models.
Knowledge of role relationships to facilitate personal, family, and career development.
Knowledge of different cultures to interact effectively with all populations.
Skills to build productive relationships with counselees.
Skills to use appropriate individual and group counseling techniques to assist individuals with career decisions and career development concerns.
Skills to assist individuals in identifying influencing factors in career decision making, such as family, friends, educational opportunities, and finances.
Skills to assist individuals in changing biased attitudes that stereotype others by gender, race, age, and culture.
Skills to assist individuals in understanding the relationship between interpersonal skills and success in the workplace.
Skills to assist individuals in setting goals and identifying strategies for reaching goals.
Skills to assist individuals in continually reassessing their goals, values, interests, and career decisions.
Skills to assist individuals in preparing for multiple roles throughout their lives.

Information

Knowledge of changes taking place in the economy, society, and job market.
Knowledge of education, training, employment trends, labor market, and career resources.
Knowledge of basic concepts related to career counseling such as career development, career progression, and career patterns.
Knowledge of the changing gender roles and how these impact on work, family, and leisure.
Knowledge of employment information and career planning materials.
Knowledge of employment-related requirements such as labor laws, licensing, credentialing, and certification.
Knowledge of state and local referral services or agencies for job, financial, social, and personal service.
Knowledge of federal and state legislation that may influence career development programs.
Skills to use career development resources and techniques designed for specific groups.
Skills to use computer-based career information systems.

Individual and Group Assessment

Knowledge of assessment techniques and measures of skills, abilities, aptitudes, interests, values, and personalities.
Skills to identify assessment resources appropriate for specific situations and populations.
Skills to evaluate assessment resources and techniques related so that their validity, reliability, and relationships to race, gender, age, and ethnicity can be determined.
Skills to administer, interpret, and personalize assessment data in relation to the career development needs of the individual.

National Career Development Guidelines continued

Management and Administration

Knowledge of program designs that can be used in organizing career development programs.
Knowledge of needs assessment techniques and practices.
Knowledge of management concepts, leadership styles, and techniques to implement change.
Skills to assess the effectiveness of career development programs.
Skills to identify staff competencies for effective career development programs.
Skills to prepare proposals, budgets, and timelines for career development programs.
Skills to identify, develop, and use record keeping methods.
Skills to design, conduct, analyze, and report the assessment of individual and program outcomes.

Implementation

Knowledge of program adoption and planned change strategies.
Knowledge of barriers affecting the implementation of career development programs.
Skills to implement individual and group programs in a variety of areas such as assessment decision making, job seeking, career information and career counseling.
Skills to implement public relations efforts which promote career development activities and services.
Skills to establish linkages with community-based organizations.

Consultation

Knowledge of consulting strategies and consulting models.
Skills to assist staff in understanding how to incorporate career development concepts into their offerings to program participants.
Skills to consult with influential parties such as employers, community groups and the general public.
Skills to convey program goals and achievements to legislators, professional groups, and other key leaders.

Specific Populations

Knowledge of differing cultural values and their relationship to work values.
Knowledge of unique career planning needs of minorities, women, the handicapped, and older persons.
Knowledge of alternative approaches to career planning needs for individuals with specific needs.
Skills to identify community resources and establish linkages to assist adults with specific needs.
Skills to find appropriate methods or resources to communicate with limited English proficient individuals.

Appendix F

State Guidance Supervisors



Mr. Jimmy Jacobs
Coordinator
Counseling & Career Guidance
State Office Bldg.
1020 Monticello Ct.
Montgomery, AL 36117

Ms. Naomi K. Stockdale
Program Manager
Adult & Vocational Education
Alaska Department of Education
P. O. Box F, Goldbelt Bldg.
Juneau, AK 99811-0500

Ms. Brenda Epati-Tanoi
Director
Guidance & Counseling
Department of Education
Pago Pago, American Samoa 96799

Ms. Emilia Sabado Le'i
Counselor/VA Coordinator
American Samoa Community College
Mapusaga Campus
P. O. Box 2609
Pago Pago, American Samoa 96799

Dr. Tina Ammon
Guidance Specialist
Arizona Department of Education
1535 W. Jefferson St.
Phoenix, AZ 85007

Dr. Lynda D. Hawkins
Coordinator
Guidance Services/Career Education
Arkansas Department of Education
#4 Capitol Mall, Room 302-B
Little Rock, AR 72201-1071

Mr. J. B. Robertson
Career Education Supervisor
Arkansas Department of Education
#4 Capitol Mall, Room 304-B
Little Rock, AR 72201-1071

Dr. Bill Anderson
Director, Community Colleges
Chancellor's Office
1107 9th St.
Sacramento, CA 95814

Dr. Tom Bauer
Adult Education
California Department of Education
P. O. Box 944272
Sacramento, CA 94244-2720

Mr. Paul N. Peters
Supervisor
Career Development/Guidance
California Department of Education
721 Capitol Mall
Sacramento, CA 95814

Ms. Martelle Chapital
Program Manager
Guidance, Corrections & CBOs
Occupational Education System
1391 N. Speer Blvd., Suite 600
Denver, CO 80204

Mr. Fermin Kebekol
Vocational Education Counselor
Department of Education
Marianas High School
CNMI, Saipan CM 96950

Mr. Joaquín Manglona
Vocational Education Counselor
Department of Education
Rota High School
CNMI, Rota CM 96951

Mr. Richard C. Wilson
Consultant
Career Guidance & Counseling
Bureau of Vocational Education
25 Industrial Park Rd.
Middletown, CT 06457

Mr. Clifton Hutton
State Supervisor of Guidance
& Pupil Personnel Instruction
Department of Public Instruction
Townsend Bldg., Box 1402
Dover, DE 19903

Dr. Dorothy E. Jenkins
Director, Guidance & Counseling
D.C. Public Schools
415 12th St., NW, Suite 906
Washington, DC 20004

Mr. Dale Ake
Student Services Section
Center for Career Development
Department of Education
Knott Bldg.
Tallahassee, FL 32301

Dr. Margaret Ferguson
Director, Career Development
Vocational, Adult & Community Ed.
Knott Bldg., 325 Gaines St.
Tallahassee, FL 32316

Dr. James C. Conkwright
Director of Program Development
and Student Support
Georgia Department of Education
1766 Twin Towers East
Atlanta, GA 30334

Mr. O. C. Hill
Coordinator, Guidance & Counseling
Student Support Services
1852 Twin Towers East
Atlanta, GA 30334

Mr. Jack L. Neuber
Chairman, Counseling Dept.
Guam Community College
P. O. Box 23069
Main Postal Facility
Guam, Mariana Islands 96921

Mr. Richard P. Stoicovy
Student Services Division
Guam Community College
P. O. Box 23069
Main Postal Facility
Guam, Mariana Islands 96921

Mr. Jay Titus
Counseling Department
Student Services Division
Guam Community College
P. O. Box 23069
Main Postal Facility
Guam, Mariana Islands 96921

Guidance Specialist
Occupational Development
& Student Services Branch
State Department of Education
941 Hind Iuka Dr.
Honolulu, HI 96821

Mr. Jim Baxter
Vocational Guidance Supervisor
Len B. Jordan Bldg.
650 W. State St.
Boise, ID 83720

Ms. Sally Keister
Coordinator
Guidance/Assessment Evaluation
Department of Education
650 W. State St.
Boise, ID 83720

Mr. Lynn Trout
Education Administrator
Vocational/Education Program
100 N. First St.
Springfield, IL 62777

Ms. reggy O'Malley
State Coordinator of Research,
Consultation, Coordination,
and Articulation
Indiana Commission on Voc-Tech Ed.
325 W. Washington St.
Indianapolis, IN 46204

Mr. Edward L. Ranney
Consultant, Guidance Services
Bureau of Instruction & Curriculum
Grimes State Office Bldg.
Des Moines, IA 50319-0146

L. Craford and M. Harrison
Consultants
JTFA Services
Iowa Department of Education
Grimes State Office Bldg.
Des Moines, IA 50319

Ms. Frayna G. Scrinopskie
Guidance & Counseling Specialist
Division of Community College
and Vocational Education
120 E. Tenth St.
Topeka, KS 66612-1103

Mr. Lou Perry
Program Manager
Student Services Branch
Office of Vocational Education
2138 Capital Plaza Tower
Frankfort, KY 40601

Mr. William Gary Steinhilber
Assistant Director
Division of Student Services
Kentucky Department of Education
1704 Capital Plaza Tower
Frankfort, KY 40601

Mr. Barry Solar
Section Administrator
Guidance and Counseling
Bureau of Student Services
P. O. Box 94064
Baton Rouge, LA 70804-9064

Ms. Thelma Hughes
Education Program Manager
Department of Education
P. O. Box 94064
Baton Rouge, LA 70804-9064

Ms. Helen Beesley
Vocational & Career Guidance
State Department of Education
and Cultural Services
State House Station 23
Augusta, ME 04333

Ms. Nancy S. Perry
Guidance Consultant
State Department of Education
and Cultural Services
State House Station 23
Augusta, ME 04333

Mr. Richard Scott
Specialist in Guidance
Maryland Department of Education
200 W. Baltimore St.
Baltimore, MD 21201

Dr. Joseph P. DeSantis
Specialist
Postsecondary & Adult Education
Maryland Department of Education
200 W. Baltimore St.
Baltimore, MD 21201

Mr. Charles Brovelli
Coordinator of Career Guidance
Massachusetts Department of Education
1385 Hancock St.
Quincy, MA 02169

Ms. Gertrude Bonaparte
Consultant, Career Guidance
Vocational-Technical Education
Services
Michigan Department of Education
P. O. Box 30009
Lansing, MI 48909

Mr. Steve Frantz
Supervisor
Student Support Services
Vocational-Technical Education
550 Cedar St.
St. Paul, MN 55101

Ms. Diane Miller
Learner Support System
State Department of Education
550 Cedar St., Suite 901
St. Paul, MN 55101

Mr. Leroy Levy
State Supervisor of Guidance
State Department of Education
P. O. Box 771
Jackson, MS 39205

Mr. Robert Larivee
Director
Vocational Special Needs & Guidance
Elementary & Secondary Education
P. O. Box 480
Jefferson City, MO 65102

Mr. Marion Starr
Assistant Director
Vocational Special Needs
& Guidance Services
Elementary & Secondary Education
P. O. Box 480
Jefferson City, MO 65102

Ms. Judy Birch
Guidance Specialist
Montana VIEW
State Capitol
Helena, MT 59620

Dr. Robert Ruthemeyer
Adult Education Specialist
Office of Public Instruction
State Capitol
Helena, MT 59620

Dr. Evelyn Lavaty
Director, Career Guidance
Department of Education
P. O. Box 94987
Lincoln, NB 68509

Dr. Carole Gribble
Occupational Guidance Consultant
Department of Education
400 W. King St.
Carson City, NV 89710

Dr. James Carr
Consultant, Vocational Guidance
State Department of Education
101 Pleasant St.
Concord, NH 03301-3860

Ms. Ann DeAngelo
Vocational Guidance & Counseling
State Department of Education
225 W. State St., CN 500
Trenton, NJ 08625

Mr. Joseph Ryczkowski
Vocational Guidance & Counseling
State Department of Education
225 W. State St., CN 500
Trenton, NJ 08625

Ms. Pat Putnam
Supervisor, Special Needs
Vocational Education
State Department of Education
Santa Fe, NM 87501

Ms. Nancy Mandell
General Guidance
Elementary & Secondary Education
Department of Education
Santa Fe, NM 87501

Dr. Richard D. Jones
Chief, Bureau of Occupational
Education Program Development
99 Washington Ave., Room 1623
Albany, NY 12234

Ms. Lorraine M. Davis
Industry/Education Coordination
Department of Public Instruction
540 Education Bldg.
Raleigh, NC 27603-1712

Mr. J. David Edwards
Chief Consultant, Vocational Education
Department of Public Instruction
539 Education Bldg.
Raleigh, NC 27603-1712

Mr. Dennis Steele
Supervisor, Vocational Guidance
State Capitol Bldg., 15th Floor
Bismarck, ND 58505

Mr. Gaylynn L. Becker
Coordinator, Counseling & Testing
Department of Public Instruction
State Capitol Bldg., 9th Floor
600 E. Boulevard Ave.
Bismarck, ND 58505-0440

Mr. Rich Hauck
Director, Counseling Center
State School of Science
Wahpeton, ND 58075

Ms. Karen P. Heath
Assistant Director
Career Development Services
Ohio Department of Education
65 S. Front St., Room 908
Columbus, OH 43215

Dr. Edwin Whitfield
Associate Director
Guidance & Testing Section
Division of Education Services
Ohio Department of Education
65 S. Front St.
Columbus, OH 43215

Ms. Belinda McCharen
Coordinator, Vocational Guidance
Department of Vocational and
Technical Education
1500 W. Seventh Ave.
Stillwater, OK 74074-4364

Dr. Don Perkins
Student Services Specialist
Oregon Department of Education
700 Pringle Parkway, SE
Salem, OR 97310

Dr. Joan Stoddard
Coordinator, Program Planning
Division of Vocational-Technical
Education
Oregon Department of Education
Salem, OR 97310

Mr. Bill Lesh
Guidance Specialist
Oregon Department of Education
700 Pringle Pkwy., SE
Salem, OR 97310

Ms. Marensia E. Edward
Counselor
Micronesian Occupational College
P. O. Box 9
Koror, Palau 96940

Ms. Sarita De Carlo
Supervisor of Guidance
Division of Student Services
Department of Education
333 Market St.
Harrisburg, PA 17104

Ms. Margie Burgos
Director, Guidance Programs
Department of Education
P. O. Box 759
Hato Rey, PR 00919

Dr. Arthur Tartaglione
Career Education Coordinator
Bureau of Vocational and Adult
Education
Department of Education
22 Hayes St.
Providence, RI 02908

Ms. Lynne Hufziger
Consultant, Guidance & Career
Education
Department of Education
Rutledge Bldg., Room 912-E
Columbia, SC 29201

Mr. E. Jimmy Smith
Director, Adult Education
Rutledge Bldg., Room 209-A
1429 Senate St.
Columbia, SC 29201

Mr. Ken Kompelien
Vocational Guidance Coordinator
South Dakota Curriculum Center
205 W. Dakota Ave.
Pierre, SD 57501

Mr. Sam McClanahan
Director, Program Services
Vocational-Technical Education
Cordell Hull Bldg., Room 200
Nashville, TN 37217

Ms. Sylvia J. Clark
Occupational Education Specialist
Texas Education Agency
1701 N. Congress Ave.
Austin, TX 78701

Dr. Ruben Dayrit
Supervisor
State Vocational Education
Ponape State
Kolonias, Ponape 96941

Dr. Lynn Jensen
Specialist
Vocational Guidance and Counseling
250 E. South
Salt Lake City, UT 84111

Ms. Elizabeth Ducolon
Consultant, Vocational Guidance
State Department of Education
120 State St.
Montpelier, VT 05602

Ms. Ida White
State Coordinator
Student Services & Programs
44-46 Kongens Gade
St. Thomas, VI 00802

Ms. Rebecca Dedmond
Career Education Specialist
Virginia Department of Education
P. O. Box 6Q
Richmond, VA 23216

Mr. Jay Wood, Administrator
Program Development Section
Division of Vocational-Technical
and Adult Education
Old Capitol Bldg., N/S FG-11
Olympia, WA 98504

Ms. Patricia Hindman
Coordinator, Vocational Education
State Board for Community
College Education
319 7th Ave.
Olympia, WA 98504

Ms. Terrie Wilson
Acting Director
Office of Education Support
Department of Education
State Office Bldg.
Charleston, WV 25305

Mr. Lorrain C. Celley
Consultant, Student Services
Vocational, Technical & Adult Education
310 Price Place
P. O. Box 7874
Madison, WI 53707

Supervisor
Vocational Guidance/Career Education
Department of Public Instruction
Bureau of Pupil Services
125 S. Webster St.
Madison, WI 53707

Mr. Richard Granum
Pupil Services Consultant
Guidance, Counseling & Placement
State Department of Education
Cheyenne, WY 82002

Appendix G

Guidelines for the Use of Computer-Based Career Information and Guidance Systems

**Guidelines for the Use of Computer-Based
Career Information and Guidance Systems**

Edited by:
David Caulum, Ph.D.
Roger Lambert, Ph.D.

Association of Computer-Based Systems for Career Information

**ACSCI Clearinghouse
1787 Agate Street
Eugene, OR 97403**

© 1985

Table of Contents

Preface . . .
Introduction
Theory and Practice
Process .
User Needs
System Site Management
Physical Environment
Personnel
Evaluation
About the Editors

Preface

As with all tools, the effectiveness of computer-based career information and/or guidance systems depends on the quality of the product. Since adherence to professional standards offers the best assurance of quality, ACSCI has put major effort into developing, refining, and disseminating its *Handbook of Standards for Computer-Based Career Information Systems*. These standards have become the accepted guide to quality for developers and operators of such systems. The standards also help the agencies that use these systems assess their quality.

The effectiveness of these systems also depends, however, on the way they are used in a given setting. Effective use is largely a responsibility of the counselors and others who assist students and clients at a user site. The guidelines in this publication are intended to help these "mediators" achieve the best possible implementation and utilization of a computer-based career information and/or guidance system. The guidelines provide criteria for installing a system in a setting and for evaluating the operation of a facility having a system in place. Just as ACSCI's *Handbook of Standards* serves to define quality in the product of a computer-based system, the guidelines presented here help define quality in the use of the system.

ACSCI assigned development of these guidelines to its Technical Assistance and Training Committee. As co-chairs of that committee, we drew on our ten-year experience in extending the services of the Wisconsin Career Information System to more than 300 sites. Without the assistance of others, however, we could not have done the job. We wish to acknowledge with gratitude the important contributions of the following individuals:

Sally Hawley, Information Development Manager, Illinois Occupational Information Coordinating Committee, Springfield, IL

Jerry Henning, Consultant, Wisconsin Department of Public Instruction, Madison, WI

Dale Herbers, Director of Guidance, Verona High School, Verona, WI

Susan Horowitz, Director, Training & Educational Data Service, Indianapolis, IN

Helena Kennedy, Information Analyst, Washington Occupational Information System, Olympia, WA

Carol Koszold, Director, South Carolina Occupational Information System, Columbia, SC

Marilyn Mase, Director, EUREKA, The California Career Information System, Richmond, CA

Joseph McGarvey, Director, Michigan Occupational Information System, Lansing, MI

Elton Mendenhall, Director, Nebraska Career Information System, Lincoln, NE

Deborah Perlmutter, Director, MetroGuide, New York City Board of Education, Brooklyn, NY

Jan Staggs, Executive Director, Illinois Occupational Information Coordinating Committee, Springfield, IL

Patricia Waldren, Specialist, Wisconsin Career Information System, Madison, WI

Walton Webb, National Occupational Information Coordinating Committee, Washington, DC

Becki Whitaker, Specialist, Indiana Cooperative Library Services Authority, Indianapolis, IN

—David Cahum, Coordinator

—Roger Lambert, Director
Wisconsin Career Information System
Madison, WI

Co-Chairs, ACSCI Technical Assistance
and Training Committee

Introduction

Any computer-based career information and/or guidance system is most effective when its use is fully integrated with the counseling and guidance or career-development program which it serves. The guidelines presented in this publication promote such integration and foster the most effective and efficient use, in a wide variety of settings, of this important tool.

People are crucial to the good use of a computer-based system. They are essential to the total integration of the system with related activities at the site and external to the site. User site personnel, however, have need for different levels of knowledge about the system, commensurate with their roles in using it. For purposes of the guidelines presented in the following sections, user site personnel can be grouped into three categories defined by their required level of knowledge about the system:

1. Counseling and Information Staff Level of Knowledge: Facilitation

This group includes all counselors in a school or college counseling department, all librarians in a reference department, all job service counselors in job service agencies, all rehabilitation counselors in vocational rehabilitation facilities, and any other counselors involved in direct contact with students or clients. Information assistants, such as school aides and library clerks, may be included. The "facilitation" level of knowledge includes hands-on application, search experience, and understanding the use of all aspects of the computer-based system.

In addition, at each user site there is a key staff member who coordinates the use of the system at that site. This "site coordinator" requires the same "facilitation" level of knowledge but has the added responsibility of maintaining contact with system operator personnel to provide feedback on system usage, to report any related problems, and to be aware of pending system changes.

2. Incidental Staff Users Level of Knowledge: Orientation

This group includes teachers in a social studies department, parent volunteers, librarians in a circulation department, administrative or clerical staff in a job service agency, and others who may assist students or clients. The "orientation" level of knowledge includes hands-on experience with the use of selected aspects of the computer-based system:

3. Administrators, Students, Clients, and Others Level of Knowledge: Awareness

Examples of this diverse group include the principal of a high school, faculty at a college, parents of student users, and users (students or clients). The "awareness" level of knowledge consists of knowing the purpose of the system, where it is located, and how to access it.

Guidelines for the Use of Computer-Based Career Information and Guidance Systems provides a voluntary means for schools and agencies using these systems to declare that they subscribe to nationally recognized standards of quality in their use. This publication also provides a model for self-assessment that can be used in periodic reviews of the delivery of service. Ultimately, such self-assessment combined with regular interaction with system operators leads to improved products.

In summary, ACSCI encourages the use of the guidelines in this publication for three purposes:

- To provide assistance in the implementation and utilization of a computer-based system, in order to maximize benefits for the students and clients who are the end users.
- To provide assistance in assessing the effectiveness of the implementation and utilization of a computer-based system.
- To assure constituencies and the general public that resources devoted to computer-based systems are invested under guidelines that insure their most efficient and effective use.

The guidelines are grouped under seven headings and numbered accordingly, from 1.1 to 7.3. The questions that follow most of the numbered statements are designed to test the extent to which those guidelines are being observed.

Theory and Practice

Computer-based career information and guidance systems reflect various career-development theories. From these theories, certain goals for the use of the systems can be derived. Goals that can be achieved through the use of a particular system should be compatible with the career-development goals of the user site. The following guidelines should apply:

GUIDELINE 1.1: Each user site should adopt, adapt, or otherwise define its theory of career development.

- How does the career-choice process fit into a student's or client's life?
- What are the steps in career decision-making?
- What are the characteristics of a vocationally mature student or client?

GUIDELINE 1.2: Each user site should define a plan to facilitate the career-development process which will meet the needs of its students or clients.

- At what point in their life/career development are most students or clients?
- At what point in the career-choice process are most students or clients when they are likely to use the systems? What are the major variations?
- What special needs do students or clients have that should be met by the user site? What is the plan to meet these special needs?

GUIDELINE 1.3: The goals of the computer-based system should be compatible with the theory to which the user site subscribes.

- What are the goals of the computer-based system?
- How do these system goals fit into the goals of the user site?
- Are there areas of conflict and how will they be resolved?

GUIDELINE 1.4: The process and content of the computer-based system should fit into the career-development plan of the user site.

- Which steps in the career-development process are satisfied by the computer-based system?
- Which steps are only partially met by the computer-based system and require further staff attention? Will this help be available?
- How will the computer-based system be integrated into the non-computer part of the career-planning process?

Process

Each user site should integrate use of the computer-based system into ongoing activities. The following guidelines should apply:

GUIDELINE 2.1: Each user site should develop program goals for integrating use of the computer-based system into existing programs to meet student or client needs.

- Do your goals adequately meet the needs of each student or client population?
- Are the goals realistic for your school or agency?
- Does the management support these goals? Are they consistent with the philosophy of the administrators?
- Do staff support these goals?

GUIDELINE 2.2: Each user site should develop objectives to implement each of the goals.

- Does each objective have a specified time frame?
- Are the objectives measurable?
- Can these objectives be achieved?
- Can expected student/client outcomes be identified?
- Are these objectives shared by staff?

GUIDELINE 2.3: Each user site should develop a variety of activities to implement each of the objectives.

- Do the activities carry out the objectives?
- Do the activities take into consideration the age and abilities of the target population?
- Are the activities implemented throughout the school or department?
- Are time, cost, and physical facilities provided for?
- Have all staff been appropriately trained to implement these activities?
- Is a key staff member (the site coordinator) responsible for carrying out each of these activities?

GUIDELINE 2.4: The management team should recognize the importance of career planning in the context of the entire program and should monitor and evaluate its progress.

- Is a key staff member responsible for this program?
- Are the funds and facilities adequate?
- Is the system readily accessible?
- Is regular maintenance provided?

GUIDELINE 2.5: Any student or client should be oriented to the system prior to usage and should be given follow-up assistance after use.

- Does this individual need to use the system?
- What portions of the system should be used by this individual?
- What outcomes are expected from this individual's use of the system?
- What other resources would be of help to this user? In what ways is the user directed to them?

User Needs

It is important to identify the variety of student or client needs so that staff can determine which needs can best be met by the computer-based system and which needs require other types of intervention. The following guidelines should apply:

GUIDELINE 3.1: Agencies should identify client populations.

- Which major groups are to be served?
- How do they differ?

GUIDELINE 3.2: The career-planning needs of each client population should be determined.

- What are the career-planning needs of each group?
- What personal resources do students or clients have for meeting their own needs? What do they need, and can they supply it themselves?
- What barriers do they face?

GUIDELINE 3.3: The career-planning needs of students or clients should be met by the counseling program by using the computer-based system as an integral tool.

- For each need, is it met by the computer-based system?
- For each need, will a counselor or aide assist to assure that the user's need is met?
- For each need, if it is not met by the computer-based system and staff, what other resources will be used to meet the need?

System Site Management

Site management of a computer-based system is critical to its effective use. A management plan for administration and staffing at the local site should be developed and reviewed annually. The management plan should cover all aspects of system use: access, long-term commitment of resources, physical environment, staff, integration into the total program, public relations, and evaluation. The plan must begin with obtaining sufficient resources to operate and maintain the system over a number of years. The following guidelines should be considered in developing the plan:

GUIDELINE 4.1: All students or clients should have an opportunity to use the system.

- Is the system regularly available during enough working hours to meet the needs of users?
- Are trained staff available to help individuals in making efficient use of the system?
- Have schedules been developed to facilitate efficient and equitable access to the system, based on the needs of the target population and the equipment available?

GUIDELINE 4.2: The organization should make a long-term commitment to providing the system's service by including in the annual budget adequate funds to handle staff, system fees, hardware, and necessary supplies.

- Are resources sufficient to cover such needs as paper, user materials, subscriber fees, and telephone lines (if required)?
- Are resources sufficient to cover purchase and maintenance of equipment, as well as acquisition and maintenance of facilities?
- Are resources sufficient to provide staff with training and in-service opportunities, including expansion and new applications?

GUIDELINE 4.3: Site management should be involved in the evaluation of the system.

- Is system use reviewed, using criteria such as numbers of users, value to clients, accessibility, and usefulness of information?

GUIDELINE 4.4: Site management should be involved with promotional activities at the site and in the local community.

- Is information on system availability shared with the general community, the professional community, the business community, labor, and specific target groups such as the handicapped and the economically disadvantaged?
- Is the system promoted through local news media?
- Is staff available to inform business groups, service clubs, and other community organizations of the system's use, functions, and availability?
- Do key staff members keep clients and colleagues informed regarding system use, functions, and availability?

GUIDELINE 4.5: The system should be regularly updated, based on releases from the system operator.

- Does site management keep the system operator informed of key personnel changes?
- Is there an established procedure for the site coordinator to inform the system operator of problems with the system or suggestions for changes?
- Are there procedures for users to inform the site coordinator of problems with the system or site service?
- Are outdated materials destroyed or returned to the system operator to assure that only the most up-to-date material is available to users?

GUIDELINE 4.6: Management should insure that site coordinators receive periodic training from the system operator and that all staff receive "in-house" training in use of the system each year.

- Are there adequate budget and release time to allow site coordinators to attend training provided by the system operator at least once per year?
- Are new staff trained in using the system within a reasonable time of being hired?
- Are continuing staff regularly updated on system changes when they occur, and are they provided training opportunities?

Physical Environment

The physical environment of the user site has an important role in the effective use of a computer-based system. Equipment must be readily accessible and available to the user, otherwise the system may not be used to the fullest extent possible. The following guidelines should apply:

GUIDELINE 5.1: The facilities should have ample and accessible space.

- Is the space adequate in terms of such features as comfort, temperature level, non-glare lighting, electrical outlets, telephonic lines, minimal noise and distraction, privacy when needed, and unobtrusive printing capability?
- Is the space open when the client or student is available? Is the space easily identifiable, with good directions?

GUIDELINE 5.2: The availability of computer equipment is essential to the use made of computer-based systems.

- Is the equipment in working order, and are there annual maintenance checkups?
- Is there sufficient, workable hardware to serve the needs of clients or students, including those with special needs?
- Is the equipment easily accessible to all staff and to all potential users?
- Is the equipment accompanied by adequate instructions on use, appropriate user materials, and instructions on repair and technical assistance?
- Does the equipment complement the needs of the site—that is, does it have a permanently accessible place within the office or classroom, or does it take advantage of portable options?
- Does the microcomputer or computer terminal have printing capability?
- Does equipment acquisition, maintenance, and repair keep up with technical advances?
- Is the equipment placed in high-traffic areas such as the counseling center, library, and other areas where clients or students are served directly?

Personnel

Depending on their roles in using the system, site personnel have need for different levels of knowledge about the system (see Introduction). There is also need for at least one site coordinator who has both a "facilitation" level of knowledge and special insights derived from the system operator regarding nuances of information interpretation, idiosyncrasies of access and usage, and future system design plans. Guidelines by level of training and role are as follows:

GUIDELINE 6.1: Staff who are regularly involved with using the system should have thorough knowledge of its operation, theoretical process, and practical interpretation (a "facilitation" level of knowledge).

- Do staff members know how the system operates, how the system can be used to retrieve information to meet student or client needs, how to help users interpret the results, and how the system interacts with other information sources?
- Have all staff members participated in initial training sessions that include hands-on practice during the session and practice time after completion of training?
- Do staff members attend periodic follow-up sessions—whether presented in-house or by system operators—on advanced techniques, new system protocols, and updates?

GUIDELINE 6.2: Each site should have at least one site coordinator. This person must have a special knowledge of the system through training offered by the system operator and needs to maintain a liaison contact with the system operator.

- Has one or, in a large facility, more than one staff member been assigned the role of site coordinator?
- Does the site coordinator keep up-to-date on the system and regularly attend training sessions offered by the system operator?
- Does the site coordinator serve as an effective liaison person with the system operator, bringing any problems or concerns about the system to the operator's attention?
- Does the site coordinator keep other staff up-to-date on the system and track its usage within the site?

GUIDELINE 6.3: Staff members should develop a process for identifying (and communicating or interacting with) related activities sponsored by other organizations. (Examples: Career Days, College Fairs, College Representative Visitations.)

GUIDELINE 6.4: Staff members should conduct in-house training and educational seminars for people needing "orientation" and "awareness" levels of knowledge, and for the end users of the system.

GUIDELINE 6.5: Incidental staff users need an "orientation" level of knowledge that can be obtained through annual updates.

- Have incidental staff users seen a demonstration of the total system? Have they had hands-on experience with the component of the system they are most likely to use? (Training of "orientation" level groups is typically done in-house by local staff members but may be supported by the system operator.)
- Are they sufficiently aware of local system access procedures so they can access the system independently?

GUIDELINE 6.6: Administrators, students or clients, and others should have an "awareness" level of knowledge about the system that can be obtained through a yearly demonstration.

- Have they seen a demonstration of access and data from at least one file? (Training for the "awareness" level is usually done by local staff members but may have the support of the system operator.)
- Are they aware of local access procedures and scheduling?
- Do administrators and other staff understand what information needs they can refer to staff members and the system?

Evaluation

Continuous evaluation and systematic review of needs, goals, and achievements are important. Systems change, needs of users change, and program goals change. The following guidelines should apply:

GUIDELINE 7.1: Objective measurement techniques should be used to provide quantitative data about use of the system. Such measurements may include number of uses of various components of the system, number and types of users, percentage of target population reached, and time-of-day usage patterns.

GUIDELINE 7.2: Subjective indicators of usage should be obtained at least every other year by surveys of end users and staff members.

- Does the computer-based system meet program goals? If not, should the program goals be modified?
- Have the program objectives been met? What further actions should be taken?
- Are staff members capable of performing to the standards described in the guidelines presented in this publication?
- Are the needs of users being met?
- Is the physical environment adequate?
- Is the site management effective?
- Has the system been successfully implemented?
- Is the system—especially its content, accessing strategies, and reliability—meeting the need?
- Have the most recent improvements to the system been implemented? Have outdated materials been destroyed or deleted?

GUIDELINE 7.3: Evaluation information should be reported to site facilitators, administrators, the system operator, and other interested parties.

The Association of Computer-Based Systems for Career Information (ACSCI) is a professional organization for the advancement of career information. Formed in 1978, the Association and its members work to advance the development and use of career information, information technology, and services to users through standards, training, public information, and technical assistance. Full members are organizations that operate computer-based systems

for career information in states and metropolitan areas. Supporting members include developers and vendors of software and hardware used in delivering career information. Individual members include researchers, administrators, counselors, and others who are interested in the field of career information. Inquiries about membership may be sent to the ACSCI Clearinghouse, 1787 Agate Street, Eugene, OR 97403.

Roger Lambert is the director of the Wisconsin Career Information System, having served in that capacity since the system's inception in 1975. He also serves as the associate director of the Vocational Studies Center at the University of Wisconsin—Madison. He has been involved in a variety of research and development activities over the past 15 years related to career development and computer-based information systems and has served as president of ACSCI.

David Caulum is the coordinator of the Wisconsin Career Information System. He was involved in the early development of the Wisconsin system and has over the years been instrumental in the development and utilization of the microcomputer for delivery of career information. He has also chaired the Research Committee and the Technical Assistance and Training Committee of ACSCI. In 1984 he was recognized by ACSCI for his outstanding contribution to the development of computerized career information systems.

Appendix H

Career Software Review Guidelines

Copyright ©1991 National Career Development Association
5999 Stevenson Avenue
Alexandria, VA 20034
(703)823-9800

Permission is hereby granted to end users to duplicate evaluation and rating forms for use in evaluating resources. Permission is also extended to publishers and others to reprint the *Guidelines* in their entirety as part of other publications with appropriate credit given to the National Career Development Association.

Additional copies of this publication are available from the National Career Development Association, address listed above.

Career Software Review Guidelines

National Career Development Association

Introduction

The National Career Development Association (NCDA) has a long history of evaluating career materials. The Association's career information reviews have for years helped counselors and career center coordinators select from available career information books and pamphlets.

In the last decade, several professional groups have developed evaluation criteria for career software. As computers came into use to help individuals access career information, the United States Department of Labor and then the National Occupational Information Coordinating Committee provided start-up grants so individual states could implement systems of career information. State system operators formed the Association of Computer-Based Systems for Career Information (ACSCI) and adopted standards for the operation of such systems, publishing them periodically since 1980. In 1985, ACSCI also published guidelines for the effective use of computer-based systems for career information.

Several states conducted or commissioned evaluations before adopting a system for state operation, and several individuals and research centers have published guidelines for system selection or guides to available career information delivery software. In 1988, the American Association for Counseling and Development published a comprehensive guide to counseling software.

Several educational organizations, including the International Society for Technology in Education, publish guides to instructional software and guidelines for evaluation of instructional software.

The existing standards provided ample precedence for these NCDA guidelines. All of them help clarify important issues regarding career development software while equipping professionals to choose software appropriate for their counseling practices or their school's or agency's service needs. The purpose here is not to compile all of the good guidelines or to supersede well-established software standards and evaluations, but to reinforce them with NCDA's efforts.

These NCDA guidelines apply to software that individuals use in planning their own careers. Because the computer is an information tool and its major use in career development is for information delivery, the guidelines are specific about the content, orientation, and coverage of occupational and educational information. The computer is not just an information storage and retrieval device, however, nor is career planning based solely on facts about work and schooling. Computers are also used to organize information about the individual and to aid decision making. Criteria for the evaluation of those career development programs are also included in the guidelines. By selecting the applicable criteria, a reviewer can evaluate special purpose programs as well as comprehensive career information systems.

The 1991 edition of the Career Software Review Guidelines was prepared under the direction of Bruce McKinlay, Ph.D., University of Oregon, Eugene, Oregon (chairperson of the CIRIS Subcommittee on Software Resources), with the assistance of the Career Information Review Service Committee, chaired by Roger Lambert, Ph.D., University of Wisconsin-Madison. The Guidelines were approved by the NCDA Board of Directors April, 1991.

Useful software rarely consists only of computer programs and data. User guides, coordinator manuals, evaluation reports, and implementation strategies are all valuable and are covered by the guidelines.

Many career software programs have companion publications or refer users to other information sources. Similarly, software developers are beginning to add other visual and electronic media to their career programs. Therefore, these software review guidelines rely on and are designed to complement two other sets of NCDA guidelines—those for print and those for media.

These guidelines are written for use by NCDA members and others in selecting and using career software. They can also be useful to NCDA in reviewing career software and to developers in producing career planning software.

The guidelines have two parts: (a) a format for describing the software and (b) criteria for evaluating the program. These two parts can be used separately or together, depending on the purposes of the user.

References

- Association of Computer-Based Systems for Career Information. (1982). *Handbook of Standards for Computer-Based Career Information Systems*. Eugene, OR: ACSCI Clearinghouse.
- Association of Computer-Based Systems for Career Information. (1985). *Guidelines for the Use of Computer-Based Career Information and Guidance Systems*. Eugene, OR: ACSCI Clearinghouse.
- Herlihy, B., & Golden, L. (1990). *Ethical Standards Casebook*. Alexandria, VA: American Association for Counseling and Development.
- National Career Development Association Career Information Review Service. (1987). *Instructions for CIRIS Committee - Career Information Review Service*. Alexandria, VA: Author.
- Northwest Regional Educational Laboratory (1988). *Evaluator's Guide for Microcomputer-Based Instructional Packages*. Eugene, OR: International Society for Technology in Education (formerly International Council for Computers in Education).
- Walz, G., & Bleuer, J. (1990). *Counseling Software Guide: A Resource for the Guidance and Human Development Professions*. Alexandria, VA: American Association for Counseling and Development.

Part 1: Software Description

Title: _____ Version: _____

Developer: _____

Hardware Requirements: _____

Topics: _____

User Materials Provided: _____

Applicable to the Following Career Development Activities:

- Career Awareness
- Career Exploration
- Skill & Knowledge Development
- Career Decision Making
- Career Growth
- Career Change
- Other: _____

Applicable in:

- Instruction
- Counseling
- Job Search
- Human Resource Development

Appropriate for Settings such as:

- Elementary Schools
- Middle & Junior High Schools
- High Schools
- Vocational Schools
- Community & Junior Colleges
- Colleges & Universities
- Job & Training Programs
- Rehabilitation Agencies
- Counseling Agencies
- Correctional Institutions
- Job Placement Services
- Personnel Offices
- The Work Place
- Libraries & Resource Centers

Cost:

Software for: Single-User Computer \$ _____
Networked or Time-Shared Computer \$ _____

Consumable Materials: \$ _____ per _____

Licensing provisions for multi-user installations (networks, computer labs, etc.) _____

Field tested data are available:

On Request

With the Program

Not Available

Objectives:

Stated by Developer

Inferred

Prerequisites for successful use:

Stated by Developer

Inferred

Content and Structure:

Potential Uses:

Description prepared by: _____ Date: _____

Part 2: Software Evaluation Criteria

You can evaluate five aspects of a program with these criteria categories:

- information in the program,
- career development process,
- user interaction,
- technical aspects of the software and materials, and
- support services .

There are few software programs, even comprehensive career information systems, to which you would apply all 67 of the criteria listed. You will need to omit the criteria that are not appropriate to the type of program you are evaluating.

Some of the criteria are standards of quality that any career development software program should meet. These include such standards as nondiscriminatory language, current and valid information, user control of decision making, program reliability, and availability of technical assistance. Use these important standards of quality to rate every program.

Other criteria (e.g., inclusion of test results or appropriateness for small group use) are features which may not be important for a particular type of program. Do not rate items that are not applicable to the kind of product you are evaluating; cross out their rating scales instead.

If you are rating one program and doing it yourself, you can select criteria and do the rating at the same time. However, if you are comparing several programs, or if several people are doing independent ratings, you first need to make several copies of the rating form. In that case, cross out the criteria that are not applicable, then make copies of the rating form.

For each applicable criterion, rate the program:

5 = Outstanding 4 = Good 3 = Satisfactory 2 = Poor 1 = Unsatisfactory

After you have finished rating the program, you can construct a summary score for it. If you want a summary score, sum the points assigned and divide the total points by the number of items rated, omitting the items you decided were not applicable. Use the overall numeric score only as a guide. If an essential criterion is rated unsatisfactory, you may decide to reject the program even if some of its features are attractive.

Information in the Program

These information criteria cover the following aspects of the program: relevance to the audience, appropriate language, organization of the information, and information quality.

	5	4	3	2	1
1. The information is clear, concise, and informative to the intended audience	5	4	3	2	1
2. The language is nondiscriminatory. Content is free from race, ethnic, gender, age, and other stereotypes	5	4	3	2	1
3. The content is free from spelling and grammatical errors	5	4	3	2	1
4. All subjects are covered in a comprehensive manner. For example, if information about all types of occupations is presented, it covers 90% of total employment in the area where the program is being used. Or, if the information applies specifically to one field of training, it covers all relevant instructional programs	5	4	3	2	1
5. The information for each topic encourages comparisons among schools or occupations	5	4	3	2	1
6. Occupational information covers standard occupational categories, duties, abilities, skills, working conditions, equipment, earnings, employment, outlook, training, and methods of entry. It identifies related occupations	5	4	3	2	1
7. Information about educational programs covers program objectives, specialties, degrees conferred, sample courses, and schools offering the program	5	4	3	2	1
8. Information about schools includes general information, admissions, programs of study, housing, costs, financial aid, and student service	5	4	3	2	1
9. The program lists only schools that meet basic licensing requirements. It reports accreditation by recognized organizations	5	4	3	2	1
10. The information is based on empirical data that are current and valid	5	4	3	2	1
11. Updated information is distributed promptly, at least yearly	5	4	3	2	1
12. In a personal search questionnaire, there is a clear, empirical relationship between characteristics of the user and those of the occupations, schools, or other activities being sorted	5	4	3	2	1
13. In a program using off-line or computer-administered assessment instruments, those instruments conform to accepted standards of validity and reliability	5	4	3	2	1
14. Advice is clearly distinguished from factual information. The sources of advice are identified	5	4	3	2	1
15. Statements made in one component are consistent with those made in other components of the program	5	4	3	2	1
16. If the program produces only lists of titles, it effectively refers users to specific sources of accurate information	5	4	3	2	1
17. Published information sources are readily available, for example, in local career information centers	5	4	3	2	1
18. To supplement objective information, the program suggests interviewing individuals about their personal career histories, including how they feel about their schools or jobs	5	4	3	2	1

Career Development Process

These criteria evaluate the compatibility of the program with important career development principles.

	5	4	3	2	1
19. The program motivates individuals to develop their own career plans	5	4	3	2	1
20. The program fosters self-knowledge relevant to work and learning	5	4	3	2	1
21. The program helps individuals to integrate and develop their values, interests, abilities, skills, and goals	5	4	3	2	1
22. Using the program broadens an individual's awareness of current options for employment and education	5	4	3	2	1
23. If there is a search process, it broadens the outlook of individuals regardless of their race, ethnic group, gender, or age	5	4	3	2	1
24. The program supports informed decision making by helping individuals generate ideas, obtain necessary information, and evaluate alternatives in responsible and personally relevant ways	5	4	3	2	1
25. The program encourages the user to get appropriate counseling and advice in making long term decisions	5	4	3	2	1
26. Using the program integrates planning with previous experiences	5	4	3	2	1
27. The user, not the program, controls the decision making	5	4	3	2	1
28. The structure of the program demonstrates that career planning is a developmental, life-long process	5	4	3	2	1
29. The program is appropriate for individual use	5	4	3	2	1
30. The program is appropriate for small group use	5	4	3	2	1
31. The program can be a useful resource in a counseling program	5	4	3	2	1
32. The program provides information that can be useful in instruction	5	4	3	2	1
33. The program can be a useful resource in a job search program	5	4	3	2	1
34. Using the program contributes to a person's career development	5	4	3	2	1

User Interaction

These criteria cover the user's interaction with the program, the objectives and features of the program, and your analysis of it.

	5	4	3	2	1
35. The purpose of the program is well defined and clearly explained to the user	5	4	3	2	1
36. The organization is clear, logical, and effective, making it easy for the intended audience to understand	5	4	3	2	1
37. The language in the program and in the user's guide is clear to the intended audience	5	4	3	2	1
38. User materials are easy to use, appealing to users, and readily available	5	4	3	2	1
39. Prerequisites are identified and instruction is provided in the software or in the user guides so individuals can run the program and understand its results	5	4	3	2	1
40. The individual has the choice of going directly to desired information or using a structured search to identify relevant topics	5	4	3	2	1
41. The individual can operate the program independently, creating his or her own sequence of presentation and review	5	4	3	2	1

- | | | | | | |
|---|---|---|---|---|---|
| 42. The program acknowledges input. Feedback on user responses is employed effectively | 5 | 4 | 3 | 2 | 1 |
| 43. Invalid commands are handled constructively. The program tolerates variations in command formats (e.g., upper or lower case, extra spaces, etc.)..... | 5 | 4 | 3 | 2 | 1 |
| 44. Individuals can easily start and exit the program. It is easy to back up, change answers, and give commands | 5 | 4 | 3 | 2 | 1 |
| 45. If there are "help" and "hint" messages, they are easy to access..... | 5 | 4 | 3 | 2 | 1 |
| 46. If the program contains tests of knowledge or skill, it reports which items were missed and which were correct | 5 | 4 | 3 | 2 | 1 |
| 47. The program is attractive and interesting. It motivates users to continue using the program and exploring career options..... | 5 | 4 | 3 | 2 | 1 |
| 48. The program is demonstrably effective with the intended audience, including people of varying abilities and experiences | 5 | 4 | 3 | 2 | 1 |
| 49. The program can be used by various cultural groups | 5 | 4 | 3 | 2 | 1 |
| 50. The program achieves its purpose | 5 | 4 | 3 | 2 | 1 |

Technical Aspects of the Software and Materials

These criteria cover aspects of the computer hardware and programs.

- | | | Outstanding | Unsatisfactory | | |
|---|---|-------------|----------------|---|---|
| 51. The system uses standard equipment that is reliable, widely available, and applicable to a variety of uses | 5 | 4 | 3 | 2 | 1 |
| 52. Computer capabilities such as graphics, color, or sound are used for appropriate instructional reasons | 5 | 4 | 3 | 2 | 1 |
| 53. If the program requires special equipment, the requirements are minimal and clearly stated by the developer | 5 | 4 | 3 | 2 | 1 |
| 54. The program is reliable in normal use. Software is bug free | 5 | 4 | 3 | 2 | 1 |
| 55. The program provides a copy or summary of its basic information to the user for future reference | 5 | 4 | 3 | 2 | 1 |
| 56. Printouts are clear and well organized. The printouts are dated | 5 | 4 | 3 | 2 | 1 |
| 57. Updates can be loaded easily into the system..... | 5 | 4 | 3 | 2 | 1 |
| 58. If any processing in the program is based on assessment scores, course grades, or other client records, the program explains to the user how the records are being used..... | 5 | 4 | 3 | 2 | 1 |
| 59. If the program uses client records, it does not restrict an individual in exploring any of the information in the program..... | 5 | 4 | 3 | 2 | 1 |
| 60. If the program creates a permanent record for a user, that record is secure and confidential. There is provision for erasing the record when the information is no longer valuable in providing services..... | 5 | 4 | 3 | 2 | 1 |

Support

These criteria cover aspects of support for professionals who implement the program: written materials, staff training, service, and cost.

	Outstanding	Unsatisfactory			
61. The site coordinator's manual explains the content and process for updating information.....	5	4	3	2	1
62. Print or computer materials explain the content and effective use of the program to local site coordinators	5	4	3	2	1
63. Training on appropriate and effective use of the program is provided regularly	5	4	3	2	1
64. There is a system of communication between user sites and the system developer which may include newsletters, telephone assistance, and annual evaluations.....	5	4	3	2	1
65. On-site technical assistance is available for effective program use.....	5	4	3	2	1
66. Evaluations of the program's effectiveness are available to site coordinators	5	4	3	2	1
67. The cost per user makes it feasible to serve most clients who can benefit from the program	5	4	3	2	1

Summary Comments

Major Strengths:

Major Weaknesses:

Other Comments:

Evaluation prepared by: _____ Date: _____

Appendix I

Guidelines for the Preparation and Evaluation of Career and Occupational Information Literature

**Copyright ©1991 National Career Development Association
5999 Stevenson Avenue
Alexandria, VA 20034
(703)823-9800**

Permission is hereby granted to end users to duplicate evaluation and rating forms for use in evaluating resources. Permission is also extended to publishers and others to reprint the *Guidelines* in their entirety as part of other publications with appropriate credit given to the National Career Development Association.

Additional copies of this publication are available from the National Career Development Association, address listed above.

Guidelines for the Preparation and Evaluation of Career and Occupational Information Literature

National Career Development Association

These *Guidelines* are designed to be used by both the publishers and the consumers of career and occupational information literature. Because career and occupational literature is often an individual's initial (and sometimes only) exposure to a specific occupation or occupational field, it is very important that this information be accurately and comprehensively conveyed to the user. The *Guidelines* represent the National Career Development Association's (NCDA) views of what constitutes good career and occupational literature. The Association encourages the use of these *Guidelines* by publishers to ensure quality control in their publications and by those who select and use career and occupational literature to ensure maximum value from their purchases.

Helping individuals obtain, evaluate, and use career and occupational information is within the scope of NCDA's mission to facilitate the career development of individuals. The revision of these *Guidelines* is one of the services provided by NCDA to encourage the development of accurate and reliable information by publishers, and the informed use of this information by consumers and clients.

The nature of career information has changed considerably in its content and its delivery since NCDA was founded in 1913, as the National Vocational Guidance Association. However, the need for career and vocational information as an important consideration in career planning has remained constant. As recently as 1989, 65% of the adults who participated in the NCDA Gallup Survey indicated that if they could plan their work lives again, they would try to get more information about career choices and options.

In addition to their evaluative use locally, these *Guidelines* also form the basis for the ratings of current career and occupational literature by the Career Information Review Service of NCDA. These ratings appear in *The Career Development Quarterly* to assist professionals in their selection of quality career and occupational information literature.

Definition of Terms

The first step in any evaluation process is to determine that all parties concerned are using terms that communicate the same meaning to all. To address this issue of clarity, the following *Guidelines* have been designed to be used for occupational literature and for career literature. The content and purpose of these two types of literature are closely related but differ in some important aspects. Therefore, the terms occupation, occupational field, career, and career progression have been used in these *Guidelines* to refer

This 1991 edition of the Guidelines are a revision of the guidelines for career and occupational literature previously published by NCDAINVGA. This revision was prepared under the direction of Jennifer B. Wilson, Ph.D., University of Wisconsin-La Crosse, La Crosse, Wisconsin (Chairperson of the CIRS Subcommittee on Print Materials), with the assistance of the Career Information Review Service Committee, chaired by Roger Lambert, Ph.D., University of Wisconsin-Madison. The Guidelines were approved by the NCDA Board of Directors April, 1991.

to the specific type of information being discussed. Occupation refers to a specific job, usually indicated by a job title and/or number. Occupational field refers to a group or cluster of related occupations, often but not necessarily requiring similar skills, knowledge, and abilities and sharing similar working conditions. Career is a more encompassing term that includes, but is not limited to, the series of occupations one might expect to hold in the course of his or her working history. Career progression refers to the series of occupations that might be held during one's work history, each involving increasing levels of decision making, responsibility, status, and compensation.

General Guidelines

This section discusses items related to the general preparation and presentation of career and occupational literature.

1. Dating and Revisions

The date of publication should be clearly indicated. Because of rapid changes in employment outlook and earnings, material should be revised at least every three to four years to stay current and accurate. This is particularly important in highly technical and skilled occupations and less a factor in unskilled or semi-skilled occupations.

2. Credits

Credits should include (a) publisher, (b) consultants, (c) sponsor, and (d) sources of any statistical data. Photographs and original artwork should be accompanied by the name of the photographer/artist, photographic outfit, and copyright mark (if any).

3. Accuracy of Information

Information should be accurate and free from distortion caused by self-serving bias, sex stereotyping, or dated resources. Whenever possible, resources over five years old should be avoided. Information should be secured from and/or reviewed by knowledgeable sources within the occupation, the occupational field, or career research. Reviewers should be selected to reflect different viewpoints germane to an occupation (e.g., business and labor) and be trained in the evaluation process. Reviewers must not use the literature to promote their own concerns or viewpoints. Data such as earnings and employment projections should be based on current, reliable, and comprehensive research.

4. Format

The information should be conveyed in a clear, concise, and interesting manner. Although information from the Content Guidelines should appear in all publications, publishers are encouraged to vary the manner of presentation for the sake of stimulation and appeal. A standard style and format for grammar should be adopted and utilized throughout the document.

5. Vocabulary

The vocabulary of the information should be appropriate to the target group. Career and occupational information is used by people of varying ages and abilities. Information designed for a specific age range or for any other clearly identifiable group should be clearly identified as such. Information designed for broader use should be comprehensible to younger persons but suitable in style for adults. Technical terminology or jargon should be either fully explained or avoided. The use of nonsexist language is essential.

6. Use of Information

The intended purpose, the target audience, and the potential use of the information should be clearly identified in the introduction to the material. Reviews should specify the intended audience, such as elementary schools, middle/junior high schools, high schools, vocational schools, community college, colleges/universities, employment/training programs, rehabilitation agencies, correctional agencies, libraries, or specify other audiences. Persons often do not have the opportunity to thoroughly review materials until after the materials have been purchased. The authors and publishers should help potential purchasers determine whether the materials present useful information.

7. Bias and Stereotyping

Care should be taken in all publications to eliminate bias and stereotyping against persons with a disability, or based on gender, race, social status, ethnicity, age, or religion. Job title and information should be bias-free. Particular care should be taken to ensure the use of gender-free language. If graphics are used, people of different races, ages, sexes, and physical abilities should be portrayed at various occupational levels. Where applicable, data, information, or resources relevant to equal opportunity for women, minorities, or persons with a disability should be included.

8. Graphics

Graphic displays, when used, should enhance the value of the narrative information. Pictures should be current and portray individuals engaged in activities primary to the occupation or unique to it. Again, the importance of portraying individuals of different sexes, races, ages, and physical abilities in a variety of roles cannot be overemphasized.

Content Guidelines

This section discusses guideline items that deal with the content of information on occupations and/or occupational fields. Reviews of nonoccupational materials will rely primarily on the previously discussed criteria.

1. Duties and Nature of the Work

The career and occupational literature should describe in a clear and interesting fashion: (a) the purpose of the work, (b) the activities of the worker, (c) the skills, knowledge, interests, and abilities necessary to perform the work, and (d) any specializations commonly practiced in the occupation. Literature that describes occupational fields should also include: (a) the overall function and importance of the field, (b) the variety of occupations available, (c) the common skills, knowledge, interests, and abilities shared by members of the field or industry, and (d) contrasts among the various occupations represented in the field.

2. Work Setting and Conditions

The portrayal of the work setting and conditions should include a description of the physical and mental activities and the work environment. Where applicable, the information should include the full range of possible settings in which the work may be performed. The range of typical physical and mental activities should be described. Environmental characteristics should include the physical surroundings, the psychological environment, and the social environment. In addition to these characteristics, other conditions related to the performance of the work, such as time requirements or travel requirements, should be described.

Aspects of the work that might be regarded as undesirable are as crucial to realistic decision making as those that are generally considered desirable; therefore, care should be taken to make descriptions as comprehensive as possible. Because different individuals may view a given work condition as either positive or negative, the descriptions should be free of the author's bias and present a balanced picture. The variety and similarity of settings should be discussed. Specific geographic locations related to employment in the occupational field should be included.

3. Preparation Required

The preparation required for entrance into the occupation, or into various levels of an occupation, should be clearly stated. The length and type of training required and the skills, knowledge, abilities, and interests of successful students or trainees should be indicated. Typical methods of financial support during training should be included. Alternative means of obtaining the necessary preparation or experience should be stated where applicable. Readers should be informed of any preferred employer selection criteria over and above minimal preparation requirements. In literature that describes a range of occupations in a career progression, the various levels of preparation required for employment in each successive occupation should also be highlighted.

4. Special Requirements or Considerations

Bonafide physical requirements: Bonafide physical requirements that are necessary for entrance into a particular occupation should be included. Only bonafide occupational qualifications should be addressed. Consideration should be given to addressing job accommodations that can and are legally required to open opportunity to all the members of our society.

Licensing, certifications or membership requirements: Licenses, certifications, or memberships in unions or professional societies may also be required for some occupations. These requirements should be indicated and the process necessary for achieving any of these requirements should be described.

Personal Criteria: The listing of qualities desired of any worker (e.g., honesty, dependability) is not particularly valuable to individuals attempting to differentiate various career possibilities. On occasion it may be useful and appropriate to consider personal criteria, if available, regarding unique skills, knowledge, mental and physical abilities, and interests. The basis for the information should be clearly identified.

Social and Psychological Factors: Participation in an occupation has important effects on the lifestyle of the individual (and his or her family), and these effects should receive appropriate consideration in the presentation of information. When these factors are determined to be appropriate to the use of the material, the source of the information presented on social and psychological factors should be clearly identified.

5. Methods of Entry

The variety of means for typical entry into the occupation should be indicated, as well as any preferred avenues for entry. Alternative approaches should be described where applicable—particularly for those occupations where experience can be substituted for education and other formal preparation or where education can be substituted for work experience.

6. Earnings and Other Benefits

Current data on entry wages, average earnings and the typical range of earnings in the occupation should be presented. In addition, variations in average earnings by geographic region should be reported if available. Fringe benefits have become an increasingly important aspect of total compensation, and ample coverage of both typical benefits and those that are unique to the occupation or occupational field should be given.

7. Usual Advancement Possibilities

The typical and alternative career progressions related to the occupational field should be presented. The supplementary skills, knowledge, and abilities necessary for advancement and the alternative means for acquiring them should be indicated. Issues such as the role of job change, availability of training, and seniority should be discussed as they pertain to advancement in the particular occupational field.

8. Employment Outlook

Statements concerning the employment outlook should be realistic and include both the short-range and the long-range outlook for the occupation and occupational field. Mention of the past record of the occupation may be useful in completing its outlook picture. A broad range of factors that may have an impact on the employment outlook, including economic, demographic, technological, geographic, social, and political factors, should be considered. Current U.S. Department of Labor or other expert research should be consulted. Realism is essential, but readers should not be discouraged from entering highly competitive fields if they have the ability, interest, and motivation to succeed.

9. Opportunities for Experience and Exploration

Literature should list opportunities for part-time and summer employment; opportunities for internships, apprenticeships, and cooperative work programs; and opportunities for volunteer work. Pertinent clubs and organizations, as well as school-related activities and programs, should be described. Publishers are encouraged to give sufficient attention to this heading because these career-related possibilities can be acted on immediately and thus have high motivational value.

10. Related Occupations

Occupations that share similar requirements on aptitudes, interest patterns, or work environments with the occupation under consideration should be listed. In addition to its value in early exploration, this information is particularly useful to adults considering lateral occupational changes.

11. Sources of Additional Information

Reference should be made to additional sources of information such as professional or trade organizations and associations, specific books or pamphlets, journals or trade publications, audiovisual materials, and literature available from public agencies. For students, the assistance of school guidance counselors or college career counselors is recommended.

**Career and Occupational Literature
Reviewer's Rating Form—1991**

Rating: _____ Type (Code Number): _____ Setting/Population: _____

GENERAL PUBLICATION DATA:

- 1. Title: _____
- 2. Author (s): _____
- 3. Publisher name: _____
- 4. Publisher address: _____
- 5. Year of publication: _____
- 6. Number of pages: _____
- 7. Price: _____

SETTING/POPULATION(s)

- 1. Elementary Schools
- 2. Middle/Junior High Schools
- 3. High Schools
- 4. Vocational Schools
- 5. Community Colleges
- 6. Colleges/Universities
- 7. Employment/Training Programs
- 8. Rehabilitation Agencies
- 9. Correctional Institutions
- 10. Libraries
- 11. Other: _____

TYPE OF PUBLICATION:

- 1. Vocational
 - a. Occupations
 - b. Trends and Outlook
 - c. Job Training
 - d. Employment Opportunities
- 2. Educational
 - a. Status and Trends
 - b. Schools, Colleges
 - c. Scholarships, Fellowships, Grants, and Loans
- 3. Career/Personal
 - a. Planning (resume, how to look for a job, career planning, etc.)
 - b. Adjustment
 - c. Theory
 - d. Assessment (Interest, Aptitude testing, etc.)

CONTENT:

5=Outstanding 4=Good 3=Satisfactory 2=Poor 1=Unsatisfactory 0=Does not apply

- 5 4 3 2 1 0 Date of publication is indicated on material
- 5 4 3 2 1 0 Appropriate credits are given in the material
- 5 4 3 2 1 0 Information accurate, free from distortion
- 5 4 3 2 1 0 Clear, concise, interesting
- 5 4 3 2 1 0 Vocabulary appropriate to age group and occupational level
- 5 4 3 2 1 0 Intended purpose/population/use is clearly identified
- 5 4 3 2 1 0 Free of bias (racial, sexual, age, physical ability, etc.)
- 5 4 3 2 1 0 Illustrations/graphic displays are current, enhance material



5	4	3	2	1	0	Duties and nature of work (purpose, activities, skills, etc.)
5	4	3	2	1	0	Conditions of work (work setting, physical activities, environment)
5	4	3	2	1	0	Preparation required (length and kind of training)
5	4	3	2	1	0	Special requirements (license, certification, degrees, memberships, personal/social criteria, etc.)
5	4	3	2	1	0	Methods of entry (typical, preferred, any alternative means)
5	4	3	2	1	0	Earnings and other benefits (figures should be current and represent range)
5	4	3	2	1	0	Usual advancement opportunities (any requirements for advancement)
5	4	3	2	1	0	Employment outlook (current, realistic, short- and long-term)
5	4	3	2	1	0	Opportunities for experience and exploration
5	4	3	2	1	0	Related occupations indicated
5	4	3	2	1	0	Sources of education and training
5	4	3	2	1	0	Sources of additional information

The following items are applicable only when the publication is a bibliography, directory, or financial assistance publication.

Bibliography						Financial Assistance							
5	4	3	2	1	0	Publication date(s) listed	5	4	3	2	1	0	Sources of financial aid
5	4	3	2	1	0	Price(s) available	5	4	3	2	1	0	Amount of aid available
5	4	3	2	1	0	Reference to author(s)	5	4	3	2	1	0	Qualification requirements
5	4	3	2	1	0	Annotation of materials							

Directories						
5	4	3	2	1	0	Content
5	4	3	2	1	0	Format

_____ **TOTAL SCORE**

Reviewer's Overall Rating for Listing-Circle Your Choice

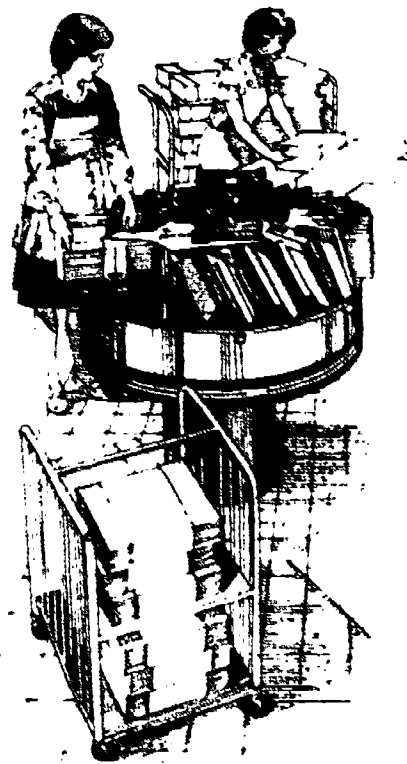
5 = Outstanding 4 = Good 3=Satisfactory 2 = Poor 1 = Unsatisfactory

COMMENTS: Recommendations and suggestions for the authors/publishers (If there is an apparent discrepancy between the total score and your evaluation, please document your evaluation decision.)

Evaluation prepared by: _____ Date: _____

Appendix J

Government Printing Offices



Government Printing Offices

Alabama

**O'Neill Building
2021 3rd Avenue North
Birmingham, AL 35203
205/731-1056**

California

**ARCO Plaza, C-Level
505 South Flower Street
Los Angeles, CA 90071
213/239-9844**

**Federal Building
Room 1023
450 Golden Gate Avenue
San Francisco, CA 94102
415/252-5334**

Colorado

**Federal Building
Room 117
1961 Stout Street
Denver, CO 80294
303/844-3964**

**World Savings Building
720 North Main Street
Pueblo, CO 81003
719/544-3142**

District of Columbia

**710 North Capitol St., NW
Washington, DC 20401
202/275-2091**

**1510 H Street, NW
Washington, DC 20005
202/653-5075**

Florida

**Federal Building
Room 158
400 West Bay Street
Jacksonville, FL 32202
904/353-0567**

Georgia

**Federal Building
275 Peachtree Street, NE
Room 100
P.O. Box 56445
Atlanta, GA 30343
404/331-6947**

Illinois

**Federal Building
Room 1365
219 South Dearborn Street
Chicago, IL 60604
312/353-5133**

Massachusetts

**Thomas P. O'Neill Federal Building
10 Causeway Street
Room 179
Boston, MA 02222
617/720-4180**

Michigan

**Federal Building
Suite 160
477 Michigan Avenue
Detroit, MI 48226
313/226-7816**

Missouri

**120 Bannister Mall
5600 East Bannister Road
Kansas City, MO 64137
816/767-8225**

New York

Federal Building
Room 110
26 Federal Plaza
New York, NY 10278
212/264-3825

Ohio

Federal Building
Room 1653
1240 East 9th Street
Cleveland, OH 44199
216/522-4922

Federal Building
Room 207
200 North High Street
Columbus, OH 43215
614/469-6956

Oregon

1305 SW First Avenue
Portland, OR 97201
503/221-6217

Pennsylvania

Robert Morris Building
100 North 17th Street
Philadelphia, PA 19103
215/597-0677

Federal Building
Room 118
1000 Liberty Avenue
Pittsburgh, PA 15222
412/644-2721

Texas

Federal Building
Room 1C50
1100 Commerce Street
Dallas, TX 75242
214/767-0076

Texas Crude Building
801 Travis Street
Houston, TX 77002
713/228-1187

Washington

Federal Building
Room 194
915 Second Avenue
Seattle, WA 98174
206/442-4270

Wisconsin

Federal Building
Room 190
517 East Wisconsin Avenue
Milwaukee, WI 53202
414/297-1304

Warehouse Outlet

8660 Cherry Lane
Laurel, MD 20707
301/953-7974

Appendix K

Sources of State and Local Job Outlook



Sources of State and Local Job Outlook Information

State and local job market and career information is available from State Employment Security Agencies and State Occupational Information Coordinating Committees (SOICC's). State Employment Security Agencies develop occupational employment projections and other job market information. SOICC's provide or help locate labor market and career information. The following list gives title, address, and telephone number of State Employment Security Agency Directors of Research. SOICC Directors are listed in Appendix B.

Alabama

Chief, Research and Statistics, Alabama Department of Industrial Relations, Industrial Relations Bldg., 649 Monroe St., Room 427, Montgomery, AL 36130. Phone: 205/261-5461.

Alaska

Chief, Research and Analysis Section, Alaska Department of Labor, P.O. Box 25501, Juneau, AK 99802-5501. Phone: 907/465-4500.

Coordinator, Alaska Department of Labor, Research and Analysis Section, P.O. Box 25501, Juneau, AK 99802-5501. Phone: 907/465-4518.

American Samoa

Program Director, American Samoa State Occupational Information Coordinating Committee, Office of Manpower Resources, American Samoa Government, Pago Pago, AS 96799. Phone: 684/633-2153.

Arizona

Research Administrator, Arizona Department of Economic Security, P.O. Box 6123, Site Code 733A, Phoenix, AZ 85005. Phone: 602/255-3616.

Arkansas

Manager, Labor Market Information - UI/BLS, Employment Security Division, P.O. Box 2981, Little Rock, AR 72203. Phone: 501/371-1541.

Executive Director, Arkansas Occupational Information Coordinating Committee, Research and Analysis Section, Arkansas Employment Security Division, P.O. Box 2981, Little Rock, AR 72203. Phone: 501/682-3159.

California

Chief, Employment Data and Research Division, Employment Development Department, P.O. Box 944216, MIC-57, Sacramento, CA 94244-2160. Phone: 916/427-4675.

Colorado

Director, Labor Market Information, Colorado Division of Labor and Employment, 1330 Fox St., Suite 801, Denver, CO 80203. Phone: 303/866-6316.

Connecticut

Acting Director, Research and Information, Employment Security Division, 200 Folly Brook Blvd., Wethersfield, CT 06109. Phone: 203/566-2120.

Delaware

Chief, Office of Occupational and Labor Market Information, Delaware Department of Labor, P.O. Box 9029, Newark, DE 19714-9029. Phone: 302/368-6962.

Executive Director, Office of Occupational and Labor Market Information, Delaware Department of Labor, University Office Plaza, P.O. Box 9029, Newark, DE 19714-9029. Phone: 302/368-6963.

District of Columbia

Chief, Labor Market Information and Analysis, District of Columbia Department of Employment Services, 500 C St. NW, Room 201, Washington, DC 20001. Phone: 202/639-1642.

Florida

Chief, Bureau of Labor Market Information,
Florida Department of Labor and Employment
Security, 2574 Seagate Dr., Room 203,
Tallahassee, FL 32399-0674. Phone: 904/488-
1048.

Georgia

Director, Labor Information Systems, Georgia
Department of Labor, 148 International Blvd.
NE, Atlanta, GA 30303. Phone: 404/656-9639.

Guam

Administrator, Department of Labor/Bureau of
Labor Statistics, Government of Guam, P.O.
Box 944216 (GMF), Tamuning, GU 96911-290.

Hawaii

Chief, Research and Statistics Office,
Department of Labor and Industrial Relations,
830 Punchbowl St., Room 304, Honolulu, HI
96813. Phone: 808/548-7639.

Idaho

Acting Chief, Research and Analysis, Idaho
Department of Employment, P.O. Box 35,
Boise, ID 83735. Phone: 208/334-2755.

Illinois

Director, Economic Information and Analysis,
Illinois Department of Employment Security,
401 South State St., 2 South, Chicago, IL
60605. Phone: 312/793-2316.

Indiana

Manager, Statistical Services, Indiana
Department of Employment and Training, 10
North Senate Ave., Indianapolis, IN 46204.
Phone: 317/232-7701.

Iowa

Chief, Audit and Analysis, Iowa Department of
Employment Services, 1000 East Grand Ave.,
Des Moines, IA 50319. Phone: 515/281-8181.

Kansas

Chief, Research and Analysis, Kansas
Department of Human Resources, 401 Topeka
Ave., Topeka, KS 66603. Phone: 913/296-5061.

Kentucky

Acting Manager, Labor Market Research and
Analysis, Department for Employment
Services, 275 East Main St., Frankfort, KY
40621-0001. Phone: 502/564-7976.

Louisiana

Director, Research and Statistics Section,
Louisiana State Department of Labor, P.O. Box
94094, Baton Rouge, LA 70804-9094. Phone:
504/342-3141.

Maine

Director, Division of Economic Analysis and
Research, Maine Department of Labor, 20
Union St., Augusta, ME 04330. Phone:
207/289-2271.

Maryland

Director, Research and Analysis Division,
Maryland Department of Employment and
Training, 1100 North Eutaw St., Baltimore,
MD 21201. Phone: 301/383-5000.

Massachusetts

Director of Research, Massachusetts Division of
Employment and Training, Charles F. Hurley
Bldg., Boston, MA 02114. Phone: 617/727-6556.

Michigan

Director, Bureau of Research and Statistics,
Michigan Employment Security Commission,
7310 Woodward Ave., Room 516, Detroit, MI
48202. Phone: 313/876-5445.

Minnesota

Director, Research and Statistics Office,
Minnesota Department of Jobs and Training,
390 North Robert St., 5th Floor, St. Paul, MN
55101. Phone: 612/296-6545.

Mississippi

Chief, Labor Market Information Division,
Mississippi Employment Security Commission,
P.O. Box 1699, Jackson, MS 39215-1699.
Phone: 601/961-7424.

Missouri

Chief, Research and Analysis, Missouri
Division of Employment Security, P.O. Box 59,
Jefferson City, MO 65104. Phone: 314/751-
3591.

K-2

Montana

Chief, Research and Analysis, Department of Labor and Industry, P.O. Box 1728, Helena, MT 59624. Phone: 406/449-2430.

Nebraska

Administrator, Labor Market Information, Nebraska Department of Labor, P.O. Box 94600, Lincoln, NE 68509-4600. Phone: 402/475-8451.

Nevada

Chief, Employment Security Research, Nevada Employment Security Department, 500 East Third St., Carson City, NV 89713. Phone: 702/885-4550.

New Hampshire

Director, Economic Analysis and Reports, New Hampshire Department of Employment Security, 32 South Main St., Concord, NH 03301. Phone: 603/224-3311.

New Jersey

Director, Division of Planning and Research, New Jersey Department of Labor, P.O. Box 2765, Trenton, NJ 08625. Phone: 609/292-2643.

New Mexico

Chief, Economic Research and Analysis, (6097), Employment Security Department, P.O. Box 1928, Albuquerque, NM 87103. Phone: 505/841-8645.

New York

Director, Division of Research and Statistics, New York Department of Labor, State Campus, Bldg. 12, Room 400, Albany, NY 12240-0020. Phone: 518/457-6181.

North Carolina

Director, Labor Market Information Division, Employment Security Commission of North Carolina, P.O. Box 25903, Raleigh, NC 27611. Phone: 919/733-2936.

North Dakota

Chief, Research and Statistics, Job Service of North Dakota, P.O. Box 1537, Bismarck, ND 58502-1537. Phone: 701/224-2825.

Ohio

Acting Director, Labor Market Information Division, Ohio Bureau of Employment Services, P.O. Box 1618, Columbus, OH 43216. Phone: 614/466-8806.

Oklahoma

Director, Research and Planning Division, Oklahoma Employment Security Commission, 2401 N. Lincoln, Room 310, Oklahoma City, OK 73105. Phone: 405/557-7105.

Oregon

Assistant Administrator, Research and Statistics, Oregon Department of Human Resources, 875 Union St. NE., Room 207, Salem, OR 97311. Phone: 503/378-3220.

Pennsylvania

Chief, Research and Statistics Division, Pennsylvania Department of Labor and Industry, Seventh and Forster Sts., Room 1216, Harrisburg, PA 17121. Phone: 717/787-3265.

Puerto Rico

Director of BLS, Department of Labor and Human Resources, Research and Analysis Division, 505 Munoz Rivera Ave., 17th Floor, Hato Rey, PR 00918. Phone: 809/754-5339.

Rhode Island

Acting Supervisor, Employment Security Research, Rhode Island Department of Employment Security, 24 Mason St., Providence, RI 02903. Phone: 401/277-3704.

South Carolina

Director, Labor Market Information Division, South Carolina Employment Security Commission, P.O. Box 995, Columbia, SC 29202. Phone: 803/758-8983.

South Dakota

Director, Labor Market Information Center, Department of Labor, P.O. Box 4730, Aberdeen, SD 57401. Phone: 605/622-2314.

Tennessee

Director, Research and Statistics Division,
Tennessee Department of Employment
Security, 500 James Robertson Pkwy., 11th
Floor, Nashville, TN 37245-1000. Phone:
615/741-2284.

Texas

Chief, Economic Research and Analysis, Texas
Employment Commission, Room 208-T, 1117
Trinity St., Austin, TX 78778. Phone: 512/463-
2616.

Utah

Director, Labor Market Information Services,
Utah Department of Employment Security,
P.O. Box 11249, Salt Lake City, UT 84147-
1249. Phone: 801/533-2014.

Vermont

Chief, Research and Analysis, Vermont
Department of Employment and Training, P.O.
Box 488, Montpelier, VT 05602-1488. Phone:
802/229-0311.

Virginia

Director, Economic Information Services,
Virginia Employment Commission, P.O. Box
1358, Richmond, VA 23211. Phone: 804/786-
5670.

Virgin Islands

Acting Director, Virgin Islands Department of
Labor, Bureau of Labor Statistics, Research
and Analysis Section, P.O. Box 3359, St.
Thomas, United States VI 00801-3359. Phone:
809/776-3700.

Washington

Director, Labor Market and Economic Analysis
Branch, Washington Employment Security
Department, 605 Woodview Dr., Olympia, WA
98503. Phone: 206/438-4804.

West Virginia

Director, Labor and Economic Research
Section, West Virginia Department of
Employment Security, 112 California Ave.,
Charleston, WV 25305. Phone: 304/348-2660.

Wisconsin

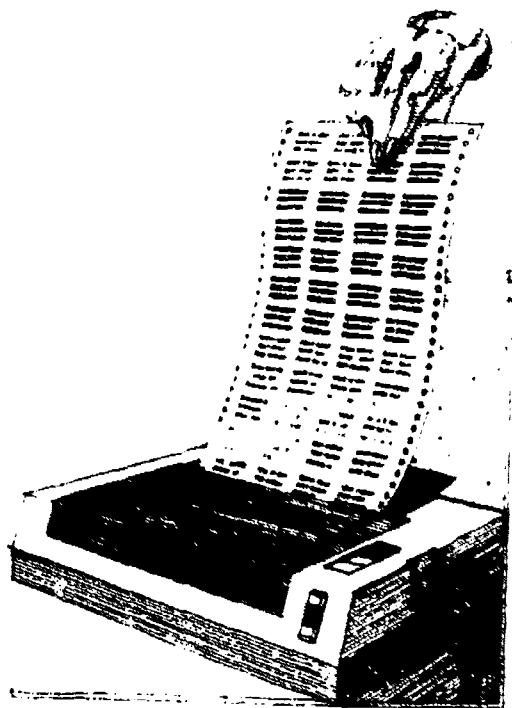
Director, Labor Market Information Bureau,
Department of Industry, Labor and Human
Relations, P.O. Box 7944, Madison, WI 53707.
Phone: 608/266-7034.

Wyoming

Chief Research and Analysis Section,
Employment Security Commission, P.O. Box
2760, Casper, WY 82602. Phone: 307/235-3646.

Appendix L

Annotated List of Selected Printed References



ANNOTATED LIST OF SELECTED PRINTED REFERENCES

This appendix consists of an annotated list of major printed references. The annotations include a brief description of the contents, some indications of possible uses, and ordering information. All references in this appendix have been mentioned in the modules.

These titles are by no means an exhaustive list of useful resources. They have been selected because they are basic tools available from the federal government.

Dictionary of Occupational Titles (DOT)

U.S. Department of Labor, Employment and Training Administration
4th Edition, 1977

Dictionary of Occupational Titles, 4th edition, Supplement 1986

The *Dictionary of Occupational Titles*, commonly called the DOT, defines and classifies approximately 20,000 occupations performed for pay or profit in the United States economy. It is the most comprehensive and probably the most well-known source of occupational descriptions. The DOT includes a detailed introduction and description of the organization of the book and the classification numbers.

The major portion of the DOT is the list of occupations according to DOT codes. With each entry there is a description of the most important characteristics of the job. There is also an alphabetic index, a glossary of technical terms, and an introduction to the concepts underlying the DOT classification structure. An appendix explains the job analysis concept of classifying worker's functions according to their involvement with data, people and things.

While the DOT contains a lot of important and useful information, it may be difficult for clients to use. It is more commonly used as a counselor reference. Because of the age of the DOT, it does not reflect the overwhelming technological changes of the past 20 years. However, it still is valuable for understanding the wide variety of occupations, the variations of particular occupations, and occupations related to given occupational titles.

The classification numbers in the DOT are commonly used by those who wish to identify a person's occupation in a precise way. The detail of the DOT allows better matching between an individual's experience and skill with a particular job opening. Each occupation defined in the DOT has been assigned a unique, nine-digit code. Occupations are grouped according to their similarities. Each of the nine digits signifies a particular characteristic of the occupation. The first three digits identify a particular occupational group. All occupations are clustered into one of nine broad categories, indicated by the first digit. The second and third digits represent subdivision of the broad category. The nine occupational categories are:

0/1	Professional, Technical, and Managerial
2	Clerical and Sales
3	Service
4	Agricultural, Fishery, Forestry, and Related
5	Processing
6	Machine Trade
7	Bench Work
8	Structural Work
9	Miscellaneous

The middle three digits are the worker functions ratings of the tasks performed in the occupation. Every job requires a worker to function to some degree in relation to data, people, and things. The fourth digit includes six functions related to data, the fifth digit eight functions related to people and the sixth digit, seven functions related to things. The lower numbers in each position represent more complex levels of work performance. The assignment of the middle three digits is made regardless of the occupational group involved.

It is through the combination of the first three digits with the second three digits that the full meaning of an occupation can be realized. The first three specify the occupational area in which the work is being done, and the second three digits express what the worker does. The last three digits indicate the alphabetical order of titles within six-digit code groups. They serve to differentiate a particular occupation from all others. A number of occupations may have the same first six digits; no two can have the same nine digits.

The 1986 DOT Supplement provides descriptions of additional occupations and does reflect some of the changing technology in the world of work.

Order from: Superintendent of Documents
U.S. Government Printing Office
Washington, DC 20402
(202) 783-3238

4th edition:

Stock number: 029-013-00079-9

Cost: \$23.00

Each edition supplement:

Stock number: unknown

Cost: unknown

Selected Characteristics of Occupations Defined in the Dictionary of Occupational Titles
U.S. Department of Labor, Employment and Training Administration
1981

Selected Characteristics provides an expanded interpretation of significant job characteristics for a wide range of occupations requiring similar capabilities. Supplementary information on training time (including mathematical and language development and specific vocational preparation), physical demands, and environmental (or working) conditions are listed for each job defined in the DOT. While some users may find the job characteristics in this resource outdated, it is still the only source for this kind of information.

Information presented in the supplement is arranged in two parts. Part A includes the titles arranged by the *Guide for Occupational Exploration* (GOE) work groups and physical demands. Part B is an index of titles by DOT code. The unique feature of Part A is the grouping of occupations according to similarity of physical demands requirements. For example, all jobs that are sedentary (within a work group) are listed together.

Order from: Superintendent of Documents
U.S. Government Printing Office
Washington, DC 20402
(202) 783-3238

Stock number: 1980 0-3010746
Cost: \$11.50

Guide for Occupational Exploration

The ***Guide for Occupational Exploration (GOE)*** is designed to give job seekers information about fields of work that match their own interests and abilities. The GOE organizes occupations into 12 interest areas, 66 work groups, and 348 sub groups. The interest areas represent the broad interest requirements of occupations. They are:

- 01 Artistic
- 02 Scientific
- 03 Plants and Animals
- 04 Protective
- 05 Mechanical
- 06 Industrial
- 07 Business Detail
- 08 Selling
- 09 Accommodating (e.g. services)
- 10 Humanitarian
- 11 Leading-influencing
- 12 Physical-performing

Descriptions are provided for each of the 66 work groups. Each description contains a general overview of the occupational area and narratives related to the following questions:

- What kind of work would you do?
- What skills and abilities do you need for this kind of work?
- How do you know if you would like or could learn to do this kind of work?
- How can you prepare for and enter this kind of work?
- What else should you consider about these jobs?

The final section of each work group lists the DOT codes that are covered in the description. The second half of the GOE contains several appendices. Appendix B discusses the related use of U.S. Employment Service interest and aptitude tests. Appendix C presents suggestions for using the Guide in organizing occupational information. Appendix D presents an alphabetical arrangement of the occupations, with related DOT and GOE code numbers.

The GOE also contains an explanation of how the guide might be used in career exploration.

Order from: Superintendent of Documents
U.S. Government Printing Office
Washington, DC 20402
(202) 783-3238

Stock number: 029-013-00080-2
Cost: \$12.00

Standard Occupational Classification Manual

U.S. Department of Commerce, Office of Federal Statistical Policy and Standards
1980

The ***Standard Occupational Classification (SOC) Manual*** was developed to standardize the list of occupations for which statistical information is collected. While the DOT may be the most complete list of occupations, it is too large for data collection purposes. The SOC Manual provides a common structure of occupations, coding all occupations in which work is performed for pay or profit, including work performed by unpaid family workers. Each title includes a list of DOT (4th edition) titles which are descriptive of the group.

The SOC is structured on a four-level system: division, major group, minor group, and unit group. There are 22 broad occupational divisions. Within the broadest classifications, there are 64 major groups, and then specific occupations. Each level represents groupings in successively finer detail.

The broad occupational divisions are:

- Executive, Administrative and Managerial Occupations
- Engineers, Surveyors, and Architects
- Natural Scientists and Mathematicians
- Social Scientists, Social Workers, Religious Workers and Lawyers
- Teachers, Librarians, and Counselors
- Health Diagnosing and Treating Practitioners
- Registered Nurses, Pharmacists, Dietitians, Therapists, and Physician's Assistants
- Writers, Artists, Entertainers, and Athletes
- Technologists and Technicians, except Health
- Marketing and Sales Occupations
- Administrative Support Occupations, including Clerical
- Service Occupations
- Agricultural, Forestry and Fishing Occupations
- Mechanics and Repairers
- Construction and Extractive Occupations
- Precision Production Occupations
- Production Working Occupations
- Transportation and Material Moving Occupations
- Handlers, Equipment Cleaners, Helpers, and Laborers
- Military Occupations
- Miscellaneous Occupations

Since the publication of the SOC, agencies have modified the basic SOC structure to suit their own purposes. The variations of the SOC organization retain the basic division and major group structure of the SOC. Two significant variations are the occupational classification scheme used by the Bureau of the Census and the Bureau of Labor Statistics for the Occupational Employment

Statistics Program.

**Order from: Superintendent of Documents
U.S. Government Printing Office
Washington, DC 20402
(202) 783-3238**

**Stock number: 0-332-946
Cost: \$30.00**

***Standard Industrial Classification Manual*
U.S. Executive Office of the President
Office of Management and Budget
1987**

All economic enterprises in the United States are classified by their major product of service. The *Standard Industrial Classification (SIC) Manual* contains this classification scheme. It covers the entire field of economic activities:

- **Agriculture, Forestry, Fishing, Hunting, and Trapping;**
- **Mining;**
- **Construction;**
- **Manufacturing;**
- **Transportation, Communication, Electric, Gas and Sanitary Service;**
- **Wholesale Trade, Retail Trade;**
- **Finance, Insurance, and Real Estate;**
- **Personal, Business, Repair, and Other Services;**
- **and Public Administration.**

This classification system was developed almost 50 years ago. Since that time, all statistical information about industries has been organized according to the SIC scheme.

The classification system includes ten major divisions, with major groups (two-digit), groups (three-digit) and particular industries (four-digit). Each level is more detailed than the previous.

The SIC Manual has been revised several times to reflect the changing nature of U.S. industry and to include the new kinds of industries appearing on the scene.

**Order from: Superintendent of Documents
U.S. Government Printing Office
Washington, DC 20402
(202) 783-3238**

**Stock number: 041-001-00314-2
Cost: \$24.00**

***A Classification of Instructional Programs*
U.S. Department of Education
National Center for Education Statistics
1985**

In the Classification of Instructional Programs (CIP) instructional programs at elementary, secondary and postsecondary levels are classified into 31 programs. Within these program categories, there are 50 sub categories, and then specific instructional programs. This classification scheme is designed for collecting, reporting and interpreting data about instructional programs.

The CIP, published in 1981 and revised in 1985, attempts to address some of the problems that were found in collecting, reporting, and analyzing information about instructional programs. These problems were due mostly to the lack of a comprehensive and up-to-date classification system with definitions for describing instructional programs. There were five major design criteria used in the development of CIP:

- **Distinctions among programs were made on the basis of program purposes or objectives.**
- **The classification applies to all instructional programs without regard to institutional types.**
- **The classification applies to programs at all educational levels: elementary, secondary, and postsecondary.**
- **For the purpose of continuity, ties to existing taxonomies are maintained as long as they do not contradict other established criteria.**
- **The classification reflects the historical traditions of various instructional program areas.**

CIP is built on a three-level hierarchical system. It consists of six digits that permit aggregation of comparable programs at varying levels of detail, from the broad two-digit program category level through an intermediate four-digit level to the most detailed six-digit program level. CIP was designed to be exhaustive and to avoid duplication among the categories. In cases where a program has historically been classified in two places, a cross-reference has been provided from one two-digit grouping to another. However, all program titles will have a single unique code derived from a single area.

The 1985 revision to the CIP was designed to eliminate classifications for programs with relatively few completers. Consequently, the revision frequently consisted of the combination of several detailed codes into one more general program classification. A number of programs were eliminated entirely.

**Order from: Superintendent of Documents
U.S. Government Printing Office
Washington, DC 20402
(202) 783-3238**

**Stock number: 069-000-000-88-1 (1981 edition)
Cost: unknown**

1990 Census of Population and Housing U.S. Bureau of the Census

The Decennial Census is a complete count of the population of the United States and its territories. The census is a survey of households. It has been taken every ten years since 1790. Recent censuses have collected data about characteristics such as age, sex, race, and marital status for 100% of the population. Detailed information, collected from a sample of the population includes labor force status, occupation, industry, education, income, poverty status, ancestry, primary language and numbers of children.

Data from the 1990 census will become available over a period of time from 1991 to 1993. These data will be available in several formats including published reports, CD-ROM, and computer tapes. There will also be numerous articles and reports available that describe and analyze the data in each state.

Below is a list of the planned printed reports and the projected release dates.

Occupational Outlook Handbook
U.S. Bureau of Labor Statistics
Biennial

The ***Occupational Outlook Handbook (OOH)*** provides an overview of about 200 occupations, clustered into 19 broader occupational groupings using the Standard Occupational Classification structure. Occupational descriptions include the nature of the work, training and other qualifications, employment outlook, earnings and working conditions, and sources of additional information. The information is based on data from a variety of sources, including business firms, trade associations, labor unions, professional societies, educational institutions, and government agencies.

An introductory chapter contains information for using and interpreting data in the OOH. Another section provides suggestions on how and where to obtain additional information about particular occupations. Another introductory section titled "Tomorrow's Jobs" describes the impact that population structure and regional differences will have on the labor force throughout the 1990s.

This is one of the best sources of information for those who are trying to make a career choice. Many occupational fields are covered and information for related occupations is clustered together, so users can easily investigate a number of occupations with similar characteristics.

Information in the OOH reflects nationwide trends, however the outlook and earnings information is likely to vary from one area to another. Users should pay particular attention to localizing the information, using wage reports from their particular state, or using the Career Information Delivery System in their state.

The OOH is published every two years in both hard cover and paper binding.

Order from: Superintendent of Documents
U.S. Government Printing Office
Washington, DC 20402
(202) 783-3238

Hard Cover

Cost: \$22.00

Stock Number: 029-001-03021-5

Paperback

Cost: \$17.00

Stock Number: 029-001-03022-3

Occupational Outlook Quarterly
U.S. Bureau of Labor Statistics
Quarterly

L-7

The *Occupational Outlook Quarterly* (OOQ) helps readers keep abreast of current occupational developments between editions of the *Occupational Outlook Handbook*. It provides updated, timely information. There is a wide range of articles in the OOQ, useful for both counselors, students and clients. The articles are written in an easy to read style and graphs and illustrations help present the story.

Easy to understand summaries of national projections are included periodically. A regular article every two years, "The Job Outlook in Brief", summarizes new information in the *Occupational Outlook Handbook*.

**Order from: Superintendent of Documents
U.S. Government Printing Office
Washington, DC 20402
(202) 783-3238
or
Regional Government Printing Office Bookstore

Cost: \$6.50/year**

***Occupational Projections and Training Data*
U.S. Bureau of Labor Statistics, Biennial**

***Occupational Projections and Training Data* is published biennially as a companion to the *Occupational Outlook Handbook* (OOH). This supplement contains the statistics and technical data that underlie the occupational descriptions in the OOH. It focuses on the information needs of education planning officials, although there is data and analysis that may interest counselors, students and clients.**

This report contains statistics on current and projected occupational employment and on completers of institutional education and training programs. There are also occupational data on worker characteristics: the percent who are wage and salary workers, the percent who left specific occupations, and the percent of workers who are part-time, female, black and Hispanic. Age and industry distribution are also presented.

**Order from: Superintendent of Documents
U.S. Government Printing Office
Washington, DC 20402
(202) 783-3238
or
Regional Government Printing Office Bookstore

Cost: \$5.00
Stock Number: 029-001-03053-3**

Military Career Guide, 1988-89, Employment and Training Opportunities in the Military
U.S. Department of Defense
1987

The *Military Career Guide* is a compendium of military occupational and training information designed to explore military careers. It is a single reference source for the diverse employment and training opportunities in the Army, Navy, Air Force, Marine Corps, and Coast Guard.

The book is divided into two major sections. The first section contains descriptions of 134 enlisted military occupations and provides information regarding the aptitudes needed for each. Persons who have taken the Armed Services Vocational Aptitude Battery (ASVAB) can use their scores to determine their chances of qualifying for these military occupations. The second section contains descriptions of 71 military officer occupations. The officer information is new to the 1988-89 edition. It was added in response to requests from educators after the 1985 edition.

Over 75% of all military occupations have counterparts in the civilian world of work. For example, dental hygienist, air traffic controller, computer programmer, aircraft mechanic, and electronic technician occupations exist in both the military and civilian work forces. An index of titles also gives a code number from the *Dictionary of Occupational Titles*. The occupations in each section are grouped in broad occupational groups. The Table of Contents will help locate a specific occupational title or group of related occupations. Copies of the *Military Career Guide* are available from military recruiters, high school counselors, and local libraries.

Order from: U.S. Military Entrance Processing Command
2500 Green Bay Road
North Chicago, IL 60064
Hotline: 1-800-323-0513
Within Illinois, call collect: 708-688-4922

Military Career Paths: Career Progression Patterns for Selected Occupations from the Military Career Guide
U.S. Department of Defense, 1990

The purpose of *Military Career Paths* is to describe the typical duties and assignments a person could expect when advancing along the path of a 20 year military career. While the *Military Career Guide* presents an overview of the typical job duties in a military occupation, this volume presents a more comprehensive description of work performed at various stages of a military career.

In total, the career paths of 25 enlisted and 13 officer occupations are described. Each occupation contains important career information, such as requirements for career advancement, training, typical job duties, and levels of advancement. One of the most interesting features is a "career profile" that summarizes the career progression of an actual service member in the particular occupation. Each profile details the places of assignment and duties the service member performed over his/her career.

**Order from: U.S. Military Entrance Processing Command
2500 Green Bay Road
North Chicago, IL 60064**

**Hotline: 1-800-323-0513
Within Illinois, call collect: 708-688-4922**

Occupational Information Systems

State Occupational Information Coordinating Committees

Occupational Information Systems (OIS) are computerized databases of labor market and occupational information that contain mechanisms for combining data from multiple sources. The systems are designed to meet the occupational information needs of vocational education, economic development, and employment and training programs. OIS systems can also help counselors pinpoint information about particular occupations.

OIS databases in the various states contain much of the same kinds of information. Each state may, however, include additional data to meet particular needs and interests of users in that state.

OIS databases contain extensive state and locally specific labor market information, including the current and projected demand for workers by occupation and information on the current supply of graduates of related training programs. There is also information on educational requirements, average wages, percent of females in that occupation and possible employers in the area.

Information developed from the data can identify major changes and trends in local and state labor markets. A careful analysis of the data can help identify current and potential shortages and surpluses of workers in specific occupations in a given place. The data can also help identify potential trouble spots in the performance of programs and the related labor market conditions that may be causing them. The program includes information on new and emerging occupations as well.

OIS databases are designed for use on a personal computer. Many states do publish information from the system, making the data more easily available to libraries, teachers, counselors, and job placement personnel.

**Order from: Contact your state's Occupational Information Coordinating Committee
(See Appendix B)**

Outlook 2000

**U.S. Bureau of Labor Statistics
1990**

Outlook 2000 presents revised Bureau of Labor Statistics employment projections for the year 2000. Three alternative growth patterns provide estimates of overall and sector economic growth with consistent industry and occupational employment projections.

Part I consists of five articles reprinted from the November 1990s issues of the *Monthly Labor Review*. These articles explore the labor force of the 1990s, the structure of the economy, industry output and employment, occupational employment, emerging issues, and a summary. Part II provides a brief review of the methodology behind the projections. Part III presents the assumptions underlying the specific industry and occupational employment estimates.

These projections are the latest product of a program begun more than 25 years ago to study alternative growth combinations and their effects on employment by industry and occupation. Previous economic and employment projections in the series have been published for the years 1970, 1975, 1980, 1985, and 2000. Less comprehensive projections have been made for a somewhat longer period.

The articles in this bulletin are written so that counselors, job placement personnel, and interested clients can understand the population and employment trends in the United States economy. The statistics of occupational employment are roughly comparable with projections of occupational employment published by individual states.

**Order from: Superintendent of Documents
U.S. Government Printing Office
Washington, DC 20402
(202) 783-3238
or
Regional Government Printing Office Bookstore**

Cost: \$7.50

Appendix M

Overview of Equal Opportunity Legislation



OVERVIEW OF EQUAL OPPORTUNITY LEGISLATION

Equal Pay Act of 1963

This act, the first piece of federal legislation forbidding sex discrimination in employment, is an extension of the Fair Labor Standards Act. It was designed to prevent sex discrimination in the payment of wages. The act essentially provides for equal pay for equal work; however, the definition of equal work is left with the courts.

Title VI of the Civil Rights Act of 1964

Title VI of the Civil Rights Act prohibits discrimination against students on the grounds of race, color or national origin in programs receiving federal funds. Title VI and related case law prohibits discrimination on the basis of race in student admissions, access to courses and programs, and student policies and their application. They also require the provision of bilingual instruction or some other method of compensating for students of limited English speaking ability. Any institution or agency receiving federal funds is covered by Title VI. Most education activities of the recipient agency or instruction are covered, even some activities or programs not in direct receipt of federal funds. Title VI is enforced by the Office of Civil Rights of the U.S. Department of Health, Education and Welfare.

Title VII of the Civil Rights Act of 1964

This act makes it illegal for private employers, labor unions, employment agencies, state and local governments, and employees of educational institutions to discriminate on the basis of race, color, religion, sex, or national origin. It is unlawful to discriminate in:

- recruitment, hiring, firing, layoff, recall
- wages, conditions or privileges of employment
- classification, assignment or promotion
- use of facilities
- apprenticeship training or retraining
- application of referral procedures
- sick leave and pay
- overtime work and pay
- insurance coverage
- retirement privileges
- printing, publishing, or circulating advertisement relating to employment
- promotion opportunities

Harassment on basis of sex is a violation of Title VII (guidelines issued, November 10, 1980)

OVERVIEW (continued)

Executive Order 11246

This order prohibits employment discrimination based on sex, as well as on race, color, religion, or national origin, by federal contractors or subcontractors. The order covers employers with a federal contract of more than \$10,000 and does not exempt specific kinds of employment or employees. Unlawful practices include discrimination in recruiting or recruitment advertising; hiring, upgrading, demotion, or transfer; layoff or termination; rates of pay or other compensation; and selection for training, including apprenticeship. Regulations have been ordered which required hiring women in all construction craft jobs--3.1% of the work crews in each craft by 1979, 5% by 1980, and 6.9% by 1981. Companies and unions which run federally registered apprenticeship programs in these crafts have to enroll women at the rate equal to half their percentage of the general work force in any area--about 20% for most entering classes.

Revised Order No. 4

This order requires contractors with 50 or more employees and a contract of \$50,000 or more to take affirmative action in the employment of minorities in job categories where they have been underutilized. The order requires similar goals and timetables for women as well as minorities. In brief, the order requires affirmative action programs to have the following: (1) A self-analysis of deficiencies in compliance, (2) corrective action to remedy deficiencies, (3) goals and timetables where numbers/percentages are relevant to correct situation, (4) development or reaffirmation of an equal opportunity policy, (5) dissemination of policy throughout community, (6) report system to measure program effectiveness, and (7) a procedure for getting support from local groups to improve employment opportunities for minorities and women.

Titles VII and VIII of the Public Health Services Act

These titles forbid schools and training programs in the health profession from discriminating against students on the basis of sex. The only schools and training programs affected are those receiving financial assistance under the Public Health Services Act. Teachers and employers who work with students covered by this Act are also covered.

Title VII of the Civil Rights Act of 1964

As amended by the Equal Employment Opportunity Act of 1972, this title prohibits discrimination in the employment of personnel on the basis of race, color, religion, national origin, or sex. All institutions or agencies with 15 or more employees including state and local governments and labor organizations are covered under the Act. Title VII prohibits discriminatory practices in most terms and conditions of employment.

Equal Pay Act of 1963, Amended by the Education Amendments of 1972

This amendment prohibits sex discrimination in salaries and fringe benefits. It covers all employees of educational institutions--professional, executive, and administrative positions.

OVERVIEW (continued)

Title IX

In 1972, Congress enacted Title IX of the Education Amendments Act, which prohibits discrimination on the basis of sex in any education program or activity receiving federal financial assistance. Title IX states: "No person in the United States shall on the basis of sex be excluded from participation in, be denied the benefits of or be subjected to discrimination under any education program or activity receiving Federal financial assistance. . ."

The Title IX regulations were issued after much delay on June 4, 1975. The regulations state that with certain exceptions, the law bars sex discrimination in any academic, extracurricular, research, vocational or other educational program (pre-school to post-graduate) operated by an organization or agency that receives or benefits from federal aid.

The exceptions included: U.S. military schools, although such schools began admitting women in 1976, religious schools, Girl Scouts and Boy Scouts, YMCA/YWCA, and other single-sex youth service organizations, social fraternities and sororities, Boys State/Girls State, and father-son and mother-daughter activities.

The regulations are divided into six categories: general provisions, coverage, admissions, treatment of significant implications for recruitment, facilities, financial aid, student rules, counseling programs, housing rules, health care and insurance benefits, scholarships and other recognition activities, marital and parental status of students, student employment, athletics and other extracurricular activities, course content, sexual harassment, single-sex courses, and school district provision of significant assistance to any organization, agency or individual that discriminates on the basis of sex. The regulation does not require or abridge the use of the particular textbooks or curriculum materials.

By July 21, 1976, educational institutions were to comply with the following procedural requirement of Title IX. Educational institutions were to 1) appoint a Title IX Coordinator to monitor compliance and to handle grievances; 2) adopt and publish a grievance procedure for prompt and equitable resolution of complaints; 3) annually provide notice of the districts compliance with Title IX to students, parents, employees, job applicants, unions, and other professional associations; 4) provide a public notice of compliance with Title IX in a local newspaper; 5) conduct a self-evaluation to determine where the districts' policies or practices might constitute sex discrimination and to set forth remedial steps to eliminate the affects of sex discrimination within a three-year period; and 6) to file an assurance of compliance with the U.S. Office for Civil Rights.

When Title IX was enacted, it contained employment-related protections for employees of educational institutions that were not yet covered by Title VII or state law, especially in the area of pregnancy and marital or parental status. Prior, to Title IX's passage, it was common practice to: pay female teachers less than male teachers because males were presumed to be the head of a household; to pay female coaches less than male coaches; and to require pregnant teachers to leave the classroom immediately. Title IX requires that school districts have a grievance procedure for employees to use if they have a complaint of discrimination, and requires that employees and applicants for employment be informed that the school district does not discriminate on the basis of sex

OVERVIEW (continued)

in employment. Between 1979 and 1982, three separate federal district courts ruled that Title IX protected students only, not employees, from sex discrimination. During that period of time, the Office for Civil Rights did not accept or investigate complaints of employment discrimination under Title IX. In May of 1982, the Supreme Court ruled in *North Haven Board of Education vs. Bell* to uphold the validity of Subpart E (Employment) of the Title IX regulations.

Women's Educational Equity Act of 1974

Designed as part of the Education Amendments of 1974, this Act was passed to provide educational equity for women in the United States. Under this Act, the Commissioner is authorized to give grants to or to enter into contracts with agencies, organizations, or individuals for activities designed to carry out the purposes of the law at all levels of education--preschool, elementary/secondary, higher education, and adult education. Activities included are the development, evaluation, and dissemination of curriculum, textbooks, and other materials concerning educational equity; preservice and inservice training for personnel with special emphasis on programs to provide education equity; research and development activities designed to advance educational equity; guidance and counseling designed to assure educational equity, etc.

Nothing in this law prohibits men from participating in any programs or activities. The act establishes in the U.S. Office of Education an Advisory Council on Women's Educational Programs composed of 17 people appointed by the President--by and with the advice and consent of the Senate. The Act is administered by the Women's Program Staff, Office of the Commissioner, U.S. Office of Education.

Section 504 of the 1973 Rehabilitation Act

Section 504 prohibits discrimination on the basis of handicap in employment and programming by all recipients of federal financial assistance. Section 504 is enforced by the Office of Civil Rights.

Age Discrimination in Employment Act of 1967

The Age Discrimination in Employment Act of 1967 prohibits employment discrimination against persons between the ages of 40 and 65; on January 1, 1979, the act was extended to protect persons between the ages of 40 and 70. The Act prohibits discrimination in hiring, discharge, compensation, terms, conditions or privileges of employment. The Act prohibits mandatory retirement prior to the age of 70. The Age Discrimination in Employment Act is enforced by the EEOC.

Age Discrimination Act of 1975

The Age Discrimination Act of 1975 prohibits unreasonable discrimination on the basis of age in programs or activities receiving Federal financial assistance. This Act will protect all students in community colleges, technical schools, and universities, from discrimination on the basis of age. The Act does not define age to limit coverage to any

OVERVIEW (continued)

particular group; it simply prohibits discrimination on the basis of age at any age, as long as that discrimination is "unreasonable." Employment is not covered by the Act, other than employment funded by the Comprehensive Employment Training Act (CETA).

Title VII (Section 799A) and Title VIII (Section 845) of the Public Health Service Act as Amended by the Comprehensive Health Manpower Training Act and the Nurse Training Amendment Act of 1971

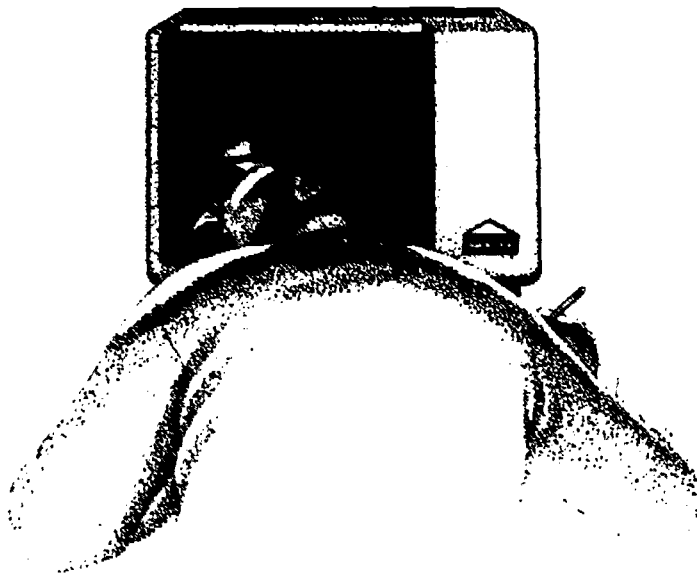
Title VII and VIII of the Public Health Service Act states that institutions receiving federal funds for their health personnel training programs may not discriminate on the basis of sex in admissions or in employment practices related to employees working directly with applicants or students. Every institution receiving or benefiting from a grant, loan guarantee, or interest subsidy to its health personnel training programs or receiving a contract under Title VII or VIII is covered. Title VII and VIII are enforced by the Office of Civil Rights.

Carl D. Perkins Vocational Education Act of 1984

The Carl D. Perkins Vocational Education Act of 1984 and its predecessor the Vocational Education Act (VEA) of 1976, represent the most comprehensive effort to date to infuse sex equity into an educational program by requiring positive action to end bias and stereotyping as well as ensuring nondiscrimination. The provisions of the Vocational Education Act of 1976 required for the first time that each state hire at least one full-time staff person to coordinate and infuse sex equity throughout the vocational education system. The law required states to provide incentives to local districts to encourage nontraditional enrollments and to begin to establish programs for special target populations, such as displaced homemakers. The law required that advisory councils have a fair representation of females, males, minorities and the disabled. The Carl Perkins Act retained and expanded upon the key sex equity provisions of the 1976 Act. States are required to assign one person full time responsibility for fulfilling seven mandated functions. The Act provides two set-asides within the basic state grant; one for Single Parents and Homemakers (8.5% of the basic grant), and the other for Young Women and Sex Equity Programs (3.5% of the basic grant). Local school or vocational districts apply for these funds on an annual basis to implement programs for vocational education students. The intended long-term outcome of these programs is to provide greater economic self-sufficiency for girls and women.

Appendix N

Labor Market Information Directors



Douglas Dyer, Director Labor Market Information Department of Industrial Relations 649 Monroe Street, Rm. 422 Montgomery, AL 36130	205/242-8855 FAX: 205/240-3070	Jim Adams, Chief Research & Analysis Department of Employment 317 Main Street Boise, ID 83735	208/334-6169 FAX: 208/334-6427
Chuck Caldwell, Chief Research & Analysis Department of Labor P.O. Box 25501 Juneau, AK 99802-5501	907/465-4500 FAX: 907/465-2101	Henry Jackson, Director Economic Information & Analysis Dept. of Employment Security 401 South State St., 2 South Chicago, IL 60605	312/793-2316 FAX: 312/793-6245
Dan Anderson Research Administrator Dept. of Economic Security 1789 West Jefferson P.O. Box 6123, Site Code 733A Phoenix, AZ 85005	602/542-3871 FAX: 602/542-6474	Kath Kunza, Director Labor Market Information IN Dept. of Employ. & Training Se. ices 10 North Senate Avenue Indianapolis, IN 46204	317/232-8456 FAX: 317/232-6950
Coy Cozart State and Labor Market Information Employment Security Division P.O. Box 2961 Little Rock, AR 72203	501/682-1543 FAX: 501/682-3713	Stephen C. Smith, Supervisor Audit & Analysis Department Department of Employment Services 1000 East Grand Avenue Des Moines, IA 50319	515/281-8181 FAX: 515/242-6301
Jeanne Barnett, Chief Employment Data & Research Div. Employment Development Dept. P.O. Box 942880, MIC 57 Sacramento, CA 94280-0001	916/427-4675 FAX: 916/323-6674	William Lyles, Chief Labor Market Information Services Department of Human Resources 401 Topeka Avenue Topeka, KS 66603	913/296-5058 FAX: 913/296-0179
William LaGrange, Director Labor Market Information Chancey Building, 8th Floor 1120 Lincoln Street Denver, CO 80203	303/894-2569 FAX: 303/960-9167	Ed Blackwell, Manager Labor Market Research & Analysis Department for Employment Services 275 E. Main Street Frankfort, KY 40621	502/564-7976 FAX: 502/564-7452
Richard Vannuccini, Director Research & Information Employment Security Division CT Labor Department 200 Folly Brook Boulevard Wethersfield, CT 06109	203/566-2120 FAX: 203/566-1519	Oliver Robinson, Director Research & Statistics Division Department of Employment & Training P.O. Box 94094 Baton Rouge, LA 70804-9094	504/342-3141 FAX: 504/342-9193
James McFadden, Chief Office of Occupational & LMI Delaware Department of Labor University Plaza, Building D P. O. Box 9029 Newark, DE 19702-9029	302/368-6962 FAX: 302/368-6748	Raymond A. Fongemie, Director Div. of Econo. Analysis & Research Bureau of Employment Security 20 Union Street Augusta, ME 04330	207/289-2271 FAX: 207/289-5292
Richard (Dick) Groner Chief of Labor Market Information Dept. of Employment Services 500 C Street, N.W., Rm. 201 Washington, D.C. 20001	202/639-1642 FAX: 202/639-1765	Pat Arnold, Director Dept. of Economic & Employ. Develop. Dept. of Economic & Employ. Develop. 1100 North Eutaw Street Baltimore, MD 21201	301/333-5000 FAX: 301/333-7121
Rebecca Rust, Chief Bureau of Labor Market Information Dept. of Labor & Employment Sec. 2012 Capitol Circle, SE, Room 200 Hartman Building Tallahassee, FL 32399-0674	904/488-1048 FAX: 904/488-2556	Rena Kottcamp, Director Research Division of Employment Security 19 Stanford Street, 2nd Floor Boston, MA 02114	617/727-6868 FAX: 617/727-0315
Milton L. Martin, Director Labor Information Systems Georgia Department of Labor 223 Courtland Street, N.E. Atlanta, GA 30303	404/656-3177 FAX: 404/651-9568	Von Logan, Director Bureau of Research & Statistics Employment Security Commission 7310 Woodward Avenue Detroit, MI 48202	313/878-5445 FAX: 313/878-5244
Frederick Pang, Chief Research & Statistics Office Dept. of Labor & Industrial Rel. 630 Punchbowl St., Rm. 304 Honolulu, HI 96813	808/548-7639 FAX: 808/548-1224	Mad Chottepanda, Director Research & Statistical Services Department of Jobs and Training 390 N. Robert St., 5th Floor St. Paul, MN 55101	612/296-6546 FAX: 612/296-0994
		Ralford G. Crews, Chief Labor Market Information, Dept. Employment Security Commission P.O. Box 1699 Jackson, MS 39215-1699	601/961-7424 FAX: 601/961-7405

Tom Righthouse, Chief Research & Analysis Division of Employment Security P.O. Box 59 Jefferson City, MO 65104	314/751-3591 FAX: 314/751-7973	Carl Thomas, Director Research & Statistics Division 1216 Labor & Industry Building Harrisburg, PA 17121	717/767-3265 FAX: 717/772-2169
Bob Rafferty, Chief Research & Analysis Dept. of Labor and Industry P.O. Box 1729 Helena, MT 59624	406/444-2430 FAX: 406/444-2639	Agapito Villegas, Director Research & Statistics Division Dept. of Labor & Human Resources 505 Munoz Rivera Ave., 15th Flr. Hato Rey, PR 00918	809/754-5385 FAX: None
Wendell Olson Research Administrator Labor Market Information Department of Labor 590 S. 16th Street—P.O. Box 94600 Lincoln, NE 68509-4600	402/471-9964 FAX: 402/471-2318	Robert Langlais, Administrator Labor Market Information & Management Services Dept. of Employment & Training 101 Friendship Street Providence, RI 02903-3740	401/277-3730 FAX: 401/277-2731
James S. Hanna, Chief Employment Security Research Employment Security Department 500 East Third Street Carson City, NV 89713	702/687-4550 FAX: 702/687-3424	David Laird, Director Labor Market Information Employment Security Commission P.O. Box 995 Columbia, SC 29202	803/737-2660 FAX: 803/737-2642
George Nazer, Director Labor Market Information Department of Employment Security 32 South Main Street Concord, NH 03301-4587	603/228-4123 FAX: 603/228-4172	Mary Sue Vickers, Director Labor Market Information Center Department of Labor P.O. Box 4730 Aberdeen, SD 57402-4730	605/622-2314 FAX: 605/622-2322
Arthur J. O'Neal Assistant Commissioner Policy & Planning Department of Labor John Fitch Plaza, Rm. 1010 Trenton, NJ 08625	609/292-2643 FAX: 609/292-6692	Joe S. Cummings, Director Research & Statistics Division Department of Employment Security Cordell Hull Office Bldg., Rm. 519 438 6th Avenue, North Nashville, TN 37245-1000	615/741-2284 FAX: 615/741-3203
Larry Blackwell, Chief Economic Research & Analysis Bureau Department of Labor P.O. Box 1928 Albuquerque, NM 87103	505/841-8645 FAX: 505/841-8421	Mark Hughes, Director Economic Research & Analysis Texas Employment Commission 15th & Congress Ave., Room 208T Austin, TX 78778	512/463-2616 FAX: 512/475-1241
Jeremy P. Schrauf, Director Division of Research & Statistics NY State Department of Labor State Campus, Bldg. 12, Rm. 400 Albany, NY 12240-0020	518/457-6181 FAX: 518/457-0620	Bill Horner, Director Labor Market Information and Research Department of Employment Security 174 Social Hall Avenue P.O. Box 11249 Salt Lake City, UT 84147	801/533-2014 FAX: 801/533-2466
Gregory B. Sampson, Director Labor Market Information Div. Employment Security Commission P.O. Box 25903 Raleigh, NC 27611	919/733-2936 FAX: 919/733-8662	Robert Ware, Director Policy and Information VT Dept. of Employment & Trng. 6 Green Mountain Drive P.O. Box 488 Montpelier, VT 05602	802/229-0311 FAX: 802/223-0750
Tom Pederson, Chief Labor Market Information Job Service North Dakota P.O. Box 1537 Bismarck, ND 58502	701/224-2868 FAX: 701/224-4000	Dolores A. Esser, Director Economic Information Services Div. Virginia Employment Commission P.O. Box 1358 Richmond, VA 23211	804/786-7496 FAX: 804/225-3923
Keth Ewald Labor Market Information Div. Bureau of Employment Services 145 South Front Street Columbus, OH 43215	614/644-2689 FAX: 614/481-8543	Annie I. Smith, Chief Research & Analysis Department of Labor P.O. Box 3159 St. Thomas, VI 00801	809/776-3700 FAX: 809/774-5908
Bernice Street, Chief Research & Planning Division Employment Security Commission 308 Will Rogers Memorial Office Bldg. Oklahoma City, OK 73105	405/557-7116 FAX: 405/557-7258	Gary Bodeutsch, Director Labor Market & Economic Analysis Employment Security Department 212 Maple Park, Mail Stop KG-11 Olympia, WA 98504-5311	206/438-4804 FAX: 206/438-4846
Vilena Crosley Assistant Administrator for Research & Statistics Oregon Employment Division 875 Union Street, N.E. Salem, OR 97311	503/378-3220 FAX: 503/3737460		

Edward F. Menfield 304/348-2660
Assistant Director
Labor & Economic Research FAX: 304/348-0301
Bureau of Employment Programs
112 California Avenue
Charleston, WV 25305-0112

Hartley J. Jackson, Director 608/265-5843
Labor Market Information Bureau
Dept. of Industry, Labor & Human FAX: 608/267-0330
Relations
P.O. Box 7944
Madison, WI 53707

Tom Gallagher, Manager 307/235-3646
Research & Planning
Employment Security Commission FAX: 307/235-3293
P.O. Box 2760
Casper, WY 82602

Appendix O

State Data Center Program Coordinating Organizations





State Data Center Program Coordinating Organizations

(Includes Business and Industry Data Center Initiative Components)

June 1990

Alabama

Center for Business and Economic
Research
University of Alabama
Box 870221
Tuscaloosa, AL 35487-0221
*Ms. Annette Waters
(205) 348-6191

Alabama Department of Economic
and Community Affairs
Office of State Planning
P.O. Box 250347
3465 Norman Bridge Road
Montgomery, AL 36105-0347
Mr. Parker Collins
(205) 284-8778

Alabama Public Library Service
6030 Monticello Drive
Montgomery, AL 36130
Ms. Hilda Dent
(205) 277-7330

Alaska

Alaska State Data Center
Research & Analysis
Department of Labor
P.O. Box 25504
Juneau, AK 99802-5504
*Ms. Kathryn Litzk
(907) 465-4500

Office of Management and Budget
Division of Policy
Pouch AD
Juneau, AK 99811
Mr. Jack Kreinheder
(907) 465-3568

Department of Education
Division of Libraries and Museums
Alaska State Library
Pouch G
Juneau, AK 99811-0571
Ms. Patience Frederiksen
(907) 465-2927

Department of Community &
Regional Affairs
Division of Municipal & Regional
Assistance
P.O. Box BH
Juneau, AK 99811
Mr. Paul Cunningham
(907) 465-4756

Institute for Social & Economic
Research
University of Alaska
3211 Providence Drive
Anchorage, AK 99508
Mr. Jim Kerr
(907) 786-7710

Arizona

Arizona Department of Economic
Security
1300 West Washington
P.O. Box 6123-045Z
Phoenix, AZ 85005
*Ms. Betty Jeffries
(602) 542-8984

Center for Business Research
College of Business Administration
Arizona State University
Tempe, AZ 85287
Mr. Tom Rex
(602) 965-3961

College of Business Administration
Northern Arizona University
Box 15066
Flagstaff, AZ 86011
Dr. Joseph Walka
(602) 523-3657

Federal Documents Section
Department of Library,
Archives, and Public Records
1700 West Washington
Phoenix, AZ 85007
Ms. Janet Fisher
(602) 621-4121

Division of Economic & Business
Research
College of Business & Public
Administration
University of Arizona
Tucson, AZ 85721
Ms. Holly Penix
(602) 621-2155

Arkansas

State Data Center
University of Arkansas-Little Rock
2801 South University
Little Rock, AR 72204
*Ms. Sarah Breshears
(501) 569-8530

Arkansas State Library
1 Capitol Mall
Little Rock, AR 72201
Ms. Mary Honeycutt
(501) 682-2864

Research & Analysis Section
Arkansas Employment Security
Division
P.O. Box 2981
Little Rock, AR 72203
Mr. Coy Cozart
(501) 682-3159

California

State Census Data Center
Department of Finance
915 L Street
Sacramento, CA 95814
*Ms. Linda Gage, Director
(916) 322-4651
Mr. Richard Lovelady
(916) 323-2201

Sacramento Area COG
106 K Street, Suite 200
Sacramento, CA 95814
Mr. Bob Pasler
(916) 441-5930

Association of Bay Area
Governments
Metro Center
8th and Oak Streets
P.O. Box 2050
Oakland, CA 94604-2050
Ms. Patricia Perry
(415) 464-7937

Institute of Southern California
SCAG
818 West 7th Street
Los Angeles, CA 90017
Mr. Tim Douglas/Mike Schwarzmann
(213) 236-1800

San Diego Association of
Governments
First Federal Plaza
401 B Street, Suite 800
San Diego, CA 92101
Ms. Karen Lampbere
(619) 236-5353

State Data Center Program
University of California-Berkeley
2538 Channing Way
Berkeley, CA 94720
Ms. Iona Einowski/Fred Gey
(415) 642-6571

* Denotes key contact SDC
+ Denotes key contact BIDC

Colorado

Division of Local Government
Colorado Department of Local
Affairs
1313 Sherman Street, Room 521
Denver, CO 80203
*Mr. Reid Reynolds
Ms. Rebecca Picaso
(303) 866-2156

Business Research Division
Graduate School of Business
Administration
University of Colorado-Boulder
Boulder, CO 80309
(303) 492-8227

Natural Resources & Economics
Department of Agriculture
Colorado State University
Fort Collins, CO 80523
Ms. Sue Anderson
(303) 491-5706

Documents Department
The Libraries
Colorado State University
Fort Collins, CO 80523
Ms. Suzanne Taylor
(303) 491-1101

Connecticut (BIDC)

Comprehensive Planning Division
Connecticut Office of Policy and
Management
80 Washington Street
Hartford, CT 06106
*+ Mr. Theron Schnure
(203) 566-8285

Government Documents
Connecticut State Library
231 Capital Avenue
Hartford, CT 06106
Mr. Albert Falke
(203) 566-4971

Roper Center
Institute for Social Inquiry
University of Connecticut, U-164
Storrs, CT 06268
Ms. Lois Timms-Ferrara
(203) 486-4440

Connecticut Department of Economic
Development
865 Brook Street
Rocky Hill, CT 06067
Mr. Jeff Blodgett
(203) 566-4882

Employment Security Division
Connecticut Department of Labor
200 Folly Brook Boulevard
Wethersfield, CT 06109
Mr. Richard Vannuccini
(203) 566-2120

Delaware

Delaware Development Office
99 Kings Highway
P.O. Box 1401
Dover, DE 19903
*Ms. Judy McKinney-Cherry
(302) 736-4271

College of Urban Affairs and Public
Policy
University of Delaware
Graham Hall, Room 286
Academy Street
Newark, DE 19716
Mr. Ed Ratledge
(302) 451-8405

District of Columbia

Data Services Division
Mayor's Office of Planning
Room 314, Presidential Bldg.
415 12th Street, N.W.
Washington, DC 20004
*Mr. Gan Ahuja
(202) 727-6333

Metropolitan Washington Council of
Governments
777 North Capitol St., Suite 300
Washington, DC 20002-4201
Mr. Robert Griffiths
Ms. Jensen Johannigmeier
(202) 962-3200

Florida (BIDC)

Florida State Data Center
Executive Office of the Governor
Office of Planning & Budgeting
The Capitol
Tallahassee, FL 32399-0001
*Mr. Steve Klumbe
(904) 487-2814

Center for the Study of Population
Institute for Social Research
654 Bellemey Building
Florida State University
Tallahassee, FL 32306-4063
Dr. Ike Eberstein
(904) 644-1762

State Library of Florida
R.A. Gray Building
Tallahassee, FL 32399-0250
Ms. Lisa Close
(904) 487-2651

Bureau of Economic Analysis
Florida Department of Commerce
107 East Gaines Street
Tallahassee, FL 32391-2000
+ Ms. Sally Ramsey
(904) 487-2568

Georgia

Division of Demographic &
Statistical Services
Georgia Office of Planning and
Budget
270 Washington Street, S.W.,
Room 608
Atlanta, GA 30334
*Ms. Robin Kirkpatrick
(404) 656-0911

Documents Librarian
Georgia State University
University Plaza
Atlanta, GA 30303
Ms. Gayle Christian
(404) 651-2185

Robert W. Woodruff Library for
Advanced Studies
Emory University
Atlanta, GA 30322
Ms. Elizabeth McBride
(404) 727-6880

Main Library
University of Georgia
Athens, GA 30602
Ms. Susan C. Field
(404) 542-0664

Georgia Department of Community
Affairs
Office of Coordinated Planning
100 Peachtree St. N.E. #1200
Atlanta, GA 30303
Mr. Phil Thiel
(404) 656-5526

Documents Librarian
State Data Center Program
Albany State College
504 College Drive
Albany, GA 31705
Ms. Juanita Miller
(912) 430-4799

Documents Librarian
State Data Center Program
Georgia Southern College
Statesboro, GA 30458
Ms. Lynn Walshak
(912) 681-5117

State Data Center Program
Mercer University Law Library
Mercer University
Macon, GA 31207
Ms. Jenny Rowe
(912) 744-2667

Data Services
University of Georgia Libraries
6th Floor
Athens, GA 30602
Ms. Hortense Bates
(404) 542-0727

* Denotes key contact SDC
+ Denotes key contact BIDC

Price Gilbert Memorial Library
Georgia Institute of Technology
Atlanta, GA 30332
Mr. Richard Leary
(404) 894-4519

Guam

Guam Department of Commerce
590 South Marine Drive
Suite 601, 6th Floor GITC Building
Tamuning, Guam 96911
*Mr. Peter E. Barcinas
(671) 646-5841

Hawaii

Hawaii State Data Center
State Department of Business &
Economic Development
Kamamalu Building, Room 602A
250 S. King Street
Honolulu, HI 96813
(Mailing Address)
P.O. Box 2359
Honolulu, HI 96804
Mr. Robert Schmitt, State Statistician
*Ms. Sharon Nishi
(808) 548-3067

Information and Communication
Services Division
State Department of Budget and
Finance
Kalanimoku Building
1151 Punchbowl Street
Honolulu, HI 96813
Ms. Joy Toyama
(808) 548-6180

Idaho

Idaho Department of Commerce
700 West State Street
Boise, ID 83720
*Mr. Alan Porter
(208) 334-2470

Institutional Research
Room 319, Business Building
Boise State University
Boise, ID 83725
Mr. Don Canning
(208) 385-1613

The Idaho State Library
325 West State Street
Boise, ID 83702
Ms. Stephanie Nichols
(208) 334-2150

Center for Business Research and
Services
Campus Box 8450
Idaho State University
Pocatello, ID 83209
Dr. Paul Zelus
(208) 236-2504

Illinois

Division of Planning and Financial
Analysis
Illinois Bureau of the Budget
William Stratton Building, Rm. 605
Springfield, IL 62706
*Ms. Suzanne Ebatach
(217) 782-1381

Census & Data Users Services
Department of Sociology,
Anthropology & Social Work
Illinois State University
604 South Main Street
Normal, IL 61761-6901
Dr. Roy Treadway
(309) 438-5946

Center for Governmental Studies
Northern Illinois University
Social Science Research Bldg.
DeKalb, IL 60115
Ms. Ruth Anne Tobias
(815) 753-1901, x221

Regional Research and Development
Service
Southern Illinois University at
Edwardsville
Box 1456
Edwardsville, IL 62026-1456
Mr. Charles Kofron
(618) 692-3300

Chicago Area Geographic
Information Study
Room 2102, Building BSB
P.O. Box 4348
University of Illinois at Chicago
Chicago, IL 60680
Mr. Jim Bash
(312) 996-6367

Indiana (BIDC)

Indiana State Library
Indiana State Data Center
140 North Senate Avenue
Indianapolis, IN 46204
Mr. Ray Ewick, Director
*Ms. Roberts Eads
(317) 232-3733

Indiana Business Research Center
Indiana University
10th and Fee Lane
Bloomington, IN 47405
Dr. Morton Marcus
(812) 855-5307

Indiana Business Research Center
801 West Michigan, B.S. 4013
Indianapolis, IN 46202-5151
+ Ms. Carol Rogers
(317) 774-2305

Division of Economic Analysis
Indiana Department of Commerce
1 North Capitol, Suite 700
Indianapolis, IN 46204
Mr. Robert Lein
(317) 232-8959

Iowa

State Library of Iowa
East 12th and Grand
Des Moines, IA 50319
*Ms. Beth Henning
(515) 281-4105

Census Services
Iowa State University
320 East Hall
Ames, IA 50011
Dr. Willis Goudy
(515) 294-8337

Center for Social and Behavioral
Research
University of Northern Iowa
Cedar Falls, IA 50614
Dr. Robert Kramer
(319) 273-2705

Iowa Social Science Institute
University of Iowa
345 Shaeffer Hall
Iowa City, IA 52242
Mr. Brian Dabiel
(319) 335-2371

Census Data Center
Department of Public Instruction
Grimes State Office Building
Des Moines, IA 50319
Mr. Steve Boal
(515) 281-4730

Research Section
Iowa Department of Economic
Development
200 East Grand Avenue
Des Moines, IA 50309
(515) 281-3005

Balfou Library
Buena Vista College
Storm Lake, IA 50588
Ms. Jodi Morin
(712) 749-2203

Kansas

State Library
Room 343-N
State Capitol Building
Topeka, KS 66612
*Mr. Marc Galbraith
(913) 432-3919

* Denotes key contact SDC
+ Denotes key contact BIDC

Division of the Budget
Room 152-E
State Capitol Building
Topeka, KS 66612
Ms. Teresa Floerchinger
(913) 296-2436

Institute for Public Policy and
Business Research
607 Blake Hall
The University of Kansas
Lawrence, KS 66045-2960
Ms. Thelma Helyar
(913) 864-3123

Center for Economic Development &
Business Research
Box 48
Wichita State University
Wichita, KS 67208
Ms. Janet Nickel
(316) 689-3225

Population and Resources Laboratory
Department of Sociology
Kansas State University
Manhattan, KS 66506
Dr. Jan L. Flora
(913) 532-5984

Kentucky (BIDC)

Urban Studies Center
College of Urban & Public Affairs
University of Louisville
Louisville, KY 40292
*+ Mr. Ron Crouch
(502) 588-7990

Office of Policy & Management
State of Kentucky
Capitol Annex
Frankfort, KY 40601
Mr. Steve Rowland
(502) 564-7300

State Library Division
Department for Libraries & Archives
300 Coffeetree Road
P.O. Box 537
Frankfort, KY 40601
Ms. Brenda Fuller
(502) 875-7000

Louisiana

Office of Planning and Budget
Division of Administration
P.O. Box 94095
Baton Rouge, LA 70804
*Ms. Karen Paterson
(504) 342-7410

Division of Business and Economic
Research
University of New Orleans
Lake Front
New Orleans, La 70122
Mr. Vincent Maruggi
(504) 286-6248

Division of Business Research
Louisiana Tech University
P.O. Box 10318
Ruston, LA 71272
Dr. Edward O'Boyle
(318) 257-3701

Reference Department
Louisiana State Library
P.O. Box 131
Baton Rouge, LA 70821
Mrs. Blanche Crotini
(504) 342-4918

Center for Life Cycle and Population
Studies
Department of Sociology
Louisiana State University
Baton Rouge, LA 70803
Dr. Alan C. Acock
(504) 388-5359

Center for Business and Economic
Research
Northeast Louisiana University
Monroe, LA 71209
Dr. Jerry Wall
(318) 342-2123

Maine

Division of Economic Analysis and
Research
Maine Department of Labor
20 Union Street
Augusta, ME 04330
Mr. Raynold Fongemie, Director
*Ms. Jean Martin
(207) 289-2271

Maine State Library
State House Station 64
Augusta, ME 04333
Mr. Gary Nichols
(207) 289-3561

Maryland (BIDC)

Maryland Department of State
Planning
301 West Preston Street
Baltimore, MD 21201
*+ Mr. Michel Lettre
(301) 225-4450

Computer Science Center
University of Maryland
College Park, MD 20742
Mr. John McNary
(301) 454-6030

Government Reference Service
Pratt Library
400 Cathedral Street
Baltimore, MD 21201
Mr. Wesley Wilson
(301) 396-5468

Massachusetts (BIDC)

Massachusetts Institute for Social and
Economic Research
128 Thompson Hall
University of Massachusetts
Amherst, MA 01003
+*Dr. Stephen Colesan, Director
(413) 545-3460
Ms. Nora Groves
(413) 545-0176

Massachusetts Institute for Social and
Economic Research
Box 219
The State House, Rm. 50
Boston, MA 02133
Mr. William Murray
(617) 727-3237

Michigan

Michigan Information Center
Department of Management & Budget
Office of Revenue and Tax Analysis
P.O. Box 30026
Lansing, MI 48909
*Dr. Laurence Rosen
(517) 373-7910

MIMIC/Center for Urban Studies
Wayne State University
Faculty/Administration Bldg
656 W. Kirby
Detroit, MI 48202
Dr. Mark Neithercut
(313) 577-8350

The Library of Michigan
Government Documents Service
P.O. Box 30007
Lansing, MI 48909
Ms. F. Anne Diamond
(517) 373-1307

Minnesota (BIDC)

State Demographer's Office
Minnesota State Planning Agency
300 Centennial Office Building
658 Cedar Street
St. Paul, MN 55155
*Mr. David Birkholz
(612) 297-2360
+ Mr. David Rademacher
(612) 297-3255

Interagency Resource & Information
Center
Department of Education
501 Capitol Square Building
St. Paul, MN 55101
Ms. Patricia Tupper
(612) 296-6684

* Denotes key contact SDC
+ Denotes key contact BIDC

Mississippi

Center for Population Studies
The University of Mississippi
Bondurant Bldg., Rm. 3W
University, MS 38677
Dr. Max Williams, Director
*Ms. Pattie Byrd, Manager
(601) 232-7288

Governor's Office of Federal- State
Programs
Department of Community
Development
301 West Pearl Street
Jackson, MS 39203-3096
Mr. Jim Carr
(601) 949-2219

Missouri

Missouri State Library
2002 Missouri Boulevard
PO Box 387
Jefferson City, MO 65102
*Ms. Mariys Davis
(314) 751-3615

Office of Administration
124 Capitol Building
P.O. Box 809
Jefferson City, MO 65102
Mr. Ryan Burson
(314) 751-2345

Urban Information Center
University of Missouri-St. Louis
8001 Natural Bridge Road
St. Louis, MO 63121
Dr. John Blodgett
(314) 553-6014

Office of Social & Economic Data
Analysis
University of Missouri-Columbia
811 Clark Hall
Columbia, MO 65211
Ms. Evelyn J. Cleveland
(314) 582-7396

Montana (BIDC)

Census and Economic Information
Center
Montana Department of Commerce
1424 9th Avenue
Capitol Station
Helena, MT 59620-0401
*+Ms. Patricia Roberts
(406) 444-2896

Montana State Library
1515 East 6th Avenue
Capitol Station
Helena, MT 59620
Ms. Kathy Brown
(406) 444-3004

Bureau of Business and Economic
Research
University of Montana
Missoula, MT 59812
Mr. Jim Sylvester
(406) 243-5113

Survey Research Center
Wilson Hall, Rm. 1-108
Montana State University
Bozeman, MT 59717
Ms. Lee Faulkner
(406) 994-4481

Research & Analysis Bureau
Employment Policy Division
Montana Department of Labor &
Industry
P.O. Box 1728
Helena, MT 59624
Bob Rafferty
(406) 444-2430

Lewis & Clark Library
120 S. Last Chance Mall
Helena, MT 59601
Bruce Newell
(406) 442-2388

Nebraska

Center for Applied Urban Research
The University of Nebraska-Omaha
Peter Kiewit Conference Center
1313 Farnam-on-the-Mall
Omaha, NE 68182
*Mr. Jerome Deichert
(402) 595-2311

Policy Research Office
P.O. Box 94601
State Capitol, Rm. 1321
Lincoln, NE 68509-4601
Ms. Prem L. Bansal
(402) 471-2414

Nebraska Library Commission
1420 P Street
Lincoln, NE 68508
Mr. John L. Kopschke
(402) 471-2045

The Central Data Processing Division
Department of Administration
Services
1306 State Capitol
Lincoln, NE 68509
Mr. Skip Miller
(402) 471-2065

Nevada

Nevada State Library
Capitol Complex
401 North Carson
Carson City, NV 89710
Ms. Joan Kerschner
*Ms. Betty McNeal
(702) 885-5160

New Hampshire

Office of State Planning
2 1/2 Beaulieu Street
Concord, NH 03301
*Mr. Tom Doffy
(603) 271-2155

New Hampshire State Library
Park Street
Concord, NH 03301
Mr. Kendall Wiggin
(603) 271-2392

Office of Biometrics
University of New Hampshire
James Hall, 2nd Floor
Durham, NH 03824
Mr. Owen Durgin
(603) 862-1700

New Jersey (BIDC)

New Jersey Department of Labor
Division of Labor Market and
Demographic Research
CN 388-John Fitch Plaza
Trenton, NJ 08625-0388
*+Ms. Connie O. Hughes, Asst Dir
(609) 984-2593

New Jersey State Library
185 West State Street
CN 520
Trenton, NJ 08625-0520
Ms. Beverly Railsback
(609) 292-6220

Princeton-Rutgers Census Data
Project
Princeton University Computer
Center
87 Prospect Avenue
Princeton, NJ 08544
Ms. Judith S. Rowe
(609) 452-6052

Princeton-Rutgers Census Data
Project
Center for Computer & Information
Services
Rutgers University
CCIS-Hill Center, Busch Campus
P.O. Box 879
Piscataway, NJ 08854
Ms. Gertrude Lewis
(201) 932-2483

Department of Urban Planning and
Policy Development
Rutgers University
Lucy Stone Hall, B Wing
New Brunswick, NJ 08903
Dr. James Hughes, Chair and
Graduate Director
(201) 932-3822

* Denotes key contact SDC
+ Denotes key contact BIDC

New Mexico (BIDC)

Economic Development and Tourism
Department
1100 St. Francis Drive
Santa Fe, NM 87503
*Ms. Carol Selleck
(505) 827-0276

New Mexico State Library
325 Don Gaspar Avenue
P.O. Box 1629
Santa Fe, NM 87503
Ms. Norma McCallan
(505) 827-3826

Bureau of Business and Economic
Research
University of New Mexico
1920 Lomas NE
Albuquerque, NM 87131
Mr. Kevin Kargacin
+ Ms. Juliana Boyle
(505) 277-2216

Department of Economics
New Mexico State University
Box 30001
Las Cruces, NM 88003
Dr. Kathleen Brook
(505) 646-1905

New York

Division of Policy & Research
Department of Economic
Development
1 Commerce Plaza, Room 905
99 Washington Avenue
Albany, NY 12245
*Mr. Robert Scardamalia
(518) 474-6905

Cornell Institute for Social and
Economic Research (CISER)
Cornell University
323 Uris Hall
Ithaca, NY 14853-7601
Ms. Ann Gray
(607) 255-1358

Law and Social Sciences Unit
New York State Library
Cultural Education Center
Empire State Plaza
Albany, NY 12230
Ms. Elaine Scheerer
(518) 474-5128
Ms. Mary Redmond
(518) 474-3940

Nelson A. Rockefeller Institute of
Government
411 State Street
Albany, NY 12203
(518) 472-1300

Division of Equalization and
Assessment
16 Sheridan Avenue
Albany, NY 12210
Mr. Wilfred B. Pauquette
(518) 474-6742

North Carolina (BIDC)

North Carolina Office of State
Budget and Management
116 West Jones Street
Raleigh, NC 27603-8005
*Ms. Francine Stephenson, Director
of State Data Center
+ Mr. Alan Barwick
(919) 733-7061

State Library
North Carolina Department of
Cultural Resources
109 East Jones Street
Raleigh, NC 27611
Mr. Joel Sigmon
(919) 966-3683

Institute for Research in Social
Science
University of North Carolina
Manning Hall CB 3355
Chapel Hill, NC 27514
Mr. Glenn Deane
(919) 966-3346

Land Resources Information Service
Division of Land Resources
P.O. Box 27687
Raleigh, NC 27611
Ms. Karen Siderelis/Tim Johnson
(919) 733-2090

North Dakota

Department of Agricultural
Economics
North Dakota State University
Morrill Hall, Room 224
P.O. Box 5636
Fargo, ND 58105
*Dr. Richard Rathge
(701) 237-8621

Office of Intergovernmental
Assistance
State Capitol, 14th Floor
Bismarck, ND 58505
Mr. Jim Boyd
(701) 224-2074

Department of Geography
University of North Dakota
Grand Forks, ND 58202
Dr. Floyd Hickok
(701) 777-4246

North Dakota State Library
Liberty Memorial Building
Capitol Grounds
Bismarck, ND 58505
Ms. Susan Pahmeyer
(701) 224-2490

Ohio

Ohio Data Users Center
Ohio Department of Development
P.O. Box 1001
Columbus, OH 43266-0101
*Mr. Barry Bennett
(614) 466-2115

Oklahoma

Oklahoma State Data Center
Oklahoma Department of Commerce
6601 Broadway Extension
(Mailing address)
P.O. Box 26980
Oklahoma City, OK 73126-0980
*Ms. Karen Selland
(405) 841-5184

Oklahoma Department of Libraries
200 N.E. 18th Street
Oklahoma City, OK 73105
Mr. Steve Belev
(405) 521-2502

Oregon

Center for Population Research and
Census
Portland State University
P.O. Box 751
Portland, OR 97207-0751
*Mr. Ed Shafer
(503) 725-3922

Oregon State Library
State Library Building
Salem, OR 97310
Mr. Craig Smith
(503) 378-4502

Bureau of Governmental Research &
Service
University of Oregon
Hendricks Hall, Room 340
P.O. Box 97403
Eugene, OR 97403
Ms. Karen Seidel
(503) 686-5232

Oregon Housing Agency
1600 State
Salem, OR 97310-0161
Mr. Mike Murphy
(503) 378-5953

* Denotes key contact SDC
+ Denotes key contact BIDC

Pennsylvania (BIDC)

Pennsylvania State Data Center
Institute of State and Regional
Affairs
Pennsylvania State University at
Harrisburg
Middletown, PA 17057-4898
+ Mr. Robert Surridge
*Mr. Michael Behney
(717) 948-6336

Pennsylvania State Library
Forum Building
Harrisburg, PA 17120
Mr. John Gerswindt
(717) 787-2327

Puerto Rico

Puerto Rico Planning Board
Minillas Government Center
North Bldg., Avenida De Diego
P. O. Box 41119
San Juan, PR 00940-9985
*Sra. Lillian Torres Aguirre
(809) 728-4430

Recinto Universitario De Mayaguez
Edificio Anexo Pinciro
Carretera Num 2
Mayaguez, PR 00708
Prfa. Grace Quinones Seda
(809) 834-4040

Biblioteca Carnegie
Ave. Ponce De Leon-Parada 1
San Juan, PR 00901
Sra. Carmen Martinez
(809) 724-1046

Rhode Island

Department of Administration
Office of Municipal Affairs
One Capitol Hill
Providence, RI 02908-5873
*Mr. Paul Egan
(401) 277-6493

Rhode Island Department of State
Library Services
300 Richmond Street
Providence, RI 02903
Mr. Frank Jacons
(401) 277-2726

Social Science Data Center
Brown University
P.O. Box 1916
Providence, RI 02912
Ms. Donna Souza
(401) 863-2550

Rhode Island Department of
Education
22 Hayes Street
Providence, RI 02908
Mr. James Karon
(401) 277-3126

Rhode Island Department of
Economic Development
7 Jackson Way
Providence, RI 02903
Mr. Vincent Harrington
(401) 277-2601

United Way of Rhode Island
229 Waterman Street
Providence, RI 02908
Ms. Florence Dzija
(401) 351-6500

South Carolina

Division of Research and Statistical
Services
South Carolina Budget and Control
Board
Rembert Dennis Bldg. Room 425
Columbia, SC 29201
Mr. Bobby Bowers
*Mr. Mike Macfarlane
(803) 734-3780

South Carolina State Library
P.O. Box 11469
Columbia, SC 29211
Ms. Mary Bostick
(803) 734-8666

South Dakota

Business Research Bureau
School of Business
University of South Dakota
414 East Clark
Vermillion, SD 57069
*Ms DeVee Dykstra
(605) 677-5287

Documents Department
South Dakota State Library
Department of Education and
Cultural Affairs
800 Governors Drive
Pierre, SD 57501-2704
Ms. Margaret Bezpaletz
(605) 773-3131

Labor Market Information Center
South Dakota Department of Labor
420 S. Roosevelt Box 4730
Aberdeen, SD 57402-4730
Ms. Mary Susan Vickers
(605) 622-2314

Center for Health Policy & Statistics
South Dakota Department of Health
Foss Building 523 E Capitol
Pierre, SD 57501
Ms. Jan Smith
(605) 773-3355

Tennessee

Tennessee State Planning Office
John Sevier State Office Bldg.
500 Charlotte Ave. Suite 307
Nashville, TN 37219
*Mr. Charles Brown
(615) 741-1676

Center for Business and Economic
Research
College of Business Administration
University of Tennessee
Room 100, Glocker Hall
Knoxville, TN 37996-4170
Ms. Betty Vickers
(615) 974-5441

Texas

State Data Center
Texas Department of Commerce
9th and Congress Streets
(mailing address)
P.O. Box 12728
Capitol Station
Austin, TX 78711
*Ms. Susan Tully
(512) 472-5059

Department of Rural Sociology
Texas A & M University System
Special Services Building
College Station, TX 77843
Dr. Steve Murdock
(409) 845-5115 or 5332

Texas Natural Resources Information
System (TNRIS)
P.O. Box 133231
Austin, TX 78711
Mr. Charles Palmer
(512) 463-8402

Texas State Library and Archive
Commission
P.O. Box 12927
Capitol Station
Austin, TX 78711
Ms. Bonnie Grobar
(512) 463-5427

Utah

Office of Planning & Budget
State Capitol, Rm. 116
Salt Lake City, UT 84114
Mr. Brad Barber, Director
*Ms. Linda Smith
(801) 538-1036

* Denotes key contact SDC
+ Denotes key contact BIDC

Bureau of Economic and Business
Research
401 Garff Building
University of Utah
Salt Lake City, UT 84112
Ms. Frank Hachman
(801) 581-6333

Population Research Laboratory
Utah State University, UMC 07
Logan, UT 84322
Mr. Yun Kim
(801) 750-1231

Department of Employment Security
174 Social Hall Avenue
P.O. Box 11249
Salt Lake City, UT 84147
Mr. Ken Jensen
(801) 533-2372

Vermont

Office of Policy Research and
Coordination
Pavilion Office Building
109 State Street
Montpelier, VT 05602
*Mr. Ken Jones
(802) 828-3326

Center for Rural Studies
University of Vermont
207 Morrill Hall
Burlington, VT 05405-0106
Ms. Cathleen Gent
(802) 656-3021

Vermont Department of Libraries
111 State Street
Montpelier, VT 05602
Ms. Patricia Klinck, State Librarian
(802) 828-3265

Vermont Agency of Development
and Community Affairs
Pavilion Office Building
109 State Street
Montpelier, VT 05602
Mr. Jed Guertin
(802) 828-3211

Virginia

Virginia Employment Commission
703 East Main Street
Richmond, VA 23219
*Mr. Larry Robinson
(804) 786-8624

Center for Public Service
University of Virginia
Dynamics Bldg., 4th Floor
2015 Ivy Road
Charlottesville, VA 22903
Dr. Michael Spar
(804) 971-2661

Virginia State Library
12th and Capitol Streets
Richmond, VA 23219
Ms. Linda Morrissett
(804) 786-2175

Virgin Islands

University of the Virgin Islands
Caribbean Research Institute
Charlotte Amalie
St. Thomas, VI 00802
*Dr. Frank Mills
(809) 776-9200

Virgin Islands Department of
Economic Development
P.O. Box 6400
Charlotte Amalie
St. Thomas, VI 00801
Mr. Richard Moore
(809) 774-8784

Washington (BIDC)

Estimation & Forecasting Unit
Office of Financial Management
Insurance Bldg., AQ-44
Olympia, WA 98504-0202
*Mr. Michael Knight
(206) 586-2504

Documents Section
Washington State Library
AJ-11
Olympia, WA 98504
Ms. Ann Bregent
(206) 753-4027

Puget Sound Council of Govts.
216 1st Avenue South
Seattle, WA 98104
Mr. Deana Dryden
(206) 464-7532

Social Research Center
Department of Rural Sociology
Washington State University
Pullman, WA 99164
Dr. Annabel Cook
(509) 335-4519

Department of Sociology
Demographic Research Laboratory
Western Washington University
Bellingham, WA 98225
Mr. Lucky Tedrow, Director
(206) 676-3617

Applied Social Data Center
Department of Sociology
Central Washington University
Ellensburg, WA 98926
Mr. David Kaufman
(509) 963-3131

West Virginia (BIDC)

Community Development Division
Governor's Office of Community and
Industrial Development
Capitol Complex
Building 6, Room 553
Charleston, WV 25305
*Ms. Mary C. Harless
(304) 348-4010

The Center for Economic Research
West Virginia University
209 Armstrong Hall
Morgantown, WV 26506-6025
Dr. Tom Witt, Director
+ Ms. Linda Culp
(304) 293-5837

Reference Library
West Virginia State Library
Commission
Science and Cultural Center
Capitol Complex
Charleston, WV 25305
Ms. Karen Goff
(304) 348-2045

Office of Health Services Research
Department of Community Health
West Virginia University
900 Chestnut Ridge Road
Morgantown, WV 26505
Ms. Stephanie Pratt
(304) 293-2601

Wisconsin (BIDC)

Demographic Services Center
Department of Administration
101 S. Webster St., 6th Floor
P.O. Box 7868
Madison, WI 53707-7868
Ms. Nadene Roenspies
*Mr. Robert Naylor
(608) 266-1927

Department of Rural Sociology
University of Wisconsin
1450 Linden Drive, Rm. 316
Madison, WI 53706
Ms. Doris Slesinger
Mr. Robert Wilger
(608) 262-1515

* Denotes key contact SDC
+ Denotes key contact BIDC

Applied Population Laboratory
Department of Rural Sociology
University of Wisconsin
316 Agriculture Hall
Madison, WI 53706
+ Ms. Judy Suchman
(608) 262-9526

Wyoming

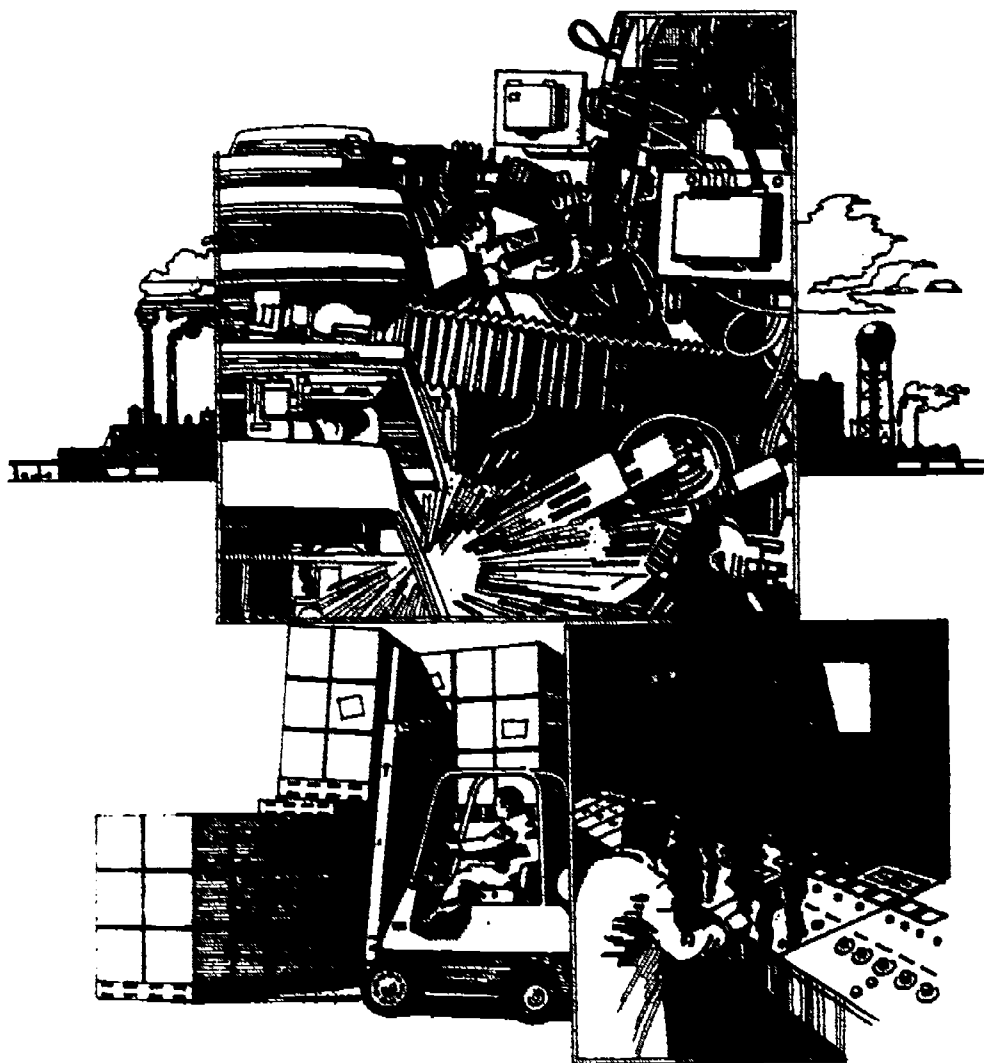
Department of Administration and
Fiscal Control
Research & Statistics Division
Emerson Building
Cheyenne, WY 82002-0060
*Ms. Mary Byrnes, Director
(307) 777-7505

Survey Research Center
University of Wyoming
P.O. Box 3925
Laramie, WY 82071
Mr. G. Fred Doll
(307) 766-5141

* Denotes key contact SDC
+ Denotes key contact BIDC

Appendix P

Acronyms



Acronyms

ASVAB	Armed Services Vocational Aptitude Battery
BLS	U.S. Bureau of Labor Statistics
CES	Current Employment Statistics Program
CEW	Covered Employment and Wages Program
CIDS	Career Information Delivery Systems
CPS	Current Population Survey
DOL	U.S. Department of Labor
DOT	<i>Dictionary of Occupational Titles</i>
ECDP	Employee Career Development Project
EEO	Equal Employment Opportunity Commission
GOE	<i>Guide for Occupational Exploration</i>
ICDM	Improved Career Decision Making
LAUS	Local Area Unemployment Statistics
LMA	Labor Market Area
LMI	Labor Market Information
MLS	Mass Layoff Statistics Program
MSA	Metropolitan Statistical Area
NCDA	National Career Development Association
NOICC	National Occupational Information Coordinating Committee
OES	Occupational Employment Statistics
OIS	Occupational Information Systems
OOH	<i>Occupational Outlook Handbook</i>
OOQ	<i>Occupational Outlook Quarterly</i>
SESA	State Employment Security Agency
SIC	<i>Standard Occupational Classification</i>
SOICC	State Occupational Information Coordinating committee
OVAE	U.S. Office of Vocational and Adult Education

Improved Career Decision Making in a Changing World

TRAINING MANUAL

EDITOR

Judith M. Ettinger

CONTRIBUTING AUTHORS

Dennis Engels, University of North Texas.

Judith Ettinger, Vocational Studies Center, University of Wisconsin-Madison.

Jean Jolin, Vocational Studies Center, University of Wisconsin-Madison.

Roger Lambert, Vocational Studies Center, University of Wisconsin-Madison.

Maile Pa'alani, Wisconsin Occupational Information Coordinating Committee.

Janet Pugh, Wisconsin Department of Industry, Labor and Human Relations.

DESKTOP PUBLISHING

Julie Peterson, Vocational Studies Center, University of Wisconsin-Madison.

Kimberlee Verhage, Vocational Studies Center, University of Wisconsin-Madison.

Organizations and individuals undertaking special projects funded by the U.S. Department of Labor for the National Occupational Information Coordinating Committee are encouraged to express their professional judgments. The interpretations and viewpoints stated in this document, therefore, do not necessarily represent the official position or policy of the U.S. Department of Labor, the NOICC members or their representatives, or the NOICC staff, and no official endorsement should be inferred.

Library of Congress Cataloging-in-Publication Data

Improved career decision making in a changing world / contributing authors: Dennis Engels ... [et al.] ; editor, Judith M. Ettinger.

p. cm.

Includes bibliographical references.

ISBN 0-912048-95-6. -- ISBN 0-912048-94-8 (training manual)

**1. Career development. 2. Employee counseling. 3. Labor market-
-Research. 4. Minorities--Employment. I. Engels, Dennis W.
II. Ettinger, Judith M.**

HF5549.5.C35157 1991

158.6--dc20

**91-29766
CIP**

Copyright © 1991 Garrett Park Press

**Published and distributed by the Garrett Park Press
PO Box 190-B, Garrett Park, MD 20896**

ISBN Number 0-912048-94-8

Library of Congress Number

91-29766

ICDM Resource Group

Gary Crossley
ICESA
444 No. Capitol St., NW - Suite 126
Washington, D.C. 20001

R. V. Dorothy
National Veterans Training Institute
1250 14th St., Suite 650
Denver, CO 80202

Charlie R. Gertz
AT&T Bell Lab, Rm. 1D-640
101 JFK Parkway
Short Hills, NJ 07078

Nancy Hargis
Oregon OICC
875 Union Street NE
Salem, OR 97311

Gisela Harkin
U.S. Dept. of Education, OVAE, DVTE
Switzer Bldg. Room 4321
300 C St, SW
Washington, DC 20202

Joe McDaniel
Mississippi Dept. of Education
P.O. Box 771
Jackson, MS 39205

Chuck Mollerup
Room 301, Len B. Jordan Bldg.
650 West State St.
Boise, ID 83720

Daniel Marrs
North Dakota SOICC
1600 East Interstate - Suite 14
Post Office Box 1537
Bismarck, ND 58502

Mildred T. Nichols
Rhode Island SOICC
22 Hayes St.
Providence, RI 02908

Nancy S. Perry
P.O. Box 805
Augusta, ME 05332-0805

Mike Pilot
7223 Whitson Dr.
Springfield, VA 22153

Karen Reiff
Career Planning & Placement Specialist
Capital Area Career Center
611 Hagadorn Road
Mason, MI 48854

Charlotte Rodriguez
1902 14th Avenue
Greely, CO 80631

Pat Schwallie-Giddis
AACD
5999 Stevenson Avenue
Alexandria, VA 22304

Karen Wempfen
IL Rehabilitation Services
623 E. Adams St.
Springfield, IL 62705

Counselor Educators Advisory Group

**Loretta Bradley
Box 4560 COE
Department of Educational Psychology
Texas Technical University
Lubbock, TX 79409**

**David Jepsen
University of Iowa
N368 Lindquist Center
Iowa City, IA 52242**

**Lee Richmond
Education Department
Loyola College of Maryland
4501 N. Charles Street
Baltimore, MD 21210**

**Clemmie Solomon
3401 27th Avenue
Temple Hills, MD 20748**

**Howard Splete
Oakland University
522 O'Dowd Hall
Rochester, Michigan 48309**

Table of Contents

	Page
List of Figures	
Foreword	
Getting Started	1
Introduction	1
Background	1
Organization of the Materials	2-3
Applications Section	3
The Participant's Resource Guide	3-4
Formats for Delivery	4-5
Planning	5-7
Teaching Tips	7-9
Using Handouts	9
Using Transparencies	10
Materials and Equipment Needed	11
Starting the Inservice Program	11-12
Workshop Evaluation	13
Sample Pre-Training Survey	14
Sample Brochures	15-21
Module 1. Introduction	
Introduction	1-2
Career Decision Making and the Role of Information	3-11
What is Career and Labor Market Information?	12
A Changing Work Place	12-14
Conclusion	14-15
The Action Plan	1-11
Module 2. Definitions of Terms and Concepts Related to Career Development and Labor Market Information	
Terms and Concepts Related to Career Development	1-3
Terms and Concepts Related to Using Labor Market Information in Career Decision Making	3-13
Technical Terms and Concepts Related to Labor Market Information and Data Collection Programs	14-21
Module 3. Demographic Trends That Impact Career Decision Making	
Introduction	1
Demographic Trend #1: The Maturation of America	1-5
Demographic Trend #2: The Increasing Diversity of Our Population	5-7
Demographic Trend #3: The Increasing Number of Women in the Labor Force	7-9
Summary	9

Module 4.	Theories of Career Development	
	Goal, Purpose and Scope	1
	Introduction	1
	What Is Career Development	1
	What Is a Career Development Facilitator?	1-2
	Career Development Facilitators Need to Be Competent in Using Theories	2
	What Are Career Development Theories?	2
	Why Do Career Development Facilitators Use Theories?	2-3
	How Do Theories Help Career Development Facilitators?	3
	What Theories Do Career Development Facilitators Use?	3-4
	Selected Career Development Theories	4-6
	Emerging Career Development Theories	6
	Promoting Decision Making in Life and Career Development	6-8
	The Process of Career Counseling: A Model	8-9
	Client Debriefing/Processing and Related Concerns	9
	Goal or Problem Identification	9-11
	Using Career and Labor Market Information in Career Counseling	11-12
	Developing, Implementing and Evaluating An Individual Career Plan	12-13
	How Do Career Development Theories Help in Making Diagnoses?	13
	How Do Career Development Theories Help in Setting Goals?	13-14
	How Do Career Development Theories Help Clients?	14-15
	Conclusion	15-16
	Background Information	B4-1 to B4-19
Module 5.	What Is Information? How Can It Be Accessed? How Can It Be Used?	
	Introduction	1
	What Is Career and Labor Market Information?	2-4
	How Can Career and Labor Market Information Be Accessed? How Can It Be Used?	5
	Decision Area: An Occupation	6-31
	Decision Area: A Work Setting	32-37
	Decision Area: Geographic Region	37-40
	Using Crosswalks to Ease the Process	40
	Labor Force, Industry and Occupational Projections	40-86
	Other Uses of Information	87-88
	Limitations of Career and Labor Market Information	89-91
	Networks as Sources	91
	Background Information	B5-1 to B5-10
Module 6.	Developing An Awareness of Multicultural Issues	
	Introductory Scenarios To Illustrate Cultural Differences	1-2
	Introduction	2
	Definitions	2-3
	Why Multicultural Counseling?	3-5
	Cultural Awareness Questionnaire	5-6
	Dynamics in Culturally Responsive Counseling	6-8
	The Role of Schools	8-9
	The Role of Career and Labor Market Information	9
	Actions To Be Taken	10

Module 7.	Specific Needs of Adults	
	Introduction	1
	Assumptions That Direct Adult Career Development	1
	A Theoretical Framework	2-3
	Subgroups of Adults With Career Development Needs	3-6
	Components of a Successful Program	6-8
	Summary	8-9
	Background Information	B7-1 to B7-4

Module 8.	Specific Needs of Women and Teen Parents	
	Introductory Scenarios	1-2
	Issues Facing Women In the Work Force	2-3
	Recognizing the Uniqueness of Women's Career Patterns	3-4
	What Is the Status of Women in the Work Force?	4-6
	Women Are In the Work Force Out of Necessity, Not For Pleasure	6
	Education Gives Women Access to Better Paying Jobs	6-7
	Women Are Heavily Concentrated in Low Paying Jobs and They Receive Less Pay Than Men For Equal Work	7-8
	Occupational Segregation of Women Continues To Be a Problem	8-9
	Family Plus a Career Can Cause Stress in Women in the Work Force	9-10
	The Lack of Literacy Skills Has Stifled Women's Work Force Participation ...	10
	The Feminization of Poverty is One Result of These Barriers	10-14
	Teen Parents	11-14
	How Can Access to Career and Labor Market Information Lead To Women's Full Participation in the Work Force?	14-16
	Summary	16
	Background Information	B8-1 to B8-7

Module 9.	Specific Needs of Persons with Disabilities	
	Introduction	1
	What Is a Disability?	1-2
	Career Counseling Persons With Disabilities	2-5
	Special Counseling Considerations	5-7
	Making the School to Work Transition	7-10
	The Impact of Federal Legislation	11-15
	The Train-Place-Train Transition Process	15-18
	The Americans With Disabilities Act of 1990	19-22
	Summary	22-23

Module 10.	Specific Needs of Children At-Risk	
	Introduction	1-3
	Meeting the Needs of Children At-Risk	3-4
	A Strategy That Works: Career Development Programs	4-7
	Summary	7-8
	Background Information	B10-1 to B10-3

Applications and Activities

- Activity #1. Signature
- Activity #2. Career Keno
- Activity #3. Dyadic Encounter
- Activity #4. Icebreaker Interviews
- Activity #5. LMI Continuum
- Activity #6. Future Metaphors
- Activity #7. Career Planning Metaphors

- Activity #8. LMI Visualization
- Activity #9. Earning Power
- Activity #10. Lost Job
- Activity #11. Carousel of Careers
- Activity #12. Advertising LMI Resources
- Activity #13. LMI Scavenger Hunt
- Activity #14. Classification Systems and Resources
- Activity #15. Implications Wheel
- Activity #16. State and Local Resources
- Activity #17. Helping Anna Find Work
- Activity #18. Around the House
- Activity #19. Public and Private Self
- Activity #20. Label Awareness
- Activity #21. Decision Making
- Activity #22. Past Challenges
- Activity #23. Career Lifeline
- Activity #24. Sex Role Commandments
- Activity #25. Sentence Completions
- Activity #26. What Do You Know About Women in the Work Force?
- Activity #27. Gender Equity
- Activity #28. Walk in My Shoes
- Activity #29. Most I Could Handle
- Activity #30. Case Study - Carl Young
- Activity #31. Case Study - Marie Alvarez
- Activity #32. Case Study - Joseph Deer
- Activity #33. Case Study - Jane Williamson
- Activity #34. Case Study - Bernie Maas
- Activity #35. Case Study - Thomas Lee

Appendices

- Appendix A. NCDCA Career Counseling Competencies
- Appendix B. SOICC Offices
- Appendix C. NOICC Staff
- Appendix D. Directory of State-Based Career Information Delivery Systems
- Appendix E. National Career Development Guidelines
- Appendix F. State Guidance Supervisors
- Appendix G. Guidelines for the Use of Computer-Based Career Information and Guidance Systems
- Appendix H. Career Software Review Guidelines
- Appendix I. Guidelines for the Preparation and Evaluation of Career and Occupational Information Literature
- Appendix J. Government Printing Offices
- Appendix K. Sources of State and Local Job Outlook
- Appendix L. Annotated List of Selected Printed References
- Appendix M. Overview of Equal Opportunity Legislation
- Appendix N. Labor Market Information Directors
- Appendix O. State Data Center Program Coordinating Organizations
- Appendix P. Acronyms

List of Figures

<u>Figure</u>	<u>Title of Figure</u>
1.1	Career Influences
1.2	Goals of the ICDM Program
1.3	National Career Development Guidelines
1.4	Student Competencies
1.5	Sample Questions to Ask of Information
1.6	Samples of Information
Action Plan 1	Programs Hopes and Personal Change
Action Plan 2	Daily Planner
Action Plan 3	Developing an Action Plan
2.1	Labor Force Concepts
2.2	Industrial Sectors
2.3	NOICC/SOICC Organization
3.1	Number of Older Americans Will Experience Fastest Growth Rate from 1990 to 2000
3.2	The Middle Aging of the Work Force
3.3	Non-Whites Are A Growing Share of the Work Force
3.4	Most New Entrants to the U.S. Labor Force Will Be Non-White, Female or Immigrants
3.5	Women Are A Growing Share of the Work Force
5.1	Two Examples of Information
5.2	A Continuum From Primary Data to Knowledge
5.3	CIDS Files and File Cross References
5.4	Example From a CIDS Printed Resource
5.5	Sample Classroom Activities
5.6	Sample Index
5.7	Example From the OOH
5.8	Examples from the DOT
5.9	Example From the GOE
5.10	Example From the <i>Military Career Guide</i>
5.11	Example From the SOC
5.12	Example From the SIC
5.13	Industry/Occupational Relationships Route
5.14	North Dakota OIS Bookkeeping and Accounting Clerks
5.15	Example of Local Information
5.16	Outlook 1990-2005
5.17	Sequence of Projection Procedures to Determine Occupational Demand
5.18	Labor Force
5.19	Labor Force Will Continue to Grow

List of Figures continued

- 5.20 Labor Force Grows Faster Than Population
- 5.21 Labor Force Growth By Age
- 5.22 Age Distribution of Labor Force is Changing
- 5.23 Women's Share of Labor Force is Growing
- 5.24 Labor Force Participation Rate Trends Differ for Men and Women
- 5.25 Labor Force Growth Slows More for Women than Men
- 5.26 Labor Force Growth by Race and Hispanic Origin
- 5.27 Labor Force Entrants by Race and Hispanic Origin, Projected 1990-2005
- 5.28 Distribution of the Labor Force by Race and Hispanic Origin
- 5.29 Economic Outlook
- 5.30 GNP Growth and Projected Alternatives
- 5.31 Unemployment Rates and Projected Alternatives
- 5.32 Industry Employment
- 5.33 Employment Growth by Major Economic Sectors, 1975-2005
- 5.34 Employment Growth, 1975-90 and Projected 1990-2005
- 5.35 Job Growth in Services Outpaces Other Industry Divisions, 1990-2005
- 5.36 Employment Growth Within Services and Retail Trade Will Be Concentrated
- 5.37 Industries Adding the Most Jobs, 1990-2005
- 5.38 Industries With the Fastest Job Growth, 1990-2005
- 5.39 Industries With the Most Rapid Job Declines, 1990-2005
- 5.40 Industries With the Fastest Growing Output, 1990-2005
- 5.41 Fastest Growing and Declining Manufacturing Industries, 1990-2005
- 5.42 Occupational Employment
- 5.43 Employment Growth by Major Occupational Group, 1990-2005
- 5.44 Job Openings for Replacement and Growth, 1990-2005
- 5.45 Fastest Growing Occupations, 1990-2005
- 5.46 Fast-Growing Occupations Generally Requiring at least a Bachelor's Degree 1990-2005
- 5.47 Fastest Growing Occupations Generally Requiring Post-secondary Training But Less Than a College Degree, 1990-2005
- 5.48 Fastest Growing Occupations Generally Requiring No More Than a High School Diploma, 1990-2005
- 5.49 Job Growth May Be Viewed in Two Ways: Changes, 1990-2005
- 5.50 Occupations Adding the Most Jobs, 1990-2005
- 5.51 Employment Change in Declining Occupations, 1990-2005
- 5.52 Education Pays
- 5.53 Annual Earnings of Workers by Highest Level of Educational Attainment, 1987
- 5.54 Educational Attainment of Workers by Race and Hispanic Origin
- 5.55 Concentration of Blacks and Hispanics by Major Occupation Group, 1990
- 5.56 Educational Attainment and Earnings
- 5.57 Female Earnings as a Percent of Male Earnings
- 5.58 Sample of How Labor Market Information is Used

List of Figures continued

- 6.1 Non-Whites Are A Growing Share of the Work Force
6.2 Concentration of Blacks and Hispanics by Major Occupational Group, 1988
6.3 Locus of Control and Locus of Responsibility by Sex
- 8.1 Women's Share of Labor Force is Growing
8.2 Labor Force Entrants by Sex
8.3 Educational attainment and Earnings
8.4 Percent Distribution and Median Earnings
8.5 Median Earnings of Males and Females by Occupation
8.6 Percent of Families with Children at Home in Which Both Spouses Work Outside the Home
- 9.1 U.S. Secondary School Special Education Students, 1987
9.2 Life Centered Career Education Curriculum
9.3 The Train-Place-Train Model
- 10.1 Labor Force Status of 1987-88 High School Dropouts and Graduates: October 1988
10.2 Educational Attainment and Earnings

Foreword

Improved Career Decision Making in a Changing World (ICDM) is designed to help career development facilitators and their clients make wise decisions as participants in a labor market that is characterized by economic, demographic and technological change. As the United States approaches the year 2000, an older and more socially diverse work force must produce, trade and prosper in a global economy that is technologically advancing at a rapid pace. People of all colors, ages and cultures are seeking roles in the changing world of work--where and how do they fit into this modern mosaic of production and distribution?

The purpose of the *Improved Career Decision Making in a Changing World* Program is to help people find answers to career-related questions through the use of labor market information (LMI). The need for the answers--information--is greater today than ever before as more preparation is needed and competition becomes keener for the better jobs. We also move around more within the labor market. Most workers can expect to change jobs more than half a dozen times during their lives. We need information more than ever, but there is so much labor market information in today's "Information Age" that it is difficult for the average person to locate, sift through and interpret it to make intelligent career decisions.

The professionals to whom we often turn, career development facilitators, play a key role in career decision making and specifically, in the information-seeking process. They need to know how to help their clients find information, process it and use it effectively. The *goal* of the ICDM Program is to train career development facilitators to help their clients use labor market information to make thoughtful, responsible and enlightened decisions about occupations and careers.

Is helping clients in their career development and decision making important work? We certainly think so. Choosing one's career is no longer an isolated incidence that can be left to chance circumstances. Our work is too important; it is central to our lives; we are often identified by what we do. If we are happy, satisfied, and fulfilled in our work roles, these elements spill into our personal lives.

To provide our citizens with this important occupational and career information, the National Occupational Information Coordinating Committee (NOICC) and the State Occupational Information Coordinating Committees (SOICCs) have accepted the mission to train career development facilitators to help their clients use labor market information. NOICC has sponsored the Improved Career Decision Making (ICDM) Program through cooperating SOICCs since 1981 and to date has trained over 30,000 career development facilitators. The training is provided through ICDM curriculum materials and workshops organized by the SOICCs with funding assistance from NOICC.

The ICDM Trainer's Guide and Participant Resource Guide are revisions of the original training materials, *Using Labor Market Information in Career Exploration and Decision Making*, published in 1986. This newer version is competency-based, using the counselor/staff competencies listed in the National Career Development Guidelines, also a NOICC Project. This ICDM curriculum is designed to be user-friendly. It can serve all population groups and it can be delivered in a variety of training modes and circumstances. It truly represents what is needed for *Improved Career Decision Making in a Changing World*.

In closing, I want to acknowledge the contributions of Roger Lambert and Judith Ettinger from the Vocational Studies Center at the University of Wisconsin, Maile Pa'alani, the Wisconsin SOICC Director, Walton Webb and Valerie Lloyd from the NOICC Office and the reviewers who took the time to contribute their expertise to the development of this publication.

Juliette Lester
Executive Director

Getting Started - Trainer's Information



Table of Contents	Page(s)
Introduction	1
Background	1
Organization of the Materials	2-3
Applications and Activities Section	3
The Participant's Resource Guide	3-4
Formats for Delivery	4-5
Planning	5-7
Teaching Tips	7-9
Using Handouts	9
Using Transparencies	10
Materials and Equipment Needed	11
Starting the Inservice Program	11-12
Workshop Evaluation	13
Sample Pre-Training Survey	14
Sample Brochures	15-21

GETTING STARTED

Introduction

The Trainer's Guide provides the information, research, theories and implementation activities necessary for conducting the inservice program, *Improved Career Decision Making in a Changing World* (ICDM). The primary objective of the inservice materials is to familiarize the participants with current labor market information resources and to teach the skills needed to use these resources in working to facilitate career development and career decision making.

The ICDM inservice program was first developed in the early 1980s. It was an inservice and preservice program for counselors that developed and enhanced their competencies in career development in general, and specifically, in the use of labor market information to enhance career decision making. Since the inception of ICDM, more than 23,000 counselors and other career development facilitators have attended workshops conducted by the 54 State Occupational Information Coordinating Committees (SOICCs). In addition, a number of counselor education programs have adopted the ICDM curriculum to use in their master's level programs.

This curriculum is a revision of the original training materials and those developed by the Washington SOICC. The revision is:

- competency-based, using the pertinent counselor/staff competencies in the *National Career Development Guidelines*.
- modular, flexible and designed to serve multiple purposes. It includes instructional units and activities suitable for inservice, preservice and advanced cadre professional activities in a variety of settings, delivery modes, and time frames.
- structured so that the trainer can choose from a variety of lecturettes, small group discussion questions, case studies, activities and problem solving exercises to customize the agenda so that it meets the specific needs of the audience.

Background

This revision of the curriculum is a reflection of the past, present and future of career development in our changing world. This program is not only for career counselors, but for all involved in supporting career development and decision making. To do this, the scope for the ICDM program has expanded to include all those individuals who are involved with the delivery of career development and career planning and placement services throughout the life span. The audience is no longer solely counselors and counselors in training. The audience has become the larger group of workers who are concerned with human resource development. This includes, for example, those who are involved with Job Service, Vocational Rehabilitation, K-12 counseling and education, postsecondary education, Job Training and Partnership Act (JTPA), and nonprofit organizations that work with adult populations and troubled youth, private employment agencies, the JOBS program, and businesses and industries that are concerned with the career development of their employees.

To reach these new audiences and expand delivery to fit the view of lifelong career development, this trainer's guide contains the resources that will enable you to address these multiple needs. Tailoring your presentations to suit your audiences can be accomplished through the way you choose to staff the inservice program and by constructing an agenda that includes those modules that best meet the needs of your audience.

Not only did the vision become broader in terms of the constituents that need to be reached, but also in terms of building links between the many related programs that are part of the NOICC mission, including the National Career Development Guidelines, Career Information Delivery Systems (CIDS), Occupational Information Systems (OIS) and *Developing a Quality Workforce*. The SOICCs are key resource people in the planning and implementation of this training.

Organization of the Materials

The curriculum is organized into ten modules. Each module teaches specific competencies through lecturettes, activities, exercises and group discussions. The first page of each module contains a listing of the content, and activities related to the content. The lecturette that follows contains summary statements in the left column to ease preparation and delivery. The content is contained on the right side of the page. Selected modules contain a section of Background Information for the Trainer that will provide more information on the topic discussed. Depending on the needs of the audience, trainers may want to include some of that information in handouts or in the lecturette, or, might want to use it to expand their level of expertise.

The trainer's function is to guide participants through the workshop, emphasizing both basic concepts and the implementation of these concepts through activities and applications contained in the final section of the Trainer's Guide. The Action Plan is incorporated into the curriculum at the beginning of the workshop, at the end of each module, and at the end of the workshop.

The Trainer's Guide is designed to be used with the Participant's Resource Guide. A brief description of the contents follows:

The Action Plan. This section contains an Action Plan and a strategy for completing the plan. This plan is started at the beginning of the workshop. Information and ideas are added to the plan throughout the workshop. The plan is completed and discussed at the end of the inservice.

Module 1 - Introduction. This module orients the participant to the content and philosophy of the inservice program. The focus is on establishing the importance and necessity of using information to make career decisions.

Module 2 - Definitions of Terms and Concepts Related to Career Development and Labor Market Information. It is important to take time at the start of the inservice to familiarize the audience with key concepts and terms related to career development, career decision making, the National Career Development Guidelines and labor market concepts.

Module 3 - Demographic Trends that Impact Career Decision Making. This module explains some of the demographic trends that impact on the labor market. Specifically, they are the graying of America, the increasing diversity of our population, and the growing number of women in the labor force.

Module 4 - Theories of Career Development. This module focuses on theories of career development and choice, with special attention to career and labor market information. The argument is made that counselors need theories to bridge gaps between knowledge and the unknown, to summarize information, to understand and explain information and to make predictions that improve the knowledge and skill bases for career counseling.

Module 5 - What Is Career and Labor Market Information? How Can It Be Accessed? How Can It Be Used? The role of information in career counseling is based on the assumption that information and knowledge can improve one's ability to make career choices.

This module defines what is meant by career information and examines a variety of delivery methods including Career Information Delivery Systems (CIDS). This module contains significant trends in the labor force, the economy, industries, and occupations projections as an example of the kind of information that can enhance career decision making.

Module 6 - Developing an Awareness of Multicultural Issues. Becoming a culturally skilled counselor is challenging. The purpose of this module is to develop multicultural awareness in those who work in the area of career development and decision making.

Module 7 - Specific Needs of Adults. Given the level of change and movement within the work force, a large percentage of adults will continually need current information to plan their changing career needs. The issues concerning an adult in career transition are discussed in this module.

Module 8 - Specific Needs of Women and Teen Parents. Women are now full participants in the work force. This opens up new horizons for them, but it also presents many challenges. These challenges are first explained and then examined in order to determine the role of information in effective career decision making. One group of women, teen parents, need a great deal of support. The barriers in their career development are also discussed.

Module 9 - Specific Needs of Persons with Disabilities. This module looks at the career development needs of those individuals with a disability and focuses on the role that good information plays in their career decision making. In addition, a review of federal legislation that supports career development of those with a disability is included.

Module 10 - Specific Needs of Children At-Risk. Keeping children in school through high school graduation is an effective deterrent to a life of poverty. The key to working with children at-risk seems to be helping them to overcome their feeling of alienation from the mainstream of society. This module shows how career education and career information can help students see the relevance in their education by building a connection between school and the world of work.

Applications and Activities Section

The final section of the Trainer's Guide contains applications of the concepts presented in the modules. These activities, case studies, small group exercises and problem solving scenarios will be referred to throughout the Trainer's Guide on the front sheet of each module. A variety of activities will enable you to customize the inservice program to meet the skill level and needs of the audience.

A matrix appears at the beginning of the Applications and Activities Section that organizes the content. Within this section, the activities are described and specific directions for completing the activities are included. Each activity can be used in a number of modules, as noted on the matrix.

Remember that the Action Plan is designed to be an activity begun at the beginning of the day, developed, reviewed and critiqued throughout the entire workshop. The final Action Plan document is the culmination of the training.

The Participant's Resource Guide

The Participant's Resource Guide contains information on the Action Plan, the ten modules and all the activities. Each module contains an abbreviated version of the lecturette with copies of the

transparencies embedded within the text. The Activities Section contains the same material that is in the Trainer's Guide.

Formats For Delivery

The inservice materials can be delivered in a variety of formats. Some states have delivered the workshop in one day drive-in workshops and others have delivered the content in three days. The materials in this curriculum have been organized to afford you maximum flexibility. Each module could stand alone, or it could be delivered in sequence. The Trainer is encouraged to review the modules to determine which ones meet the needs of the audience. The agenda should be developed to meet those needs within the time constraints.

Trainers should realize that reducing the length of the inservice may cause participants to feel rushed and overwhelmed. Hands-on activities take time, but they also result in a better understanding of how to use the wide array of resources and information. Eliminating these activities is likely to diminish the effectiveness of the inservice.

Several sample agendas follow.

One Day Workshop - Six Hours

- Introduction, Welcome, and Ice Breaker
- Introduce Action Plan
- Definitions of Key Terms and Concepts
- Module 5
- Complete Action Plan
- Conclusion

One Day Workshop - Eight Hours

- Introduction, Welcome, and Ice Breaker
- Introduce Action Plan
- Definitions of Key Terms and Concepts
- Module 5
- Select one module from Modules 3, 4 or 6-10 depending on the needs of the audience
- Complete Action Plan
- Conclusion

One and a Half Day Workshop - 12 Hours

- Introduction, Welcome, and Ice Breaker
- Introduce Action Plan
- Definitions of Key Terms and Concepts
- Select two modules from Modules 3, 4 or 6-10 depending on the needs of the audience
- Module 5
- Complete Action Plan
- Conclusion

Two Day Workshop - 16 Hours

- Introduction, Welcome, and Ice Breaker
- Introduce Action Plan
- Definitions of Key Terms and Concepts
- Select three modules from Modules 3, 4 or 6-10 depending on the needs of the audience
- Module 5
- Complete Action Plan
- Conclusion

Two and a Half Day Workshop - 20 Hours

Introduction, Welcome, and Ice Breaker

Introduce Action Plan

Definitions of Key Terms and Concepts

Module 3 Demographics or Module 4 Counseling Theory

Module 5

Select two or three modules from Modules 6-10 depending on the needs of the audience

Complete Action Plan

Conclusion

Planning

The success of this instruction depends on how well the trainer can incorporate principles of "how adults learn." Although adults are a group with a vast amount of individual differences, the literature concludes that there are certain characteristics that define the adult learning style.

- Adult learners frequently want to know "why" they are learning. They learn what they consider to be important. When they perceive a need, they are capable of working very hard. On the other hand, they will drop out when their needs are not being met.
- Adults have an orientation to learning that is life, task and/or problem centered. Merely acquiring new information is not as important as problem solving. "How" the information can be applied is really the critical issue.
- Adults are time conscious learners. They have many roles that put demands on their time and energy. This means they want to meet their goals as directly, quickly and efficiently as possible.
- Adults want to be treated as responsible and independent learners. Instruction should be designed so adults retain as much autonomy as possible.
- Adult learners proceed with an historical base consisting of a myriad of experiences that serves as a framework into which current learning and future growth are incorporated. Past success and failure color their attitude towards learning and towards specific pedagogical strategies.
- Adults understand that as they pass through stages, they focus their attention on the knowledge, skills and attitudes that they need during that particular time. This is sometimes referred to as a "teachable moment." This means that the trainer should design the inservice program to include the following:
 - The learner, rather than the teacher, should be the key decision maker, or at the very least, be involved in joint decision making.
 - The applied learning techniques used to deliver the lesson should include discussions, problem solving cases, simulations and field relevant experiences.
 - Programs should be focused on meeting real life needs and organized by the mastery of competencies that are sequenced to parallel the learner's readiness to learn.
 - Programs should be short in length and to the point.

Remember, the orientation of the audience should dictate planning and delivery of the inservice.

- The training team should include individuals who have expertise in the topics covered. The team might include a SOICC Director counselor educator, labor market analyst, CIDS staff member, demographer and/or counselor.
- If other speakers are to be used, they should be identified and an outline should be developed for them to use in their presentation. Examples of other speakers might include

representatives from labor and/or business, a test specialist, a representative from higher education, or a staff member from a community agency.

- If there is a state Career Information Delivery System (CIDS) and there is no CIDS person on the training team, someone should be assigned to gather and present information about the state CIDS.
- Once ICDM workshop trainers have been selected, it is helpful if formal planning meetings are held prior to the first workshop to formulate the agenda and assign tasks. After the first workshop has been completed, another planning meeting is useful to revise the program, based on the initial experience and feedback.
- Trainers should check to determine how the National Career Development Guidelines are implemented in the participants' work sites. In particular, trainers should determine what resources are available and how they are being used. This can be completed informally or formally with a Pre-Training survey. (A sample survey is included at the end of this section.)
- Trainers should check which career information resources are available in their own states. If the National Career Development Guidelines or state developed guidelines are being implemented in your state, contact the appropriate state agency for information to include in the workshop.
- Discuss how the Action Plan can best be used throughout the training.
- Someone on the team should be designated to make certain there are enough resource materials available for participants to use in the workshop and make arrangements for transporting them to the training site.
- One member of the training team should take responsibility for duplicating materials, obtaining name tags, arranging for audiovisual equipment and any other supplementary supplies that are necessary.
- A marketing plan should be in place that ensures that sufficient information about the training is sent to all potential participants. Think creatively about how to offer the program to all possible audiences. (Sample brochures are included at the end of this section.)
- A mailing to potential participants with registration information should be sent out approximately two months prior to the workshop. If there is a series of workshops offered, be sure that the dates, places and times are clear.
- Special touches, such as an inviting workshop site, refreshments and attractive handouts help to improve the ambiance of the inservice program.
- Discuss a pay-off as an incentive to finish the training, such as a certificate of completion, college credit, credit from the National Board for Certified Counselors (NBCC), or CEU's.
- Plan for follow-up of participants.

In closing, be sure that your plans include a discussion of the learning environment. Eittington (1989) has developed a **Climate Setting Checklist** that can encourage learner involvement and participation. Review this checklist both during your planning sessions and immediately before the training begins.

Physical Surroundings

- | | |
|---|--|
| <input type="checkbox"/> Space | <input type="checkbox"/> Refreshments |
| <input type="checkbox"/> Lighting | <input type="checkbox"/> Writing Materials |
| <input type="checkbox"/> Acoustics/Outside Noise | <input type="checkbox"/> Rest Rooms |
| <input type="checkbox"/> Decor | <input type="checkbox"/> Audiovisual Aids |
| <input type="checkbox"/> Temperature | <input type="checkbox"/> Coat Racks |
| <input type="checkbox"/> Ventilation | <input type="checkbox"/> Parking |
| <input type="checkbox"/> Seating: Comfort/Position | <input type="checkbox"/> Traffic Directions |
| <input type="checkbox"/> Seating Arrangement/Grouping | <input type="checkbox"/> Name Tags or Cards |
| <input type="checkbox"/> Mobility/Rest/Change | <input type="checkbox"/> Records/Addresses, etc. |

Human and Interpersonal Relations

- | | |
|--|--|
| <input type="checkbox"/> Welcoming | <input type="checkbox"/> Relevance to Work Setting |
| <input type="checkbox"/> Starting on Time | <input type="checkbox"/> Assessing Needs |
| <input type="checkbox"/> Comfort Setting | <input type="checkbox"/> Formulating Objectives |
| <input type="checkbox"/> Informality | <input type="checkbox"/> Distributing a List of Participants |
| <input type="checkbox"/> Warm up Exercise | <input type="checkbox"/> Designing and Implementing Activities |
| <input type="checkbox"/> Democratic Leadership | <input type="checkbox"/> Evaluating |
| <input type="checkbox"/> Interpersonal Relations | <input type="checkbox"/> Closing Exercise |
| <input type="checkbox"/> Handling VIP's | <input type="checkbox"/> Ending on Time |

Organizational

- | | |
|---|--|
| <input type="checkbox"/> Policy | <input type="checkbox"/> Program Theme |
| <input type="checkbox"/> Structure | <input type="checkbox"/> Advertising |
| <input type="checkbox"/> Clientele | <input type="checkbox"/> Poster, Displays |
| <input type="checkbox"/> Policy and Structure Committee | <input type="checkbox"/> Exhibits |
| <input type="checkbox"/> Meeting Announcements | <input type="checkbox"/> Budget and Finance |
| <input type="checkbox"/> Informational Literature | <input type="checkbox"/> Publish Agenda and Closing Time |

Teaching Tips

(Many of the following ideas have been suggested by SOICC staff members.)

- The trainer's function is to guide the participants through the inservice program, emphasizing career development as a lifelong process and the use of information in career decision making.
- Explain that the competency based curriculum is designed to teach skills that can be incorporated into the career development process, regardless of the type of agency or institution in which they work, or the counseling theory they utilize.
- When appropriate, involve knowledgeable counselor educators in both planning and delivering the training.
- Ask participants to identify their needs on all topics at the beginning of the workshop. Then review the agenda and the process involved in the formulation of an Action Plan to see if the participants' needs are being addressed. In this way, the participants will see how the training can meet their needs. Review the major objectives and emphasize the variety of delivery modes that will be utilized in the training.

- Be sure to discuss the Action Plan at the beginning of the workshop, after each module and at the end of the workshop. Time needs to be set aside to finalize and fill in the details of the Action Plan.
- Have the SOICC director, the state Career Guidance Supervisor, and the CIDS Director appear early in the workshop. This gives visibility to primary state resources. Also involve counselor educators early to lead activities, facilitate group interactions and set the climate.
- Prepare a handout and place a list of the most frequently used acronyms on the wall. At the beginning of the session, identify and acknowledge the "special language" used that sometimes creates barriers. Quickly define acronyms that will be covered each day. At the end of the day, review the list.
- To deliver an effective lecture be sure that you:

State your objectives at the outset
 Know your subject well
 Prepare in advance
 Study yourself in action
 Over prepare
 Use visual aids
 Watch techniques of delivery, i.e., voice variation, gestures, movement, and pauses
 Vary the tempo
 Maintain eye contact
 Use humor
 Use handouts
 Breathe properly
 Do not read the lecture
 Introduce surprise into the content
 Enunciate carefully
 Exude confidence and sincerity
 Be energetic and enthusiastic
 Do not turn down an opportunity for practice
 Watch your introduction
 Watch your closing
 Ask for feedback during the speech to be sure that you are headed in a direction that fits the needs of the audience
 Avoid "uh's" and "ah's"
 Know your audience--their interests, perceptions, expectations, and background
 Assess and reassess your audience during the presentation
 Quit on time
 Personalize your talk, which can frequently be accomplished by using a lot of "you's"
 Include practical material
 Avoid heavy statistics and speak generally about quantitative items
 Use everyday language
 Try to speak in a conversational tone of voice
 (Eitington, 1989)

- Be sure you use a variety of methods to deliver the content including:

Current books, magazines, newsletters
 Videotapes
 Overhead transparencies
 Computer displays

- Easel and flip chart
- Flannel board
- Posters and signs
- Chalk or cork board
- Lecturettes
- Process groups
- Brainstorming
- Simulation
- Games
- Role play
- Case study
- Critical incident
- Teaching/learning teams

Using Handouts

Use the following checklist to determine whether your handouts will help or hinder the instruction.

No Yes General

- — 1. Do I regard handouts as aids or tools rather than just "throw aways?"
- — 2. Do I choose handouts carefully and opt for quality rather than quantity?
- — 3. Do I constantly up-date and enrich my handout files?
- — 4. Do I think in terms of variety of formats and uses: outlines, charts, graphs, models, cartoons, poems, quotes, cases, articles, question sheets for films, instruction sheets for exercises, editorials, self-quizzes, topic summaries, etc.?
- — 5. Do I plan their use carefully?
- — 6. Have I secured permission to reproduce copyrighted materials?
- — 7. Do I use handouts at all stages: 1. Pre-Session; 2. In-Session; 3. End-of-Session; 4. Post-Session?

A. Pre-Session

- — 1. Do I utilize pre-work materials for one or more of these reasons:
 - a. To establish early contact with the participants
 - b. As a "motivator"
 - c. As a topic introducer
 - d. To bring everyone up to a common level of understanding of a topic
 - e. To facilitate entry from the job to the classroom
 - f. To save time
- — 2. Is there a plan to tie advance work to specific class activities?
- — 3. Do advance readings, exercises, etc. consider trainee interests and needs?
- — 4. Are instructions on advance work clear and goal-oriented?
- — 5. Time factors:
 - a. Will the materials be received early enough to work on them?
 - b. Will the participants' schedules allow for pre-work?

B. In-Session

- — 1. Do I provide participants with a bulky notebook of materials "for effect" rather than for actual class use and benefit?
- — 2. Are all or most sessions supported by handout materials?
- — 3. Do I provide outlines so participants can have an overview of an activity or the total course?

- — 4. Do I hand out materials to advance the session rather than to compete with it (e.g., extensive reading in class of handouts is to be avoided)?
- — 5. Do I pass out more items at any one time than people can digest?
- — 6. Do I tap participant motivation via:
 - — a. Participant-prepared handouts (i.e., assembly and reproduction of ideas developed by participants in their small groups or general sessions)?
 - — b. Encouraging trainees to bring in pertinent materials that can be reproduced for the total group?
- — 7. Do I provide in writing key points or summary statements of talks, learnings from exercises, complex ideas, etc.?
- — 8. Do I "imagineer" handout distribution (e.g., put an item on everyone's chair during the break)?
- — 9. If I use handouts extensively do I try to evaluate their effectiveness?

C. End-of-Session

- — 1. Have I provided materials for reading?
- — 2. Have I pointed up the importance of take home materials so they are seen as reference items rather than "throw aways"?
- — 3. Have I allowed enough class time for distribution of final take home materials?
- — 4. Should all take home materials be distributed to everyone or, alternately, might they be placed on a table for optional selection?
- — 5. Have I facilitated storage (via notebook, folder or envelope) and retrieval (via dividers) of handouts?

D. Post-Session

- — 1. Do I think in terms of follow-up, of stimulating participants via handouts provided one, three or six months after training's end?
- — 2. Have I considered contacting course "graduates" about additional materials they might wish to receive?
- — 3. Can handouts developed in class by participants be made available to other segments of the organization?

Prepared by J. E. Eitington, *Bulletin on Training*, July/August 1977.

Using Transparencies

The overhead transparencies are located in two places in the Trainer's Guide: at the end of each module and a small version of each transparency is embedded in the lecturette. A list of the transparencies used in each module appears on the front page of each module immediately after the title page.

Although each transparency was designed to illustrate a particular point, trainers should feel free to use them to meet their own needs. You may choose to disregard some or create new ones, depending on the concepts you wish to teach and the needs of the audience.

Transparencies can be made more attractive by using permanent markers to add color. Underlining and/or using boxes or circles around certain words, numbers or symbols are effective ways to add emphasis.

Materials and Equipment Needed for the Workshop

(NOTE: If all modules are not included on your agenda, you might not need all the resources and documents listed below.)

- Transparencies for workshop**
- Overhead projector and screen for transparencies and computer display**
- Copy of agenda for each participant**
- Copy of Pre-Training Survey**
- Flip chart, pens, masking tape**
- Participant Resource Guide for each participant**
- Copy of the National Career Development Guidelines Brochure**
- Standard Industrial Classification Manual (SIC)**
- Dictionary of Occupational Titles (DOT) and Supplement**
- Selected Characteristics of Occupations Defined in the DOT**
- Standard Occupational Classification (SOC)**
- Guide for Occupational Exploration (GOE)**
- Occupational Outlook Handbook (OOH)**
- Occupational Outlook Quarterly**
- Occupational Projections and Training Data**
- U.S. Industrial Outlook**
- BLS Area/Industry Wage Surveys**
- County Business Patterns**
- State OES I/O Matrix or OIS**
- OES Industry/Occupation Employment Projections (state and local)**
- Employment, Wages, and Contributions, ES-202 (state and local)**
- Monthly LMI Newsletters (state and local)**
- Career Information Delivery System Information (software, fact sheets, user materials, workbooks, etc.)**
- State Manufacturer's Guide**
- State and Local Labor Force Data**
- State Career Tabloids**
- 1990 Census Data**
- Workshop Evaluation Forms**
- Other:**

Starting the Inservice Program

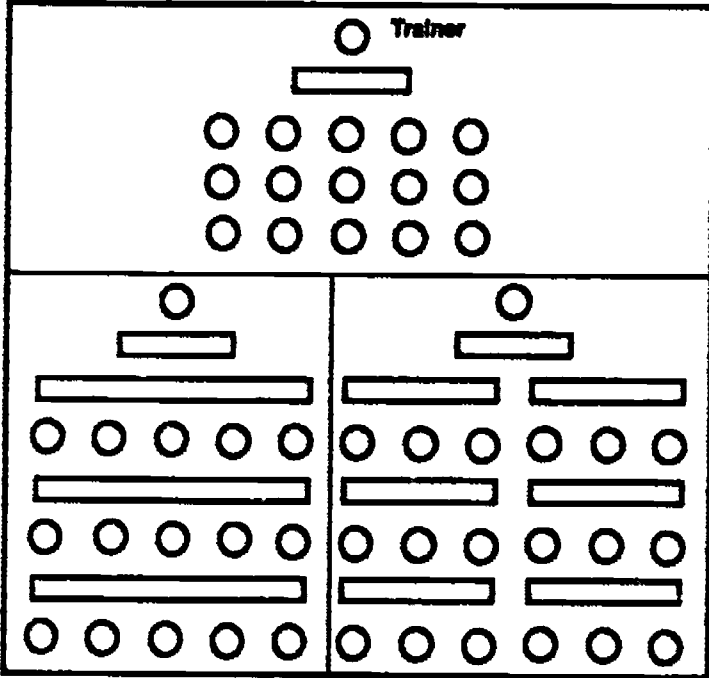
1. **Seat participants in small groups, four to six to a table, depending on the table size. Round tables are best because they provide more possibilities for the group to interact and share materials. Some trainers prefer to seat participants by team or common interest.**

It is important to note the critical nature of a seating arrangement. The proper seating can serve to facilitate participation, energize the group and communicate the trainer's philosophy of adult learning and instructional style. If not considered, the seating arrangement alone can lead to a misdirected training program. Before you decide how you want to arrange the room, ask yourself, How much involvement of participants do I want? How much movement should take place to facilitate that involvement?

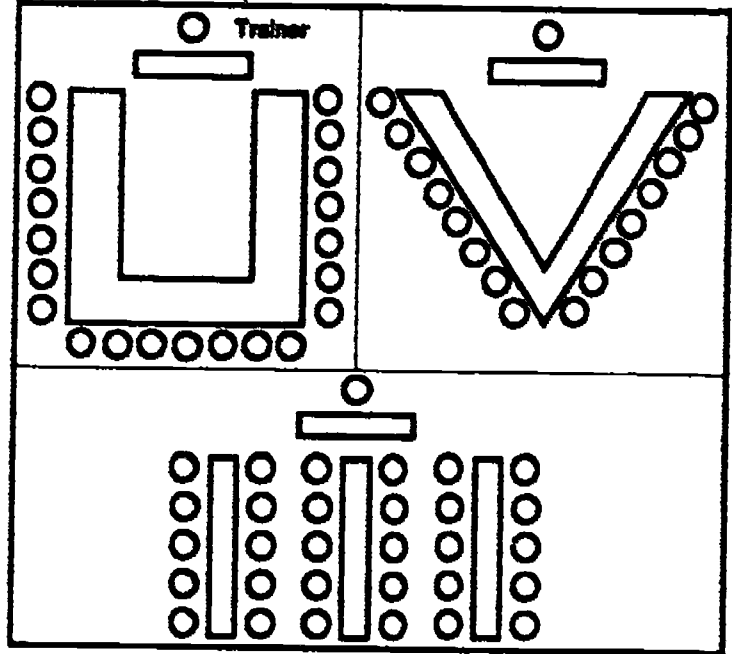
Eitington (1989) discusses three possible levels of involvement and the seating arrangements that encourage or discourage the desired level of involvement: low participant involvement, moderate involvement and high involvement.

Examples of Seating Charts

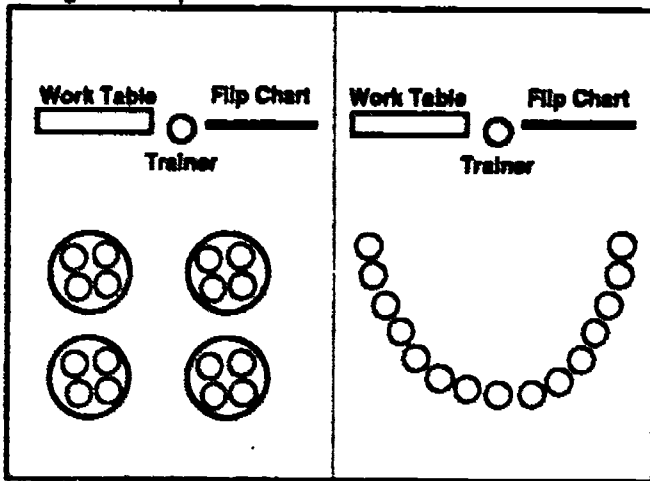
Low Participant Involvement



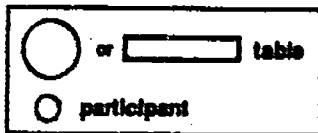
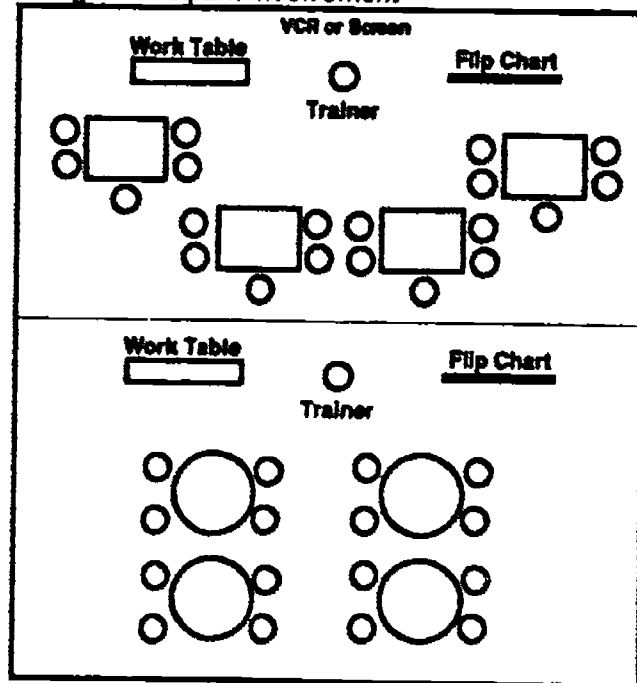
Moderate Participant Involvement



High Participant Involvement



High Participant Involvement



2. Introduce the training team and attend to the housekeeping duties. People may have concerns about lodging, meals, breaks, location of restrooms, credit available for attending the workshop, and the schedule for the workshop.
3. Have participants introduce themselves, identify their job/agency/institution and talk briefly about their reason for attending this workshop. As these reasons are expressed, another team member can list them on the board. This activity should be limited to 30-40 seconds per participant. The facilitator can link responses to point out networking opportunities. The list can be displayed in the workshop room and periodically checked throughout the inservice to make certain participant needs are being met, and to help trainers learn the participants' names.
4. Begin the formal session with one of the ice breakers in the Applications Section. Openers help participants ease into the subject matter. They are intended to set the stage, and make participants more comfortable and eager to learn. They can give participants the opportunity to express their reasons for attending, their goals and expectations. The size of the group and the amount of time available for the activity should be taken into consideration.
5. Provide a brief overview of ICDM.

Workshop Evaluation

A sample evaluation form is included at the end of the Trainer's Guide. Be sure to leave enough time at the end of the workshop to complete these forms.

A PRE-TRAINING SURVEY

We are interested in learning about your knowledge of Labor Market Information so that we can better tailor the ICDM training program. Please fill out this survey and return it with your registration.

Labor Market Information (LMI) is systematized data, produced on a regular basis, about employment, unemployment, jobs and workers. It includes information about people (their demographic characteristics, incomes, skills, education, etc.), jobs (their structure, content, wages, availability, etc.), and employers (their locations, industries, hiring patterns, etc.).

A. Below are listed some common types of labor market information. Please indicate how each type fits into your agency's activities using the following designations:

A = relevant and useful

B = of some minor relevance and use

C = relevant, but not useful as currently provided and presented

D = irrelevant/not used at all

E = don't know

state & national labor force statistics

local employment by industry data

wage information

distribution of occupations by industry

occupational projections

industry outlook information

characteristics of jobs

data on plant closings & mass layoffs

local unemployment rates

data on vocational education graduates

enrollments/completions in secondary education

enrollments/completions in postsecondary education

poverty data

welfare data

population and demographic data

B. Indicate how labor market information relates to the following functions, commonly performed in agencies like yours. Use the following designations:

A = LMI is relevant and useful

B = LMI has some relevance and use

C = LMI is relevant, but not useful as currently provided & presented

D = LMI is irrelevant/not used at all

E = don't know

F = agency doesn't perform this function

designing labor market policy/strategy

evaluating performance of different programs

evaluating overall agency performance

providing information to clients

tracking client progress/outcomes

responding to questions about labor market conditions

assessing demand for agency services

placing people in jobs

allocating funds to sub-areas

counseling persons in training/careers/jobs

fulfilling federal/state planning/reporting requirements

analyzing conditions in the labor market

prioritizing agency activities

refining the agency's missions/goals

evaluating employers' requests for assistance

identifying population groups in need of services

C. Where do you find labor market information? Rank the following resources

A = use frequently

B = use occasionally

C = do not consult at all

D = not aware of

local newspapers

local Job Service LMI analyst

national newspapers and magazines

professional publications

WI Career Information System (WCIS)

State Bureau of Labor Market Information

local libraries

State Data Center or affiliate

local vocational college

federal agencies and publications

Please list other types of LMI not listed above which you would rate as relevant and useful to your agency's activities.

What are your favorite sources of LMI?

Developed by the Wisconsin SOICC, 1991.



**IS YOUR CONCEPT
OF CAREER PLANNING
OUT OF DATE?**

**Attend the "Career Planning – A Lifelong Process"
Conference, April 10 and 11, 1990 in Great Falls**

This conference will provide an opportunity for you to better assist your students or clients in making career decisions based on the realities of the labor market. You will:

- Understand why career development is a lifelong process
- Learn how occupational and educational information is used in a career information system
- Receive up-to-date information about Montana's economic and occupational future
- Gain information about career opportunities in the military
- Network with others interested in career counseling
- Learn to use the National Career Development Guidelines in your career counseling program
- Apply national and Montana occupational and labor market information to career planning

Highlights include:

- **Dr. Cal Crow**, Center for Career and Work-Related Education, Northwest Cooperative Education Center, Des Moines, Washington
- **Dr. Bruce McKinlay**, Executive Director of the National Career Information System, Eugene, Oregon
- **Dr. Paul Polzin**, Director of the Bureau of Business and Economic Research, University of Montana, Missoula
- Chuck Wagon Buffet sponsored by the Department of Defense

Who should attend? School and job counselors, administrators, teachers, curriculum planners, principals, employers and others interested in career planning.

The conference is sponsored by the Montana State Occupational Information Coordinating Committee (SOICC), the Montana Career Information System, the Montana Council on Vocational Education, the Military Entrance Processing Station and the Montana Office of Public Instruction.

CONFERENCE DETAILS:

"Career Planning – A Lifelong Process" will be held at the Sheraton Great Falls, 400 - 10th Avenue South. The conference will begin at 9:30 a.m., April 10 and will last until noon, April 11.

The registration fee before March 23, 1990 is \$25. Registration after March 23 is \$30. Your registration fee covers all conference activities including a banquet the evening of April 10.

The Sheraton is offering a conference rate for sleeping rooms of \$39 single occupancy and \$45 double occupancy. A block of rooms has been reserved for state employees at \$24 single occupancy (state identification is required). If you need hotel rooms, you must make reservations at least two weeks before the conference. To get the conference rate, please indicate that you will be attending the "Career Development – A Lifelong Process" conference. Call the Sheraton at 800-626-8009 to make your reservations. You can also request a room reservation card from the Montana SOICC by checking the appropriate box on the registration form.

Participants will receive career and labor market information resources at the conference. These include a publication called "Using Labor Market Information in Career Exploration and Decision Making," and the latest "Occupational Outlook Quarterly Outlook 2000."

If you have questions about the conference, call the Montana SOICC at (800) 633-0229.

We hope to see you there!

REGISTRATION FORM

YES, please register me for the "Career Planning – A Lifelong Process" conference at the Sheraton Great Falls, April 10 and 11, 1990.

\$25 – registration before March 23, 1990

\$30 – registration after March 23, 1990

Please send me a Guest Registration form for the Sheraton Great Falls.

Check here if you are interested in a post-conference "case study" using labor market information. If there is enough interest, this session will be scheduled for the afternoon of April 11.

NAME:

TITLE:

ADDRESS:

PHONE:

Please return your completed registration form and your check or money order made out to the Montana SOICC to:

Montana SOICC
P.O. Box 1728
Helena, MT 59624

CAREER COUNSELING IN A CHANGING WORLD
Viriden Center, University of Delaware
Lewes, Delaware



May 18-19, 1990

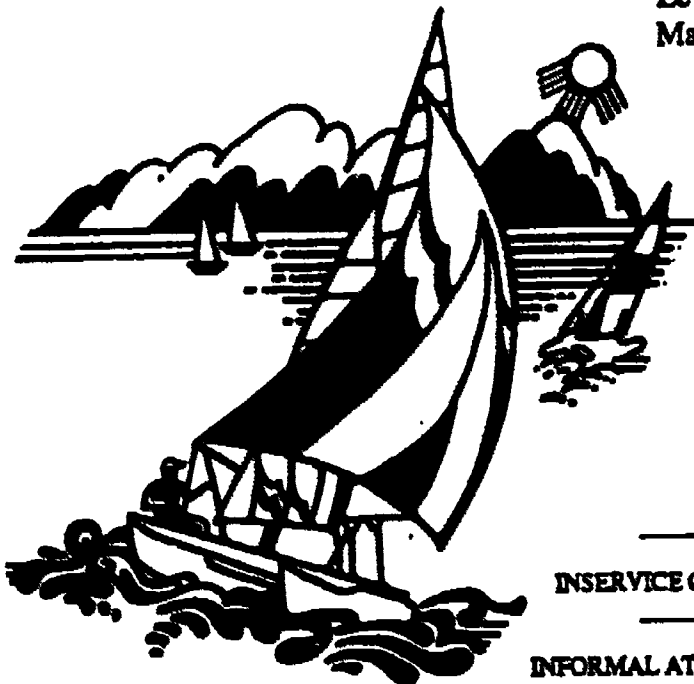
**Delaware Department of Labor
Office of Occupational and Labor Market Information**

Delaware Occupational Information Coordinating Committee

Delaware Department of Public Instruction

CAREER COUNSELING IN A CHANGING WORLD

Virden Center, University of Delaware
Lewes, Delaware
May 18-19, 1990



8:00 a.m., May 18 - 12:00 Noon, May 19
Delaware Department of Labor, Office of,
Occupational and Labor Market Information,
Delaware Occupational Information Coordinating
Committee, and Delaware Department of Public Instruction

"A workshop to enhance career decision
making using occupational and labor
market information".

PARTICIPANT INVOLVEMENT AND HANDS-ON
OPPORTUNITIES IN A PLEASANT ATMOSPHERE
AT THE BEACH

INSERVICE CREDIT WILL BE GRANTED

INFORMAL ATTENDANCE - ENJOY AS YOU LEARN

MEALS AND OVERNIGHT ACCOMMODATIONS PROVIDED

OPTIONAL BOAT TOUR

PARTICIPATION IS LIMITED--DEADLINE FOR RESPONSE, MAY 11

NOTE: A waiting list may be necessary. If you register and do not attend, we will need to bill you for costs we cannot recover. If you must cancel after your registration is confirmed, please call Jan McCullough by May 15 at 368-6963.

Registration:

Name _____ Work place _____

Phone _____ Work _____
Home _____ We will call to confirm your registration.

Please check

- Yes, please register me for "Career Counseling in a Changing World", May 18-19. If forced to cancel I will call by May 15.
- I will need overnight accommodations on Friday night.
- I would like to participate in a boat tour of Lewes Harbor on ~~Saturday afternoon~~
FRIDAY EVENING

RETURN BY MAY 11 TO:

Jan McCullough
Delaware Department of Labor,
Delaware Occupational Information Coordinating Committee
P. O. Box 9029
Newark, DE 19714-9029

Improve Career Decision-Making (ICDM) Workshops

Work is or will be important to most of us. For many of us, work is a major factor in defining "who we are" in our lifetimes. Sooner or later, young people must deal with this reality as they mature. Even when grown, individuals find that work-related issues affect their lives throughout their lifespans.

Counselors and other helping professionals must be prepared to deal with the work and career concerns that their clients present. In our modern information-age workforce, most workers can expect to change jobs more than half a dozen times in their lifetimes; and to need assistance in doing so. Counselors and other helping professionals need to know how and where to get current job and career information that will best help their clients.

To assure that occupational and career information is available and used to meet that need, Congress created the National Occupational Information Coordinating Committee (NOICC) and the State Occupational Information Coordinating Committees (SOICCs) in 1976. And to assure that counselors and others are well-prepared to assist their clients with job and career-related issues, NOICC has sponsored the Improved Career Decision Making (ICDM) Program through cooperating SOICCs since 1981.

The goal of the ICDM program is to train counselors and others to help individuals use labor market information in making decisions about occupations and careers. The Delaware SOICC, working closely with the labor market analysts of the Office of Occupational and Labor Market Information and the State Supervisor of Guidance of the Department of Public Instruction, tailors the ICDM curriculum to Delaware's economic and demographic conditions and the needs of the participants.

Sections of the curriculum include:

The Changing World:

(The Changing Workplace; Changing Information; The Changing Decision-Making Process, Changing Career Counseling)

Labor Market Information in the Changing World:

(Labor Market Information--What is It?; Labor Market Information--Where Do You Get It?; Labor Market Concepts; Classification Systems and Resources) and

Using Labor Market Information in the Changing World:

(Use of LMI in Case Studies; Special Needs Populations)

The ICDM Workshops are fast-paced, intense learning experiences geared to groups of no more than 25 participants. The information is presented by a variety of visual aids, hands-on activities, and mini-lectures. Workshop participants not only gain a broad understanding of the term "labor market information," but also gain experience working with an extensive group of labor market resource materials, many of which are theirs to keep and use in the future.

For further information, please call Jan McCullough, Delaware Occupational Information Coordinating Committee, at (302)368-6963.

EVALUATION FORM

USING LABOR MARKET INFORMATION TO ENHANCE CAREER DEVELOPMENT

Please complete the following evaluation form so that we may direct our future planning efforts to serve your needs.

- I. Rate the quality and usefulness of the following subjects. Circle one number for each item.

		RATING				
		Low			High	
Unit 1:	<i>What is Labor Market Information?</i>	1	2	3	4	5
Unit 2:	<i>Demographic Trends</i>	1	2	3	4	5
Unit 3:	<i>Occupational Projections</i>	1	2	3	4	5
Unit 4:	<i>Federal and State Resources</i>	1	2	3	4	5
Unit 5:	<i>Local Resources</i>	1	2	3	4	5
Unit 6:	<i>CIDS</i>	1	2	3	4	5
Unit 7:	<i>Practical Applications</i>	1	2	3	4	5

- II. Please respond to the following:

		Disagree		Agree		
1.	The amount of time allotted for each presentation was about right.	1	2	3	4	5
2.	My awareness of labor market information was increased.	1	2	3	4	5
3.	I learned new ways to use labor market information.	1	2	3	4	5

Comments and Recommendations:

Developed by the Wisconsin SOICC.

Module 1

Introduction



National Career Development Guidelines-Counselor Competencies

Skills to assist individuals in setting goals and identifying strategies for reaching goals.

Knowledge of changes taking place in the economy, society, and job market.

Knowledge of education, training, employment trends, labor market, and career sources.

INTRODUCTION

MODULE 1

Outline Topic	Delivery Methods	Trainer's Notes
Introduction	Lecturette pp. 1-2 <i>Figure 1.1</i> <i>Career Influences</i> <i>Figure 1.2</i> <i>Goals of the ICDM Program</i>	
Career Decision Making and the Role of Information	Lecturette pp. 3-11 <i>Figure 1.3</i> <i>National Career Development Guidelines</i> <i>Figure 1.4</i> <i>Student Competencies</i> <i>Figure 1.5</i> <i>Sample Questions to Ask of Information</i>	
What is Career and Labor Market Information? (LMI)	Lecturette p. 12	
A Changing Work Place	Lecturette pp. 12-14 <i>Figure 1.6</i> <i>Samples of Information</i>	
Conclusion	Lecturette pp. 14-15	
Activities	1, 2, 3, 4, 5, 6, 7, 8	

INTRODUCTION

MODULE 1

INTRODUCTION

Work is part of our identity.

Career decisions are critical to our sense of well-being.

The 1989 Gallup Survey reiterates the need for attention to improving career decision making.

Chance and environment play an important role in career decision making.

Introduction

"Hi, I'm Jane Cruz."

"Well, it's nice to meet you, Jane, I'm Tom Chen."

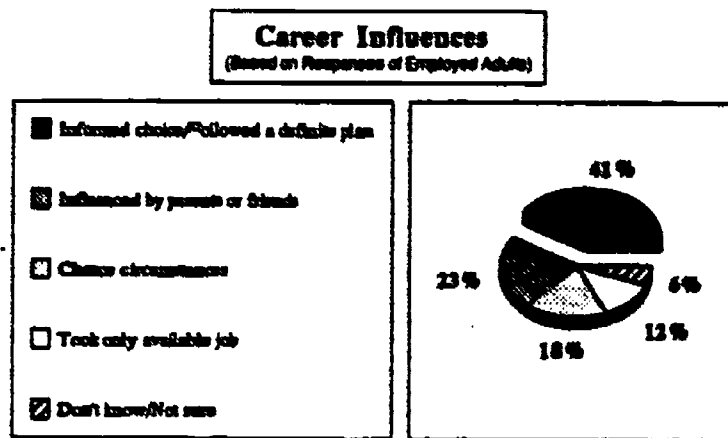
"You look familiar, Tom, I know I've seen you before. Do you work in this area?"

In many first time meetings such as this, the work we do is often our most descriptive label. He's a nurse; she's in sales; she's retired; he's unemployed. How do we arrive at these social definitions? Did he choose to become a nurse? Did she aspire to be in sales? How are these career choices made? Are they the result of long-term goals set early in life? Did Tom and Jane make decisions and plans years ago to be in a particular career? Or is Tom a nurse because entry into other professions seemed difficult? Is Jane in sales because she needed work at age 18 and selling was the first job she stumbled upon after graduating from high school?

The decisions we make about our careers and leisure activities throughout the lifespan are critical to our sense of well-being. Satisfaction in our work can be a key ingredient to our sense of self-worth. Our happiness can be contingent upon our role as a productive and worthwhile employer or employee. Conversely, excessive stress on the job can interfere with our mental and physical health and our personal relationships. Many believe that the person who finds fulfillment in the work place can maintain a sense of security and belonging to the society at large.

Despite the importance of a career, a Gallup Survey conducted in 1989 found that less than half (41%) of today's adults made a conscious and informed career choice. The survey, sponsored by the National Occupational Information Coordinating Committee (NOICC) and the National Career Development Association (NCDA) contains data that strongly reinforce the widely recognized need for improved career decision making.

Many of the adults polled attributed their career patterns to situational causes, chance encounters and environmental conditions. The survey found that only four out of ten working adults in the United States followed a specific plan for entering their career. One-third of the others surveyed got started in their current jobs by chance (18%) or necessity (12%), by taking the only job that was available at the time. The social environment can also be a dominant factor controlling career decisions. Twenty-three percent (23%) of the Gallup respondents reported that their career choice was influenced by family or friends.



(Gallup Survey, 1988)

Figure 1.1

One step in the career decision making process is relating self-knowledge to the available opportunities in the world of work.

This inservice is designed to help you locate, access, evaluate and use the career and labor market information that explains what is available in the world of work.

Career decision making is a complex process. One step in the process is to relate self-knowledge to the available opportunities in the world of work. Unfortunately, many career development facilitators are not prepared to locate, access, evaluate and use information that defines the opportunities in the world of work.

This inservice program, *Improved Career Decision Making (ICDM) in a Changing World*, is designed to aid career development facilitators in finding, interpreting and effectively using the wealth of career and labor market information (LMI) that is available. The goals of the ICDM program follow.

Goals of the ICDM Program

Train career development facilitators to help students and clients:

1. Understand labor market information,
2. Use information to make career decisions,
3. Improve decision making skills, and
4. Develop an action plan to make more effective use of information in career decision making.

Figure 1.2

CAREER DECISION MAKING AND THE ROLE OF INFORMATION

The National Career Development Guidelines define the role of career development facilitators.

Career Decision Making and the Role of Information
What can a career development facilitator do to enable clients and students to make effective decisions? Note that the term "career development facilitator" refers to anyone who provides a systematic program of experiences and information designed to facilitate an individual's career development. *The National Career Development Guidelines*, developed by the National Occupational Information Coordinating Committee, define competencies for staff who deliver career guidance and counseling programs. The competencies are organized around seven major areas: counseling, information, individual and group assessment, management and administration, implementation, consultation and specific populations.



National Career Development Guidelines

Counseling

Knowledge of developmental issues individuals address throughout the life span.
Knowledge of counseling and career development theories and techniques.
Knowledge of decision-making and transition models.
Knowledge of role relationships to facilitate personal, family, and career development.
Knowledge of different cultures to interact effectively with all populations.
Skills to build productive relationships with counselees.
Skills to use appropriate individual and group counseling techniques to assist individuals with career decisions and career development concerns.
Skills to assist individuals in identifying influencing factors in career decision making such as family, friends, educational opportunities, and finances.
Skills to assist individuals in changing biased attitudes that stereotype others by gender, race, age, and culture.
Skills to assist individuals in understanding the relationship between interpersonal skills and success in the workplace.
Skills to assist individuals in setting goals and identifying strategies for reaching goals.
Skills to assist individuals in continually reassessing their goals, values, interests, and career decisions.
Skills to assist individuals in preparing for multiple roles throughout their lives.

Information

Knowledge of changes taking place in the economy, society, and job market.
Knowledge of education, training, employment trends, labor market, and career resources.
Knowledge of basic concepts related to career counseling such as career development, career progression, and career patterns.
Knowledge of the changing gender roles and how these impact on work, family, and leisure.
Knowledge of employment information and career planning materials.
Knowledge of employment-related requirements such as labor laws, licensing, credentialing, and certification.
Knowledge of state and local referral services or agencies for job, financial, social, and personal service.
Knowledge of federal and state legislation that may influence career development programs.
Skills to use career development resources and techniques designed for specific groups.
Skills to use computer-based career information systems.

Individual and Group Assessment

Knowledge of assessment techniques and measures of skills, abilities, aptitudes, interests, values, and personalities.
Skills to identify assessment resources appropriate for specific situations and populations.
Skills to evaluate assessment resources and techniques related so that their validity, reliability, and relationships to race, gender, age, and ethnicity can be determined.
Skills to administer, interpret, and personalize assessment data in relation to the career development needs of the individual.

National Career Development Guidelines *continued*

Management and Administration

Knowledge of program designs that can be used in organizing career development programs.
Knowledge of needs assessment techniques and practices.
Knowledge of management concepts, leadership styles, and techniques to implement change.
Skills to assess the effectiveness of career development programs.
Skills to identify staff competencies for effective career development programs.
Skills to prepare proposals, budgets, and timelines for career development programs.
Skills to identify, develop, and use record keeping methods.
Skills to design, conduct, analyze, and report the assessment of individual and program outcomes.

Implementation

Knowledge of program adoption and planned change strategies.
Knowledge of barriers affecting the implementation of career development programs.
Skills to implement individual and group programs in a variety of areas such as assessment decision making, job seeking, career information and career counseling.
Skills to implement public relations efforts which promote career development activities and services.
Skills to establish linkages with community-based organizations.

Consultation

Knowledge of consulting strategies and consulting models.
Skills to assist staff in understanding how to incorporate career development concepts into their offerings to program participants.
Skills to consult with influential parties such as employers, community groups and the general public.
Skills to convey program goals and achievements to legislators, professional groups, and other key leaders.

Specific Populations

Knowledge of differing cultural values and their relationship to work values.
Knowledge of unique career planning needs of minorities, women, the handicapped, and older persons.
Knowledge of alternative approaches to career planning needs for individuals with specific needs.
Skills to identify community resources and establish linkages to assist adults with specific needs.
Skills to find appropriate methods or resources to communicate with limited English proficient individuals.

The Guidelines also include student competencies in the areas of self-knowledge, education/occupational exploration and career planning.

The Guidelines include student competencies in the areas of self-knowledge, educational/occupational exploration and career planning.

Career Development Competencies by Area and Level

	Elementary	Middle/Junior High School	High School	Adult
Self-Knowledge				
	Knowledge of the importance of self-concept.	Knowledge of the influence of a positive self-concept.	Understanding the influence of a positive self-concept.	Skills to maintain a positive self-concept.
	Skills to interact with others.	Skills to interact with others.	Skills to interact positively with others.	Skills to maintain effective interactions.
	Awareness of the importance of growth and change.	Knowledge of the importance of growth and change.	Understanding the impact of growth and development.	Understanding developmental changes and transitions.
Educational and Occupational Exploration				
	Awareness of the benefits of educational achievement.	Knowledge of the benefits of educational achievement to career opportunities.	Understanding the relationship between educational achievement and career planning.	Skills to enter and participate in education and training.
	Awareness of the relationship between work and learning.	Understanding the relationship between work and learning.	Understanding the need for positive attitudes toward work and learning.	Skills to participate in work and life-long learning.
	Skills to understand and use career information.	Skills to locate, understand, and discover information.	Skills to locate, evaluate, and interpret career information.	Skills to locate, evaluate, and interpret career information.
	Awareness of the importance of personal responsibility and good work habits.	Knowledge of skills necessary to seek and obtain jobs.	Skills to prepare to seek, obtain, maintain, and change jobs.	Skills to prepare to seek, obtain, maintain, and change jobs.
	Awareness of how work relates to the needs and functions of society.	Understanding how work relates to the needs and functions of the economy and society.	Understanding how societal needs and functions influence the nature and structure of work.	Understanding how the needs and functions of society influence the nature and structure of work.
Career Planning				
	Understanding how to make decisions.	Skills to make decisions.	Skills to make decisions.	Skills to make decisions.
	Awareness of the interrelationship of life roles.	Knowledge of the interrelationship of life roles.	Understanding the interrelationship of life roles.	Understanding the impact of work on individual and family life.
	Awareness of different occupations and changing male/female roles.	Knowledge of different occupations and changing male/female roles.	Understanding the continuous changes in male/female roles.	Understanding the continuing changes in male/female roles.
	Awareness of the career planning process.	Understanding the process of career planning.	Skills in career planning.	Skills to make career transitions.



National Occupational Information Coordinating Committee • Peltz 118, 2100 M Street, N.W., Washington, D.C. 20037 • (202) 692-6000

Figure 1.4

Within these competency areas, career development staff are expected to help students and clients acquire, understand and assess the values, interests, attitudes and skills that will be required of them at choice points in the planning of their education, work and future career paths.

To master these competencies, a number of activities are completed, including administering various assessment instruments, organizing programs that expose students to a variety of work sites and disseminating information about training programs and career opportunities. During this process, clients typically analyze personal traits, backgrounds and their interests. This process of

To master these competencies, a variety of self-awareness activities are completed. The next step is to relate this self-knowledge to the many available careers.

Materials containing career and labor market information are a necessary adjunct to successful career decision making.

In our changing world, people need help in locating, evaluating and using the most up-to-date and valid information.

self-awareness certainly aids the choice of a career. However, because we are faced with a broad, rapidly changing spectrum of careers, it is difficult to relate this self-knowledge to the many alternatives available in the world of work. In order to become knowledgeable about the full range of options, "handles" are needed to learn about these alternatives. Materials containing career and labor market information are one of the handles that needs to become a necessary adjunct to successful career decision making.

According to Pederson, Sampson, and Reardon (1991) information can be used in the following ways:

- to communicate how certain careers can meet an individual's needs;
- to instruct by providing details about potential options;
- to decrease inconsistencies between aspirations and capabilities; and
- to distinguish between and within careers.

Grasping the information handle can be difficult because of the quantity of information that surrounds us. To bring some order into what can well be a chaotic situation, various schema such as Career Information Delivery Systems (CIDS) have been devised to organize, analyze and present information about the thousands of occupations, careers and educational training programs available.

Brown and Brooks (1991) have identified the following reasons for moving beyond assessment and on to the search for information during career decision making:

- to clarify which occupational alternatives are congruent with the client's interests, skills, values and current needs;
- to generate new occupational alternatives;
- to narrow the number of occupational options currently under consideration;
- to help inexperienced clients become familiar with the world of work;
- to correct stereotyped or inaccurate impressions regarding specific occupations; and
- to motivate career decision making by illustrating the rewards associated with a career choice.

Career development facilitators not only need to understand the role information plays in career decision making but they also need to learn how to access, evaluate and use the most up-to-date and valid information. To reiterate, the goal is not only to understand one's potential, but to know how to maximize this potential in the work force today and in the future.

According to Meyer (1988), the glut of information prohibits us from stopping once we locate the information. Information only has meaning if it is evaluated in light of what individuals know about themselves. Ensuring that it is collected in a manner that best serves the individual is the critical step. First, it is important for

Information only has meaning if it is evaluated in light of what individuals know about themselves.

those seeking career information to sort out the relevant from the irrelevant. Second, as facilitators, we need to monitor the process of collection. Third, the information needs to be processed as it is collected so it becomes part of the decision about to be made. Fourth, the results of this processing need to be understood and integrated by the individual.

To illustrate, a student may be considering a career as a tobacco grower. The student wants to know what the job will entail. What will I do on the job? What will my income be? What kind of training do I need? The ICDM training program will teach you about available resources that contain answers to many of these questions.

Sample Questions to Ask of Information:

1. How will consumer behavior affect opportunities?
2. What public policies will impinge on this career?
3. How many workers are already in this field?
4. How many new workers will be needed in the future?
5. Where would I have to live to work in this occupation?
6. What will my work environment be like?
7. How will technology change the industry?

Figure 1.5

This information can be supplemented by researching large issues such as public policy and consumer behavior that affect the world of work. Will smoking habits continue to change with increased health education efforts? Will policies banning smoking in most public areas be effective? Will the government continue to tax tobacco quite heavily? Will government subsidies to tobacco growers continue? Will the pro-smoking lobby of growers, manufacturers, distributors and users keep tobacco in demand and its price competitive? How many tobacco growers do we have today? Do we need more? In what areas? How will technology change the industry?

Finding answers can be challenging and time consuming.

When students and counselors can find the answers to these questions, in the information gathering stage of career decision making, wiser career choices can be made. Undeniably, finding the answers to the questions surrounding any career choice is challenging and time consuming, but nevertheless, critically important. Some clients are capable of researching and using the available information to make good decisions; others may need help in locating and evaluating information to answer their questions.

WHAT IS CAREER AND LABOR MARKET INFORMATION? (LMI)

It is information about jobs, workers, the work place and the preparation needed to work.

A CHANGING WORK PLACE

Work place changes need to be understood in order to make an effective career decision.

What Is Career and Labor Market Information?

During this inservice program, the term "information" will be used to refer to career and labor market information. It is information about jobs and workers; industries and economic development; education and training. Some examples include job descriptions, wage information and training program information. The information is readily available to the public through Career Information Delivery Systems (CIDS) printed materials, computer-based systems, videotapes, microfiche, current periodicals, newspapers and books. It is used by people who are exploring the world of work. Those who are presently in the labor force, but are looking for other positions, consult this information when planning their moves. Workers who have left the labor force and who are seeking reentry also find career and labor market information helpful.

This same information is also used as a yardstick by employers to set wages and conditions of employment and to evaluate their present and future business opportunities. The information is a valuable tool for planners who assess our future labor market needs and design training programs for workers. It is a powerful counseling resource for those in career education and public and private job service offices.

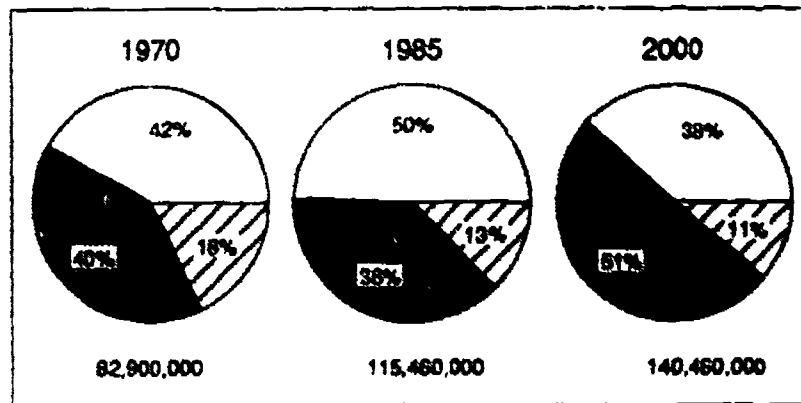
A Changing Work Place

It is important for career development facilitators not only to understand the information about occupations, but also to have knowledge about the broader issues that result in fluctuations in our social, political and economic systems, as well as changes in the occupational structure. This knowledge can only serve to enhance career decisions. For example, the composition of today's labor market has continued to change as the population shifts and our economy changes from a national to a global marketplace, from a manufacturing to a service economy; and from a youth-oriented work force to a middle-aged work force.

To survive and succeed, students and workers must be aware of these changes.

Samples of Information

The Middle Aging of the Workforce



Percent Change in Population: 1990 - 2000

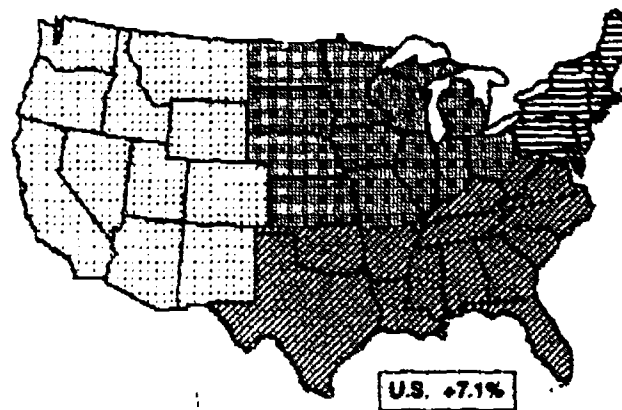


Figure 1.6

Workers need

- basic skills
- career education
- an understanding of the changing world of work

Career decision making is an individualized, client-centered process. Another way to illustrate the importance of decision making is by examining our national priority for informed and skilled workers. *Building a Quality Work Force* (1988), a government report, was a joint initiative of the United States Departments of Labor, Education, and Commerce. It addressed deficiencies in our educational system (including career education) that have not changed to meet our future work force needs. Employers were unanimous in their concern that the basic skills of reading, writing, mathematics and communication were lacking in entry level workers. Employers also reported that employees were wanting in abilities such as analysis and problem solving, cooperation and teamwork, flexibility and adaptability and personal motivation and initiative.

New entrants to the labor force will decline.

CONCLUSION

While striving to improve the quality of our work force, we also need to be cognizant of another concern. The number of people entering the labor market will decline in the next decade, due to demographic changes. The supply of workers to meet the demand for a skilled work force appears to be insufficient, not entirely due to numbers, but due to educational deficiencies and the lack of sufficient career planning and preparation. How can we help move our citizens into the work force with the skills they need? How can we translate the concerns for a skilled work force into a motivation for effective career decision making? How can we train adults to meet labor market needs? How can we provide information to enable our clients to use this labor shortfall to make better career decisions?

Conclusion

Knowing how to access, evaluate and use information is necessary for all career development facilitators. They not only need to be familiar with career information delivery systems and other information resources, but they also need to adequately prepare clients for the information acquisition process and provide them with a method to evaluate the information that is collected.

For example, how can knowledge of the following trends be incorporated into career decision making? How can this information best be used to provide opportunities for our students and clients?

- The number of employees in goods producing industries have remained relatively constant, while employees in industries providing services have increased dramatically. As a result, more than twice the number of workers are now involved in the provision of services as are employed in the production of goods.
- The number of employees in blue-collar occupations remains relatively stable, while the number of employees in the white collar occupations has greatly increased.
- The average educational attainment of the labor force has risen appreciably. Lack of an education has become a formidable challenge to gainful employment.
- The proportion of women workers in the labor force has increased significantly. Over 50% of American women now work outside the home. About one quarter of all managers are now women.
- The number of blacks in professional occupations has increased.
- Part-time work has increased considerably. One in every five workers is a part-time employee.
- Job turnover has increased for males; that is, the average number of jobs held over a work lifetime has increased.
- New jobs are created and obsolete jobs are phased out of existence. Automation will also change occupations; it will eliminate some jobs and create others in all sectors of the economy.
- The population and the labor force will grow more slowly than it did during the 1970s, due to declining birth rates in

the 1960s and 70s. Females and people of color will make up the majority of the new entrants to the labor force.

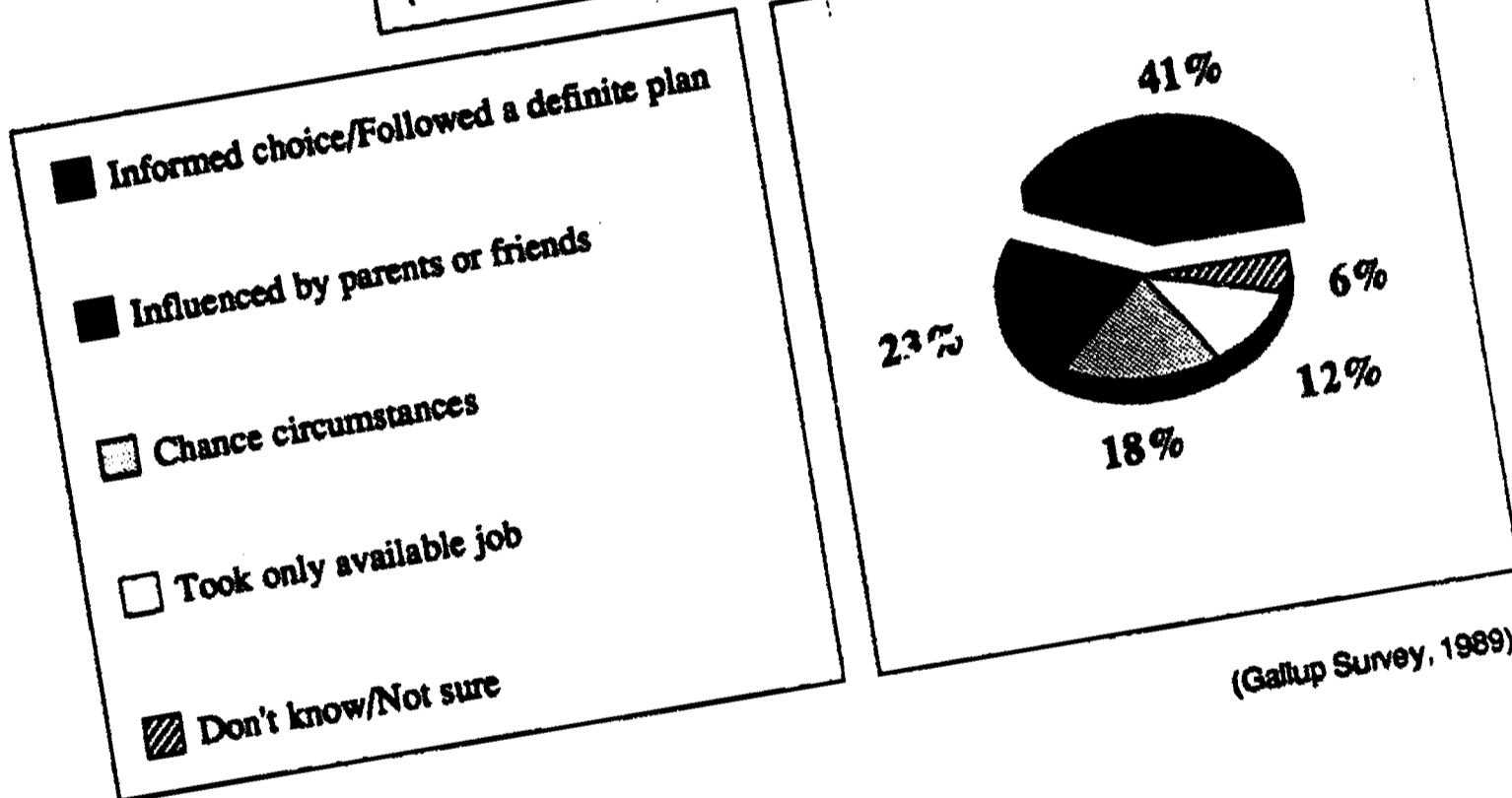
- A large percentage of the prison population never completed high school.

The wealth of information may seem intimidating and the process for incorporating this information into career decision making may seem overwhelming. To help you focus on your specific needs, turn to the Action Plan, specifically "Program Hopes and Personal Change." Here, you can specify changes you can make at your work place after completing this training.

**Introduction
Module 1
References**

- Brown, D., & Brooks, L. (1991). *Career counseling techniques*. Boston: Allyn and Bacon.**
- Johnston, W. B., & Packer, A. H. (1987). *Workforce 2000. Work and workers for the 21st century*. Indianapolis: The Hudson Institute.**
- Meyer, H. E. (1988, May 15). Real-World Intelligence. *American way*, 54-65.**
- National Career Development Association (1990). *National survey of working America*. Washington DC: National Occupational Information Coordinating Committee.**
- Peterson, G. W., Sampson, J. P., & Reardon, R. C. (1991). *Career development and services*. Pacific Grove, CA: Brooks/Cole.**
- U.S. Department of Labor, U.S. Department of Education, and U.S. Department of Commerce (1988, July). *Building a quality workforce*. Washington DC: Office of Public Affairs, Employment and Training Administration, U.S. Department of Labor.**

Career Influences (Based on Responses of Employed Adults)



(Gallup Survey, 1989)

Figure 1.1

● **Goals of the *ICDM Program***

Train career development facilitators to help students and clients:

- **• understand labor market information;**
- **• use information to make career decisions;**
- **• improve decision making skills; and**
- **• develop an action plan to make more effective use of information in career decision making.**

● **Figure 1.2**

National Career Development Guidelines

Counseling

Knowledge of developmental issues individuals address throughout the life span.
Knowledge of counseling and career development theories and techniques.
Knowledge of decision-making and transition models.
Knowledge of role relationships to facilitate personal, family, and career development.
Knowledge of different cultures to interact effectively with all populations.
Skills to build productive relationships with counselees.
Skills to use appropriate individual and group counseling techniques to assist individuals with career decisions and career development concerns.
Skills to assist individuals in identifying influencing factors in career decision making, such as family, friends, educational opportunities, and finances.
Skills to assist individuals in changing biased attitudes that stereotype others by gender, race, age, and culture.
Skills to assist individuals in understanding the relationship between interpersonal skills and success in the workplace.
Skills to assist individuals in setting goals and identifying strategies for reaching goals.
Skills to assist individuals in continually reassessing their goals, values, interests, and career decisions.
Skills to assist individuals in preparing for multiple roles throughout their lives.

Information

Knowledge of changes taking place in the economy, society, and job market.
Knowledge of education, training, employment trends, labor market, and career resources.
Knowledge of basic concepts related to career counseling such as career development, career progression, and career patterns.
Knowledge of the changing gender roles and how these impact on work, family, and leisure.
Knowledge of employment information and career planning materials.
Knowledge of employment-related requirements such as labor laws, licensing, credentialing, and certification.
Knowledge of state and local referral services or agencies for job, financial, social, and personal service.
Knowledge of federal and state legislation that may influence career development programs.
Skills to use career development resources and techniques designed for specific groups.
Skills to use computer-based career information systems.

Individual and Group Assessment

Knowledge of assessment techniques and measures of skills, abilities, aptitudes, interests, values, and personalities.
Skills to identify assessment resources appropriate for specific situations and populations.
Skills to evaluate assessment resources and techniques related so that their validity, reliability, and relationships to race, gender, age, and ethnicity can be determined.
Skills to administer, interpret, and personalize assessment data in relation to the career development needs of the individual.

Figure 1.3

Management and Administration

Knowledge of program designs that can be used in organizing career development programs.
Knowledge of needs assessment techniques and practices.
Knowledge of management concepts, leadership styles, and techniques to implement change.
Skills to assess the effectiveness of career development programs.
Skills to identify staff competencies for effective career development programs.
Skills to prepare proposals, budgets, and timelines for career development programs.
Skills to identify, develop, and use record keeping methods.
Skills to design, conduct, analyze, and report the assessment of individual and program outcomes.

Implementation

Knowledge of program adoption and planned change strategies.
Knowledge of barriers affecting the implementation of career development programs.
Skills to implement individual and group programs in a variety of areas such as assessment decision making, job seeking, career information and career counseling.
Skills to implement public relations efforts which promote career development activities and services.
Skills to establish linkages with community-based organizations.

Consultation

Knowledge of consulting strategies and consulting models.
Skills to assist staff in understanding how to incorporate career development concepts into their offerings to program participants.
Skills to consult with influential parties such as employers, community groups and the general public.
Skills to convey program goals and achievements to legislators, professional groups, and other key leaders.

Specific Populations

Knowledge of differing cultural values and their relationship to work values.
Knowledge of unique career planning needs of minorities, women, the handicapped, and older persons.
Knowledge of alternative approaches to career planning needs for individuals with specific needs.
Skills to identify community resources and establish linkages to assist adults with specific needs.
Skills to find appropriate methods or resources to communicate with limited English proficient individuals.

Career Development Competencies by Area and Level

	Elementary	Middle/Junior High School	High School	Adult
Self-Knowledge				
	Knowledge of the importance of self-concept.	Knowledge of the influence of a positive self-concept	Understanding the influence of a positive self-concept.	Skills to maintain a positive self-concept.
	Skills to interact with others.	Skills to interact with others.	Skills to interact positively with others.	Skills to maintain effective behaviors.
	Awareness of the importance of growth and change.	Knowledge of the importance of growth and change.	Understanding the impact of growth and development.	Understanding developmental changes and transitions.
Educational and Occupational Exploration				
	Awareness of the benefits of educational achievement.	Knowledge of the benefits of educational achievement to career opportunities.	Understanding the relationship between educational achievement and career planning.	Skills to enter and participate in education and training.
	Awareness of the relationship between work and learning.	Understanding the relationship between work and learning.	Understanding the need for positive attitudes toward work and learning.	Skills to participate in work and life-long learning.
	Skills to understand, and use career information.	Skills to locate, understand, and use career information.	Skills to locate, evaluate, and interpret career information.	Skills to locate, evaluate, and interpret career information.
	Awareness of the importance of personal responsibility and good work habits.	Knowledge of skills necessary to seek and obtain jobs.	Skills to prepare to seek, obtain, maintain, and change jobs.	Skills to prepare to seek, obtain, maintain, and change jobs.
	Awareness of how work relates to the needs and functions of society.	Understanding how work relates to the needs and functions of the economy and society.	Understanding how societal needs and functions influence the nature and structure of work.	Understanding how the needs and functions of society influence the nature and structure of work.
Career Planning				
	Understanding how to make decisions.	Skills to make decisions.	Skills to make decisions.	Skills to make decisions.
	Awareness of the interrelationship of life roles.	Knowledge of the interrelationship of life roles.	Understanding the interrelationship of life roles.	Understanding the impact of work on individual and family life.
	Awareness of different occupations and changing male/female roles.	Knowledge of different occupations and changing male/female roles	Understanding the continuous changes in male/female roles.	Understanding the continuing changes in male/female roles.
	Awareness of the career planning process.	Understanding the process of career planning	Skills in career planning.	Skills to make career transitions.

Figure 1.4

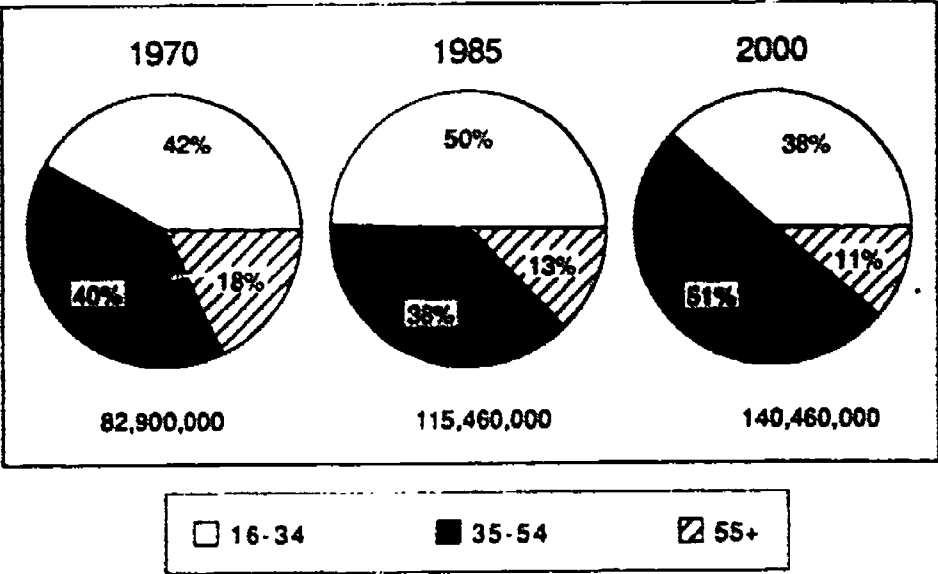


● **Sample Questions to Ask of Information:**

1. How will consumer behavior affect opportunities?
2. What public policies will impinge on this career?
3. How many workers are already in this field?
- 4. How many new workers will be needed in the future?
5. Where would I have to live to work in this occupation?
6. What will my work environment be like?
7. How will technology change the industry?

● **Figure 1.5**

The Middle Aging of the Workforce



Percent Change in Population: 1990 - 2000

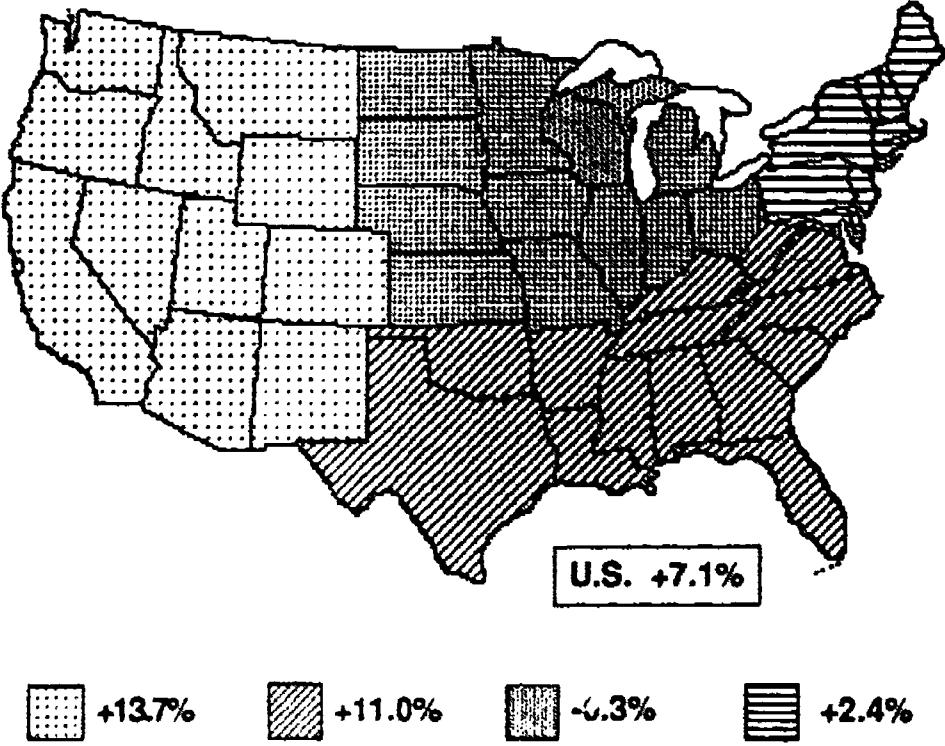
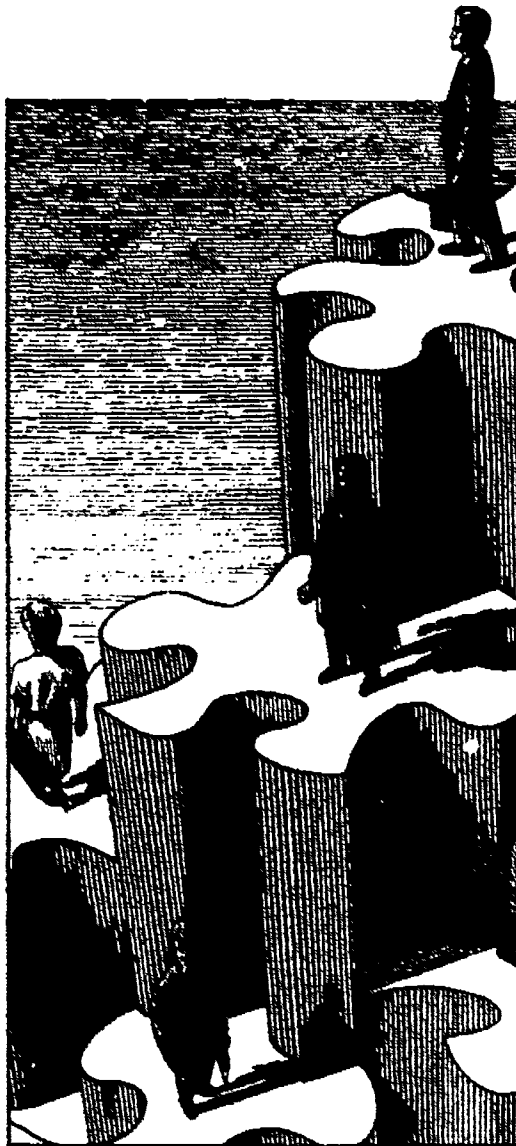


Figure 1.6

The Action Plan



National Career Development Guidelines-Counselor Competencies

Skills to use career development resources and techniques designed for specific groups.

Skills to implement individual and group programs in a variety of areas such as assessment, decision making, job seeking, career information and career counseling.

Skills to assist individuals in setting goals and identifying strategies for reaching goals.

THE ACTION PLAN

Nothing is more terrible than activity without insight.
Thomas Carlyle, 1796-81.

Change: A Personal Challenge

Most of us have heard the familiar saying, "There are people who make things happen, people who watch things happen, and people who wonder what happened." From personal experience, we admire people who "make things happen." Through our own efforts, however, we realize how hard it is to take action and make changes in our lives. We recognize what it takes to accomplish our goals--motivation, hard work, determination, tenacity, support from others, and sometimes, just plain luck.

Despite the personal sacrifices that may be required, many of us do want to change or improve certain aspects of our personal lives or work situations. We are motivated to make changes when we are exposed to new concepts and ideas that can improve or enrich our lives. As a result of these influences, we are charged with a mental and physical energy to change our behavior in some way--to quit smoking, to lose weight, to take a course in speed reading, or to develop a new program to better meet the needs of our students. Unfortunately, our motivation to act often withers, wanes and gradually subsides, due to factors such as the time needed to achieve change, the people who may be standing in the way, the money to implement our plans, the personal discipline that is necessary, or simply the pressures of daily life.

Needed: A Road Map

What is often missing is a "road map" to reach our destination. By studying persons who have achieved, psychologists have discovered that they have two common characteristics:

1. they set goals for themselves; and
2. they write them down.

In other words, they have plans of action, which serve as detailed road maps to their goals. The purpose of this section is to help participants develop their own road maps, or action plans, of professional growth and development in career facilitating through the effective use of labor market information.

Some Barriers To Change

What prevents career development facilitators from applying what they have learned? There are three distinct types of barriers that prevent the transfer of skills from an inservice program to the work site:

- **The participant.** Because of personal standards and ideas about how the career facilitating should be accomplished, the participant may reject the values and concepts in the training course. Or, the participant may lack the confidence to use or apply the new skills developed during training.
- **The participant's supervisor.** The supervisor may not encourage the participant to use the new skills; or, may not support the participant who applies what has been learned.
- **The organization.** The participant's new skills may not be accepted in the work environment due to time constraints, pay structures, incompatible office policies and procedures, or the lack of authority to act.

Overcoming Barriers: A Training Approach

To prevent these barriers from occurring, a comprehensive plan of action should be initiated before the training begins. We suggest the following approach:

Step 1.

The participant and supervisor develop mutual training objectives.

Action to be taken: This should be completed before attending an ICDM inservice.

The participant's supervisor can work cooperatively with the participant by communicating his/her needs. The supervisor who has a voice in defining the skills that are needed will take a greater interest in the outcome of the training. An involved and concerned supervisor will also be more likely to support the skills of the participant. For these reasons, a meeting should be held between the participant and his/her supervisor before the onset of the training session to develop some clearly stated mutual objectives in written form.

An example of a mutual objective might be:

To develop stronger ties between the school and the business community in order to place more students in work experience or internship programs.

Step 2.

Participant lists pre-training objectives.

Action to be taken: Instruct participants to complete "Program Hopes and Personal Change." Allow five minutes.

First Component of Action Plan for _____

Program Hopes and Personal Change

- 1 My hopes and expectations for this training are . . .

- 2 If my supervisors could have a goal for this training, they would want me to . . .

- 3 If my peers or associates could have a goal for this training, they would want me to . . .

- 4 If the individuals that I supervise could have a goal for this training, they would want me to . . .

Adapted from The Wiring Trainer, J.E. Engler, Gulf Publishing Co., Houston, TX, 1980

Figure 1

The participant's first task in the training session is to outline what he/she wishes to gain from the inservice. This enables the trainer to better meet the participant's needs. The objectives listed by the participant will be translated into an Action Plan at the conclusion of the training session that will contain activities to be completed back at the work site. A form for this purpose, "Program Hopes and Personal Change," is in the Participant's Guide.

An example of a participant objective might be:

To become skilled in how to access local labor market information to better advise students who wish to work in the community.

Step 3.

The training instills confidence in the participant.

Action to be taken: Instruct participants to take a minute to examine and ask questions about the "Daily Planner."

In order to instill confidence, each training module should incorporate hands-on, work-related activities to develop the participant's skills in the use of labor market information. Practical activities that can be easily adapted to the work place will enhance the participant's motivation and confidence. These activities should be related to the participant's training objectives. A written form to outline this learning transfer for the participant, the "Daily Planner," can be found in the Participant's Guide.

Daily Planner

Directions: Notes should be taken by the participant on the worksheet at the end of each training session (pages 5-6 provided). When the training is concluded the Planner is used to create the Action Plan.

	Key Points of Module	Key Points Related to My Needs	Action I Intend to Take
Module 1			
Module 2			
Module 3			
Module 4			
Module 5			
Module 6			
Module 7			
Module 8			
Module 9			
Module 10			

Adapted from the Training Manual, U.S. Bureau of Labor Statistics, 1990

Figure 2

It is important that the participant be given at least five minutes to fill in the "Daily Planner" at the conclusion of each training module. When the training modules have been concluded, the "Daily Planner" is used by the participants to create an Action Plan.

An example of a practical training activity might be:

Role playing a career counseling session during which the counselor is showing a client how to scan and evaluate the help wanted ads in a newspaper to gain a broader understanding of the local labor market.

Step 4.

The training enables the participant to develop a supportive network.

The participant's organization may need to be modified in order to accomplish training goals. The training should provide the participant with tools to implement organizational change and the human resources to assist him/her. These tools and resources should become components of the participant's Action Plan.

An example of a training activity to enable the participant to develop a peer network would be:

A brainstorming session on how to develop ties between the school and the business community that results in the formation of interest or support groups among the participants that would continue beyond the training session.

Step 5.

The Action Plan is completed at the conclusion of the training.

The participant's concluding activity will be the formulation of a plan of action. The procedure for "Developing an Action Plan" and directions for the small group work to review and critique the plan follow in the Participant's Guide.

Action Plan

Developing an Action Plan

I. Purpose

The final phase of this program is designed to give you an opportunity to apply the concepts and skills that you have learned to an actual on-the-job concern of your choice. This should provide real and lasting meaning to your training experience. It will also provide you with a maximum return from your investment of time and effort in the training session.

II. Procedure

- A** Select a topic about which you have a genuine concern, that is, an area that requires some worthwhile improvement or remedial action. The concern may relate to management, an operational matter, an administrative change, a plan for self-improvement, an improvement in relations with others (superiors, coworkers), etc. It may involve overcoming a deficiency or meeting a new challenge or opportunity. You alone know where a real need for change or betterment exists.
- B** Individual work (20 minutes): Use the three-part Action Plan Worksheet to help you work through the details of your problem-solving activity.
- C** Small group work (30 minutes): You will be assigned to a team of three (two other participants who share your concerns and yourself). Each of you will have the opportunity to present your concern and plan for action to the other two members for review, critique, feedback, and counsel. Each presenter will have 10 minutes to secure help from the other two participants. Although this is your concern, objective "outsiders" can be of real help, because they may see things you might have overlooked. Feedback from your teammates will sharpen the issue for you and help you think through the steps outlined in your action plan.

Adapted from *The Moving Target*, J. E. Ferguson, Gulf Publishing Co., Houston, TX, 1982

Figure 3

A two page worksheet, "My Action Plan," helps the participant create a specific outline with details, such as resources needed and time frames required. When writing the plan, it is important that the participant consider the factors that will enable him/her to reach

the Action Plan goals, as well as the obstacles that must be overcome. By doing so, the participant can develop realistic strategies to reach the objectives.

My Action Plan

I. Defining my concerns

1. I have carefully reviewed my "back-home" situation, and the area I would like to see improved relates to...

2. I am concerned about this situation because...

3. The major facts that relate to this situation are...

II. Seeking a solution

1. The elements of my situation most amenable to change are...

2. The elements of my situation least amenable to change are...

3. I would use these indicators to consider my concerns to be satisfactorily resolved.

4. The forces that I see as unfavorable to (prolonging) the hoped for change are...

5. The solutions I see to my concerns are...

6. The major facts that relate to my concern are...

My Action Plan cont.

III. An action plan to implement my solution

1. I see the time frame for my plan to be operative as follows

2. I will need the assistance of these individuals to implement my plan.

Name: _____ about _____

Name: _____ about _____

Name: _____ about _____

Name: _____ about _____

3. I will need to communicate the plan to:

Name: _____ about _____

Name: _____ about _____

Name: _____ about _____

Name: _____ about _____

4. I intend to follow up and evaluate the success of my plan by doing the following

Action taken: _____ Date: _____

Action taken: _____ Date: _____

Action taken: _____ Date: _____

Action taken: _____ Date: _____

Adapted from The Housing Rules, J.E. Ferguson, Gulf Publishing Co., Houston, TX 1988

Figure 4

Pages 7-10 are included in the Participant's Resource Guide-Action Plan.

The Action Plan

As a result of this training in *Improved Career Decision Making (ICDM)*, you will be better informed about how the labor market works. You will develop skills in maintaining up-to-date information about its fluctuations and changes. You can utilize these skills by integrating information resources into your work. It is critical that the skills developed during your training be transferred. By applying what you have learned, you can help your clients make the best possible career choices.

Your Action Plan is the culmination of the training session. Once you have achieved your training objectives, an Action Plan needs to be developed as a mechanism to assist you in making the important transfer of skills from the training session to your work environment.

It's Easy!

The creation of an Action Plan should not be intimidating, because the framework for your plan already exists. You have been formulating your plans from the very beginning of your training when you listed your hopes for the program and possibilities for change. Please see "Program Hopes and Personal Change" from the Participant's Guide. During training, you have gradually added pieces to your plan. A review of your notes from each training module will reveal this information on your "Daily Planner."

Your final Action Plan will combine:

- your original objectives as stated in "Program Hopes and Personal Change;"
- the actions listed in the last column of your module notes from your "Daily Planner;" and
- any additional goals you wish to set for yourself and your organization.

A systematic approach to writing your plan is outlined on "My Action Plan." Once formulated, the Action Plan becomes a self-pledge; it is a commitment to engage in new behaviors as a result of the training.

The plan itself should be simple, realistic, and measurable. The plan defines what you want to do, how and when you will do it, what help you will need, and how you will measure what you have accomplished. See the next page for an example.

Example of an Action Plan

As a result of my training I plan to:

- **set up a resource center called "Jobs in River City," with information on local employment opportunities;**
- **become active in the local Chamber of Commerce in order to establish ties with community businesspersons; and**
- **work with other facilitators to establish a new work study partnership between my organization or school and a local business or industry.**

To illustrate the complete Action Plan process that is outlined on the participant's worksheet, we will use the first goal, setting up a resource center on local employment opportunities, as an example. Some of the services this center might provide would be:

- **a Career Information Delivery System (CIDS) for career exploration and information;**
- **federal, state and local labor market information publications, such as the *Dictionary of Occupational Titles (DOT)*, *Standard Occupational Classification (SOC)*, *Occupational Outlook Handbook (OOH)*, *Standard Industrial Classification (SIC)*, local newsletters, etc.;**
- **a list of the major employers in the community, with descriptions of their businesses or industries and the principal occupations found within them;**
- **telephone numbers of personal contacts that may be helpful, e.g., job telephone lines, human resource departments of governmental agencies and large employers, Job Service, JTPA contacts, private employment agencies, etc.;**
- **a chart showing the major occupational classifications in the local labor market, with information on qualifications, wages, hours and conditions of employment;**
- **cost of living information for River City: food, utilities, housing, etc.;**
- **information on tax deductions taken from paychecks, employee benefits and legal rights,**
- **a map showing where major employers are located, along with local public transportation services and schedules;**
- **video/audio tapes of local employers describing the qualifications they are seeking in prospective employees;**
- **a listing of postsecondary educational and training institutions, with catalogs of their offerings;**
- **a job bulletin board taken from the listings in the local newspaper or Job Service Office;**
- **a file of job postings from public institutions and any other large employers within the city;**
- **instructions for resume and cover letter writing; files of sample resumes and introduction letters;**
- **samples of common job application forms used by major employers in the area with instructions to follow; and**
- **a sign-up sheet for personal counseling services.**

With this goal in mind, a Jobs in River City Resource Center, "My Action Plan" could be outlined in the following way on the worksheet:

I. Defining my concern

- A. I have carefully reviewed my professional environment; the area that I would like to see improved relates to the lack of information our students have about job opportunities in River City.**
- B. I am concerned about this situation because:**

1. many of our students wish to remain in River City and will be seeking work in this area;
2. national and state labor market information does not always apply to conditions in River City; and
3. our students lack job search skills.

C. The major facts that relate to my problem are:

1. sixty percent of our high school graduates remain in River City;
2. fifty percent have completed their education; they will not go on to a postsecondary program; they will be looking for work in River City;
3. students need information about where they can find work and how to get it;
4. "Education for Employment" is a goal of our school district; and
5. my principal supports school-wide efforts to educate for employment.

II. Seeking a solution

A. The elements of my situation most amenable to change are:

1. having the cooperation of most teachers and the school administration in setting up this Resource Center;
2. learning about the labor market in River City, thereby improving my career counseling skills; and
3. the frustration expressed by students looking for work; they have a need for a Jobs Resource Center.

B. The elements of my situation least amenable to change are:

1. the limited availability of time to set up the Center: finding materials, interviewing employers, developing handouts, etc.;
2. finding money in our budget to purchase some of the publications and computer software that would enhance the Resource Center;
3. convincing all staff members to support and contribute to the Resource Center; and
4. assuring that all students have access to the Resource Center.

C. I would use these indicators to consider my concerns to be satisfactorily resolved:

1. the completion of a Resource Center within three months;
2. the Resource Center will be used by at least 60% of the student body before the end of the school year as determined by a record keeping procedure;
3. students, staff members and administrators who use the Center will complete written evaluations of its effectiveness;
4. the Center will establish working relationships with public and private agencies, such as Job Service and JTPA; and
5. the evaluations of the Center will be used to improve its future content and operation.

D. The forces that I see as unfavorable to (or blocking) the hoped-for change are:

1. coworkers who may not approve of the time that I will be spending to set up the Center;
2. teachers who may be unwilling to allow their students class time to use the Jobs Resource Center;

3. local businesses and industries that may be uncooperative; and
4. a lack of student awareness as to how the Center can help them.

E. The forces I see as favoring (supporting) the change are:

1. students looking for work;
2. the school district administration;
3. the library director;
4. special education teachers;
5. parents; and
6. local employers who envision the value of the Center.

F. The solution I see to my concern is:

1. to work closely with those persons who will support my efforts to establish the Center;
2. to communicate frequently with persons who may oppose or resent my efforts in order to address their concerns and enlist their support and cooperation;
3. to involve local business people in the planning of the Center; and
4. to ask my principal to appoint an ad hoc advisory committee composed of teachers, parents and local business people to assist in the planning and development of the Center.

III. An Action Plan to implement my solution

A. I see the time frame for the plan to be operative as follows:

1. Center established in three months;
2. student, staff and administrative evaluations of the Center in nine months; and
3. Center revisions in twelve months.

B. I will need the assistance of these individuals to implement my plan:

Name: Principal Sam Martinez
About: Administrative and financial support of the Center

Name: Library Director Helen Han
About: Help in finding information resources

Name: Chamber of Commerce President Sue Young
About: Getting cooperation from local businesses

Name: English teacher Michael Felúman
About: Sample resumes, cover letters and job applications

C. I will need to communicate the plan to:

Name: Staff members, administrators and students
About: Purpose/design/time frame for the Center

Name: Local employers
About: The purpose of the Center; their employment needs

Name: Parents of students

About: How the Center can help their child

Name: Members of my own department

About: Duties, responsibilities, time frames, etc.

D. I intend to follow up and evaluate the success of my plan by doing the following:

- 1. reviewing, tabulating and analyzing the evaluations of the Jobs Resource Center completed by the students, staff and administration by the end of the school year;**
- 2. using the findings from the evaluations to set goals to improve the Center during the following school year; and**
- 3. communicating these future plans to students, staff and administration.**

Conclusion

As you can see by this example, your Action Plan can be a powerful instrument of change. Your plan outlines your goals and develops strategies to achieve, monitor and refine them. It is truly amazing what people can accomplish by simply setting realistic goals and writing them down.

After the Action Plan has been completed, it is important that time be allowed for each participant to discuss his/her plan with fellow trainees. Research has shown that group discussion is very valuable; the "talking it over" process creates a bond between the participant and the plan of action. Through the process of discussing the plan with others, the participant receives constructive criticism, useful suggestions, and most importantly, the support of the group. As a result of the group encouragement and feedback, the participant becomes more publicly committed to the Action Plan.

Returning to the pressures of the work place, however, may diminish the commitment and enthusiasm of the participant. Work day realities, such as time constraints, budget considerations and coworkers who are resistant to new ways of doing things are often difficult to overcome. For these reasons, strategies are developed in the written Action Plan to diffuse the forces blocking change. Persons whose assistance will be needed are identified, as well as individuals with whom the participant must communicate. By preparing for anticipated barriers, the participant will be better able to overcome them.

Step 6.

The final consideration for the trainer is to make provisions for follow-up with the participants and their progress in the work place.

For these reasons, trainers should try to retain a copy of the Action Plan developed by each participant. In order to rejuvenate the participant's commitment after a period of time has elapsed, he/she may need to be monitored and encouraged by a supervisor, the support network formed during the training, a peer group at the work site and the trainer. Some suggestions for follow up are:

- Self-addressed postcards to the trainer for participant feedback or requests for trainer assistance.
- A three month evaluation of the training results by the participant and his/her supervisor, focusing on a review of the participant's Action Plan.
- A meeting or telephone conference between the participant and his/her support network at a specified time to discuss the progress of each Action Plan.
- A mail, telephone, or face-to-face progress report on the Action Plan between the participant and the trainer at three, six or twelve month intervals.

Summary

The most critical aspect of the training process is whether or not the training can be sustained. Are the skills learned by the participant transferred to the work place? There are many reasons why training does not take: the wary or unbelieving participant, an uninvolved supervisor, or a non-responsive work environment. Because of these barriers to the transfer of training, it is critical that each participant overcome them by developing a written, specific and measurable plan to use the skills that he/she has developed. Group discussion and feedback provide the participant with not only a supportive peer network, but help to increase the participant's commitment to his/her Action Plan. The final document, "My Action Plan," is the culmination of the training. For maximum effectiveness, Action Plans should be followed up and evaluated by timely reports from the participants, their supervisors and coworkers and the trainers. Specific objectives, practical learning experiences, plans of action and follow-up--these are all needed to make training truly "take" and be effective.

Program Hopes and Personal Change

- 1. My hopes and expectations for this training are. . .**

- 2. If my supervisors could have a goal for this training, they would want me to. . .**

- 3. If my peers or associates could have a goal for this training, they would want me to. . .**

- 4. If the individuals that I supervise could have a goal for this training, they would want me to. . .**

Second Component of Action Plan for _____
name

Directions: Notes should be taken by the participant on this worksheet at the end of each training session (allow 5 minutes).
When the training is concluded this Planner is used to create the Action Plan.

Daily Planner			
	Key Points of Module	Key Points Related to My Needs	Action I Intend to Take
Module 1			
Module 2			
Module 3			
Module 4			
Module 5			
Module 6			
Module 7			
Module 8			
Module 9			
Module 10			

Developing an Action Plan

I. Purpose

The final phase of this program is designed to give you an opportunity to apply the concepts and skills that you have learned to an actual on-the-job concern of your choice. This should provide real and lasting meaning to your training experience. It will also provide you with a maximum return from your investment of time and effort in the training session.

II. Procedure

- A. Select a topic about which you have a genuine concern; that is, an area that requires some worthwhile improvement or remedial action. The concern may relate to management, an operational matter, an administrative change, a plan for self-improvement, an improvement in relations with others (supervisors, coworkers), etc. It may involve overcoming a deficiency or meeting a new challenge or opportunity. You alone know where a real need for change or betterment exists.
- B. Individual work (20 minutes): Use the three-part *Action Plan Worksheet* to help you work through the details of your problem-solving activity.
- C. Small group work (30 minutes): You will be assigned to a team of three (two other participants who share your concerns and yourself). Each of you will have the opportunity to present your concern and plan for action to the other two members for review, critique, feedback, and counsel. Each presenter will have 10 minutes to secure help from the other two participants. Although this is your concern, objective "outsiders" can be of real help, because they may see things you might have overlooked. Feedback from your teammates will sharpen the issues for you and help you think through the steps outlined in your action plan.

Action Plan of _____
name

My Action Plan

I. Defining my concerns

1. I have carefully reviewed my "back-home" situation, and the area I would like to see improved relates to. . .
2. I am concerned about this situation because. . .
3. The major facts that relate to this situation are. . .

II. Seeking a solution

1. The elements of my situation most amenable to change are. . .
2. The elements of my situation least amenable to change are. . .
3. I would use these indicators to consider my concerns to be satisfactorily resolved.
4. The forces that I see as unfavorable to (blocking) the hoped for change are. . .
5. The solutions I see to my concerns are. . .
6. The major facts that relate to my concern are. . .

Adapted from *The Winning Trainer*, J.E. Elington, Gulf Publishing Co., Houston, TX, 1990

My Action Plan cont.

III. An action plan to implement my solution

1. I see the time frame for my plan to be operative as follows:

2. I will need the assistance of these individuals to implement my plan:

Name: _____	about: _____
Name: _____	about: _____
Name: _____	about: _____
Name: _____	about: _____

3. I will need to communicate the plan to:

Name: _____	about: _____
Name: _____	about: _____
Name: _____	about: _____
Name: _____	about: _____

4. I intend to follow up and evaluate the success of my plan by doing the following:

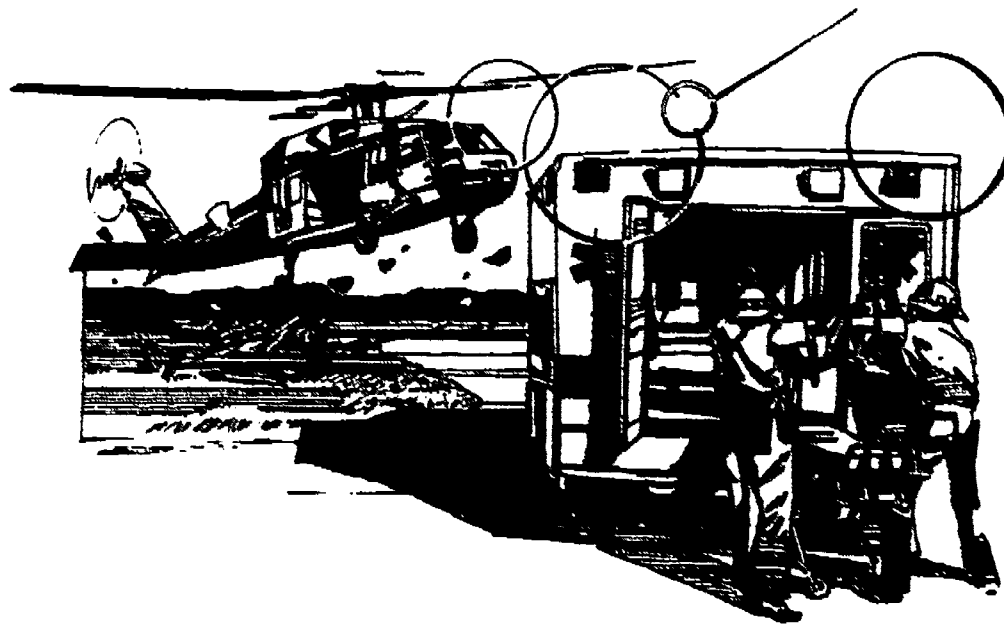
Action taken: _____	Date: _____
Action taken: _____	Date: _____
Action taken: _____	Date: _____
Action taken: _____	Date: _____

Adapted from *The Winning Trainer*, J.E. Ettington, Gulf Publishing Co., Houston, TX, 1990

Notes

Module 2

Definitions of Terms and Concepts Related to Career Development and Labor Market Information



National Career Development Guidelines-Counselor Competencies

Knowledge of education, training, employment trends, labor market, and career resources.

Knowledge of employment information and career planning materials.

DEFINITIONS OF TERMS AND CONCEPTS RELATED TO CAREER DEVELOPMENT AND LABOR MARKET INFORMATION

MODULE 2

Outline Topic	Delivery Methods	Trainer's Notes
<p>Terms and Concepts Related to Career Development</p> <ul style="list-style-type: none"> • Career • Job • Work • Occupation • Skill • Task • Career Development • Career Decision Making • Career Guidance • Career Education • Developmental Guidance • The National Career Development Guidelines 	<p>Lecturette or reviewed when related concepts are introduced in Modules 3-10. pp. 1-3</p> <p>This section is contained in the Participant's Resource Guide.</p>	
<p>Terms and Concepts Related to Using Labor Market Information in Career Decision Making</p> <ul style="list-style-type: none"> • What Is a Labor Market? • What Is Labor Market Information (LMI)? • Who Uses LMI? • Who Collects LMI? 	<p>Lecturette or reviewed when related concepts are introduced in Modules 3-10. pp. 3-13</p> <p>This section is contained in the Participant's Resource Guide.</p>	

Outline Topic	Delivery Methods	Trainer's Notes
<ul style="list-style-type: none"> • Defining the Labor Force • What Are Industries? • Industry Definitions According to the SIC • What Is an Occupation? • Occupational Shifts • Occupational Definitions and Coding Systems <p>Technical Terms and Concepts Related to Labor Market Information and Data Collection Programs</p> <ul style="list-style-type: none"> • The NOICC • Role of the SOICC • Role of the SESA • Labor Market Area • External Versus Internal Labor Markets • Supply and Demand • Measuring the Labor Force • Benchmarking • Seasonal Adjustments • Covered Employment • Labor Surplus Area • Labor Turnover • Federal Data Collection Programs for Industries 	<p><i>Figure 2.1 Labor Force Concepts</i></p> <p><i>Figure 2.2 Industrial Sectors</i></p> <p>This section is not included in the Participant's Resource Guide.</p> <p><i>Figure 2.3 NOICC/SOICC Organization</i></p>	

DEFINITIONS OF TERMS AND CONCEPTS RELATED TO CAREER DEVELOPMENT AND LABOR MARKET INFORMATION

MODULE 2

Please note: The sections on **Career Development and Using Labor Market Information in Career Decision Making** contain definitions that should be included in all inservice programs. They can be discussed either before you begin Modules 3-10 or incorporated into the discussions and/or lecturettes as you proceed through the agenda. Copies of these pages are also contained in Module 2 of the Participant's Resource Guide.

The section on **Technical Terms and Concepts Related to Labor Market Information and Data Collection** contains definitions that you might want to include in your presentation or use to increase your personal knowledge of the subject matter. If you decide to discuss these terms and concepts, make a copy of these pages for all participants.

TERMS AND CONCEPTS RELATED TO CAREER DEVELOPMENT

Career

Job

Work

Occupation

Skill

Task

Career Development

Terms and Concepts Related to Career Development

Career

Career is a life style concept that involves a sequence of work or leisure activities in which one engages throughout a lifetime. Careers are unique to each person and are dynamic, unfolding throughout life. They include not only occupations but pre-vocational and postvocational concerns as well as how persons integrate their work life with their other life roles. (Herr and Cramer, 1984)

Job

A group of similar, paid positions requiring some similar attributes in a single organization. (Super, 1976)

Work

Conscious effort, other than that having as its primary purpose either coping or relaxation, aimed at producing benefits for oneself and/or oneself and others. (Hoyt, 1991)

Occupation

A group of similar jobs found in different industries or organizations. (Herr and Cramer, 1984)

Skill

An attribute required of the worker in order to complete a work task. (Jepsen, 1991)

Task

An element of work to be completed. (Jepsen, 1991)

Career Development

The total constellation of psychological, sociological, educational, physical, economic, and chance factors that combine to shape the career of any given individual. (Splete, 1978)

Career Decision Making

Career Decision Making

The following steps constitute the decision making process:

- determine the concern to be acted upon,
- project possible alternative actions,
- review possible consequences of each alternative action,
- choose the best alternative at this time,
- decide how and when to implement the alternative,
- implement it,
- evaluate the results of the action, and
- determine whether a related decision needs to be made now or if further planning is needed.

(Spete, 1978)

Career Guidance

Career Guidance

A systematic program of coordinated information and experiences designed to facilitate individual career development, and more specifically, career management. (Herr and Cramer, 1984)

Career Education

Career Education

The totality of experiences by which persons acquire knowledge and attitudes about self and work, and the skills by which to identify, choose, plan and prepare for work and other life options. (Herr and Cramer, 1984)

Developmental Guidance

Developmental Guidance

Developmental Guidance is based on the premise that as children and adults mature, they pass through various developmental stages vital to their growth. Programs that systematically address the learning, personal/social, and career development needs of all individuals are the basis for this preventative approach to counseling and guidance. (Wilson, 1986)

National Career Development Guidelines

National Career Development Guidelines

The National Career Development Guidelines are based on developmental guidance concepts and as a result are preventative, goal oriented and proactive in nature. (NOICC, 1989)

They reflect the national movement to improve career guidance and counseling programs throughout the life span and to support standard-setting efforts which:

- increase the understanding of lifelong career development needs, based on the conceptual framework of developmental guidance;
- expand the definitions of comprehensive career guidance and counseling programs;
- emphasize competency-based education and training;
- support program accountability efforts;
- heighten interest in achieving professional consensus on program guidelines and standards;

- renew legislative support for career guidance and counseling programs; and
- increase emphasis on certification of counselors, including career specialization.

(See Figures 1.3 and 1.4 for a listing of the Guidelines.)

Major components addressed in the Guidelines include:

- **Student Competencies and Indicators.** Guidelines for the outcomes of career guidance and counseling programs are the basis for program development. The competencies are stated as broad goals. The indicators describe specific attitudes, knowledge and skills related to career development. They are divided into five sequential levels: elementary, middle or junior high school, high school, young adult and adult. They are organized into three broad areas: self-knowledge, educational and occupational exploration, and career planning.
- **Institutional Capabilities.** This section provides a statement of the necessary commitment, structure, and support required for effective career guidance and counseling programs including administrative commitments, physical facilities, and supportive materials.
- **Personnel Requirements and Counselor Competencies.** This section provides a description of the roles of various staff members as well as specific competencies needed by counselors to deliver career guidance and counseling programs.

A basic understanding of the key concepts, vocabulary and measures of labor market information is essential to its effective use.

For those engaged in education, counseling, job development and job placement, an understanding of how to use labor market information effectively in career decision making is critical. Although one might not want, or necessarily need, technical knowledge of numbers and statistics, knowing the terms and concepts will help explain information found in the lay press or in technical reports.

What Is a Labor Market?

Labor markets bring together buyers and sellers seeking to exchange one thing of value for another. Sellers are individuals seeking work, and buyers are employers offering wages and other benefits in exchange for work. Through the operation of the market, employers obtain the labor needed to transform raw materials into goods and services, and workers earn an income to support themselves and others.

Labor markets are dynamic and constantly changing. They tend to be more complicated than other kinds of markets. There are many interacting variables that influence supply and demand in a labor market. The commodity being sold, the labor supply, is controlled by

TERMS AND CONCEPTS RELATED TO USING LABOR MARKET INFORMATION IN CAREER DECISION MAKING

What Is a Labor Market?

What Is Labor Market Information (LMI)?

human beings with individual values and abilities who are free to make choices about education, training, occupation and geographical location. Moreover, workers can even choose to work for themselves and become their own employers.

What Is Labor Market Information?

Labor market information (LMI) is systematized data, produced on a regular basis, about employment, unemployment, jobs and workers. It includes information about people, jobs and employers.

Although many people may think of LMI as only basic employment and unemployment statistics, labor market information is, in fact, a wide array of employment related data on economic conditions and labor force characteristics, such as population, education, income, occupational descriptions and employment conditions.

Who Uses Labor Market Information?

Who Uses Labor Market Information?

The interpretation of labor market information contributes to the development of public policies and programs. Educators and students need data on occupational outlooks to make sound decisions about programs of study and careers. Young people need information about occupational descriptions, educational requirements, wages, and the employment outlook to make choices about careers and training. Managers of job training and retraining programs need labor market information to identify those most in need of training programs, to develop new curricula for vocational training, to design and implement appropriate programs and to place graduates in jobs. Employers use labor market information to set wages, design working conditions and evaluate alternative business opportunities.

Who Collects Labor Market Information?

Who Collects Labor Market Information?

The federal government is responsible for developing, maintaining and reporting labor market information and information about the nation's economy. The states collect this raw data for the federal government.

Several federal agencies are involved in the collection effort. They play a major role in data development by specifying a common methodology for data collection, processing and reporting that results in standard data available for each state. The major agencies are:

- The U.S. Bureau of Labor Statistics (BLS) collects and issues statistics on labor market conditions and social trends that affect the demand for labor. BLS is responsible for the methodology and procedures used by state agencies to collect data on the labor force.
- The U.S. Bureau of the Census collects a wide range of demographic, social and economic data. The Census also collects national, state and local data to describe the size, characteristics and status of the labor force.
- The U.S. Office of Educational Research collects and disseminates information about educational institutions, levels

of enrollment, basic literacy skills attainment and information about school leavers.

- The U.S. Office of Vocational and Adult Education (OVAE) sets standards for spending federal vocational education funds. The planning requirements issued by the OVAE have a significant impact on the kinds of occupational information needed for vocational planning.

Defining the Labor Force

Defining the Labor Force

LABOR FORCE CONCEPTS

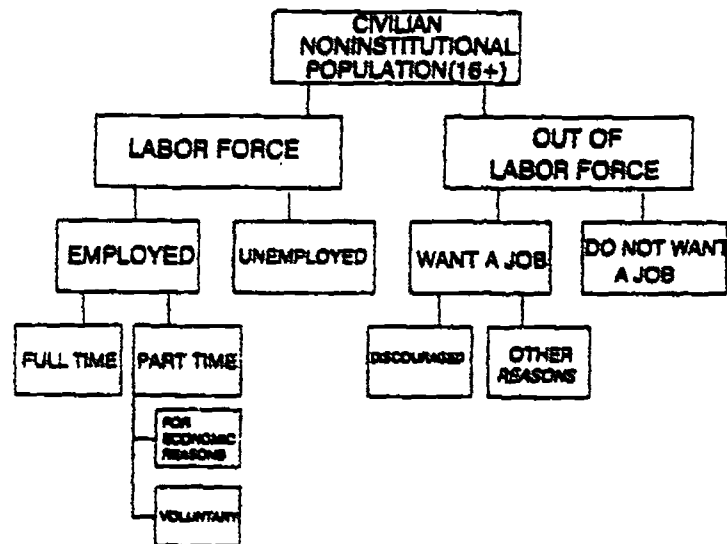


Figure 2.1

Civilian Noninstitutional Population

This group consists of all persons 16 years of age and older who are not members of the resident armed forces and who do not reside in institutions, such as nursing homes, prisons or mental hospitals. This is the group from which potential workers are available.

Civilian Labor Force and Labor Force Participation Rate

This group consists of the total number of civilians who are employed and unemployed. It does not include those persons employed by the armed forces. The proportion of the total civilian noninstitutional population, or of a demographic subgroup of that population classified as "in the labor force," is known as the labor force participation rate.

Employed

The BLS definition for employed are those people who:

- worked for pay or profit at any time during the payroll period which included the 12th day of the month;
- held jobs, but were temporarily absent from them for such reasons as a vacation, weather, personal illness or an industrial dispute; or

- worked without pay in a family-owned business for 15 or more hours.

The number of employed are estimated monthly through the Current Population Survey. The employed group includes three sub-groups of workers, wage and salary workers, self-employed workers and unpaid family workers.

- **Wage and salary workers** - People who work for wages, salaries, commissions, tips or pay in kind from a private employer, a non-profit employer or a governmental unit. Nonfarm wage and salary workers make up the major portion of this category.
- **Self-employed workers** - People who work for profit or fees in their own business, profession or trade, or who operate a farm.
- **Unpaid family worker** - Persons who work without pay for at least 15 hours a week on a farm or in a business operated by a household member who is related by birth or marriage.

Full-Time Employed

These are people who are employed 35 hours or more per week.

Part-Time Employed

These are people who are employed less than 35 hour a week. Part-time workers are further broken down into two groups: those who are part-time by choice, and those who are part time for economic reasons. The economic reasons include slack work, material shortages and the inability to find a full-time job. Some of these people are referred to as the "underemployed".

Unemployed

This group is defined by BLS as those persons who meet the following criteria:

- performed no work at all for pay or profit in the week of the 12th of the month;
- looked for a job at some point in the past four weeks; and
- were available for work in the survey week.

These people represent an unutilized but available labor supply.

Out of the Labor Force

This is a residual category of persons who are neither employed nor unemployed. These include people who are enrolled in school, those with family care responsibilities, persons with disabilities and those who are retired. Many of these people may move into and out of the labor force as economic or personal conditions warrant.

Want a Job

These tend to be the people who want a job, but who are not actively looking because they perceive there are no jobs available, or believe they are not skilled. They are sometimes thought of as "discouraged." This category may also include persons who want a job, but are not highly marketable, such as those lacking skills or who are differently abled.

Hidden Unemployment

These are discouraged workers, who for a variety of reasons think they cannot find work and sooner or later cease looking.

Example: Unskilled workers in the ghettos of many large cities who, lacking education and/or transportation, often cannot find jobs and become resigned to life on the streets or on welfare.

Underemployment

This occurs when a worker is either overqualified for a job or works fewer hours than desired. Example: A college graduate in microbiology who can find no work in his/her field and ends up as a clerk in a department store.

Do Not Want a Job

These are people who have other responsibilities, such as schooling or caring for family members, as well as those persons who have already retired.

Types of Unemployment

Frictional Unemployment, usually for a short duration, is caused when people are between jobs. Example: A waitress who quits a job to look for a position that offers better wages.

Structural Unemployment arises when there is a job skill mismatch such that the skills workers possess are not those that employers require. Example: A football player who has been released and who has no other job skills on which to rely.

Seasonal Unemployment is created when jobs are available for only a portion of the year. Example: Migrant workers who "follow the harvest" of various crops, but who have little chance of working in the colder months.

Cyclical Unemployment is caused by boom and bust cycles in the economy. Example: Oil field workers who enjoy plentiful and lucrative work when the price of oil is up and suffer economic setbacks as the price drops.

Unemployment Rate represents the number of unemployed as a percent of the labor force. The seasonally adjusted unemployment rate eliminates the influence of regularly recurring seasonal fluctuations which can be ascribed to weather, crop-growing cycles, holidays, vacations, regular industry model changeover periods, and the like, and therefore, more clearly shows the underlying basic trend of unemployment.

What Are Industries?

What Are Industries?

Industries are groups of firms that produce similar goods and services. Our economy has two basic kinds of industries: those that produce goods and those that provide services.

Industrial Sectors

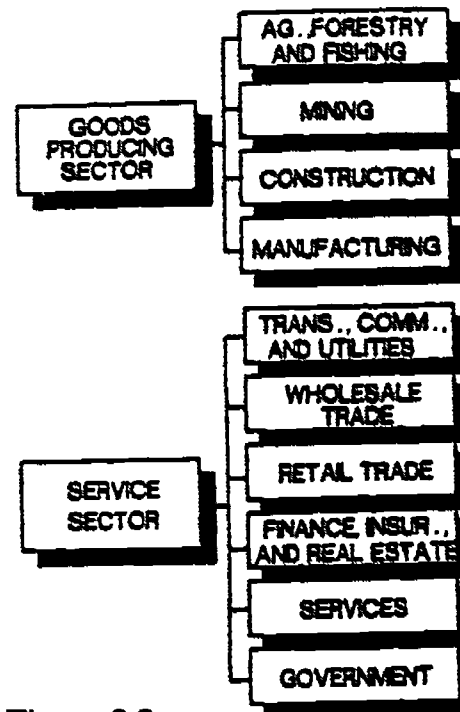


Figure 2.2

The goods producing industries supply everything from gasoline to drill presses to lamb chops. These industries employ less than one-third of U.S. workers. Major goods producing industries include:

- **Agriculture** (farming, food and fiber processing, and manufacturing of farm tools and fertilizers, to name a few elements of a basic industry)
- **Mining** (industries producing most of the basic raw materials and energy sources that industries and consumers use, including coal mining, metal mining, and oil exploration and processing)
- **Contract construction** (industries that build, alter, and repair roads, bridges and structures, such as factories)
- **Manufacturing** (industries that manufacture goods ranging from miniature computer circuits to textiles to spacecrafts)

The service industries either provide services such as medical care or haircuts, or maintain and distribute the goods listed above. More than two-thirds of U.S. workers are employed in these major industrial groups. They include:

- **Transportation, communication and public utilities** (industries grouped together because they provide a public service. They are regulated and sometimes owned by public

agencies, such as telephone companies, power companies, airlines, and truckers)

- **Trade** (industries involved in the distribution and sale of goods from producers to consumers, such as restaurants, wholesale textile dealers, and department stores. There are two divisions, one called wholesale trade and another called retail trade.)
- **Finance, insurance and real estate** (industries that provide financial services, protection, and property to businesses and consumers; among those in this group are banks, consumer credit agencies, insurance companies, and real estate brokers.)
- **Services** (industries engaged in providing a personal service to consumers, such as private hospitals, private schools, hotels, and the Girl Scouts)
- **Government** (national, state and local agencies including public schools, the postal service, police and fire protection, the Army)

There are several groups of industries in each division. For instance, under "services" one would find business services, legal services, educational services, health services, etc. Health services includes hospitals, offices of dentists, medical and dental laboratories, outpatient care facilities, nursing and personal care facilities. It is important to understand this type of industry breakdown because it provides a useful means for analyzing labor force activity.

Industries, like people, are highly dependent on each other. For instance, the trade industry depends upon the manufacturing industry to provide the goods it sells, and manufacturing depends upon the finance, insurance and real estate industries for the loans needed to buy goods and to expand. The manufacturing sector also depends on the finance industry for insurance and for the land and buildings needed for warehouses and stores. In turn, the trade industry relies upon public utilities industries for transportation, electricity, telephones, and so on.

Industry Definitions According to the Standard Industrial Classification (SIC)

Industry Definitions According to the Standard Industrial Classification (SIC)

In an economic context, industries are groups of firms that produce essentially the same goods or services. The **Standard Industrial Classification (SIC)** system of the U.S. Office of Management and Budget provides definitions and coding of industries based on their products or services. Narrower definitions of products or services are used to distinguish industries from one another at finer levels of detail. The SIC system is based on an ordering of products and services, arranged at increasingly greater levels of detail.

What Is an Occupation?

What Is an Occupation?

An **occupation** is a group of similar jobs found in different industries or organizations. With hundreds of thousands of meaningful differences existing in the overall marketplace, it is important to be

able to recognize major categories of occupations when performing human resources planning, vocational counseling and economic development activities.

Data on occupational employment are needed to generate insights into the types of jobs held by workers, the characteristics of the job duties performed, and the skills and abilities required to function within the job in an acceptable manner.

Not only do jobs differ in their skill requirements, but all jobs are not available to all potential workers. Arising from attempts to restrict the entry of unqualified workers or other potential competitors, job qualification barriers reinforce the skill distinctions that exist naturally. Such barriers may include certification or registration guidelines, occupational licensing and apprenticeship requirements.

Occupational Shifts

Occupational Shifts

Occupations undergo change. There are at least three designations to describe this change process.

1. A new occupation is an occupation in which major tasks, skills and duties are not included in any currently existing occupation, or in which tasks are combined in significantly different ways that preclude workers from other occupations performing the work without training beyond a short demonstration.
2. A changing occupation is an existing occupation that has experienced change in duties, skills or tasks significant enough to require training beyond a short demonstration, but not significant enough to classify into another occupation, or to create a new occupation.
3. An emerging occupation is an occupation (defined by a reasonably well accepted descriptive phrase) that is growing rapidly from a small base either within an economy as a whole, or within a particular industry, and has significant education or training implications.

Occupational Definitions and Coding Systems

Occupational Definitions and Coding Systems

Occupational definitions and coding systems were developed for the purpose of assembling and simplifying detailed data on the skill and performance requirements of jobs. There are many ways to classify occupations. Each is designed for a different audience to meet a different need. Each system is based on functional differences in the work done and the work settings where work is performed.

The *Dictionary of Occupational Titles (DOT)* is probably the most familiar occupational classification system and contains the greatest level of detail. The DOT was first developed in the 1930s. It provides concise descriptions of job tasks for over 17,000 separate occupational titles. The system tries to describe jobs based on the nature and content of the specific tasks a worker needs to perform. Formal education and training requirements for individual occupations are also described.

The *Standard Occupational Classification (SOC)* system was developed by the U.S. Department of Commerce. The SOC provides a mechanism for cross-referencing and aggregating occupation-related data collected by social and economic statistical reporting programs. The system covers all occupations in which work is performed for pay or profit, including work performed by unpaid family workers. Occupations unique to volunteer settings are not included. The SOC is hierarchically structured on four levels: division, major group, minor group and unit group. Subsequent levels represent finer levels of detail. Residual categories are included where needed to handle groups of occupations that do not warrant separate identification or do not fit into one of the specific groups.

A third occupational classification system developed by the Bureau of Labor Statistics is the *Occupational Employment Statistics (OES)* system used in the OES survey. This schema is closely related to the SOC and is used to collect occupational staffing patterns from employers and to develop occupational projections. The OES contains over 750 job titles and definitions that specify job tasks and functions for individual occupations, sometimes on an industry specific basis. The OES system combined with benchmarked industry employment data, is capable of identifying and measuring the level of employment for specific categories of workers engaged in similar job tasks.

The OES helps to develop an accurate profile of occupational employment by industry, to provide basic data for projecting future occupational requirements, and to identify new and emerging occupations and declining occupations.

The OES survey is a mail survey which includes a sample of nonfarm establishments reporting to the state's Unemployment Insurance program. The survey collects data on both full- and part-time employees. The survey cycle covers a three-year period. Manufacturing industries are surveyed in one year, selected nonmanufacturing industries another year, and the balance the next year.

The primary source of occupational employment information is the OES/Matrix program generated with state and national data (Micro-Matrix). This program is designed to provide very detailed information on the occupational employment outlook for use in career guidance and planning employment and training programs. Outputs from the Matrix program show base year employment, projected employment in the target year, and the estimated number of average annual job openings. Job openings consist of new jobs expected to be created by growth--or job loss due to projected employment declines--plus openings likely to be created by mortality and labor force withdrawal. Matrices may be available statewide and for selected LMAs.

The projections are a key element in assessing the employment potential of different occupations and making an informed judgment

on which training programs to provide. The projections show which occupations are expected to grow most rapidly and which are trailing or declining. The projections also provide estimates of the number of job openings likely to be created in each occupation. The number of future job openings is a function of the size of the occupation and the demographic and age structure of the workers in the occupation, in addition to projected economic growth.

In evaluating employment prospects, it is important to consider the level of job openings, as well as the growth rate of the occupation. Sometimes, there is a preoccupation with growth in ranking occupations for training. This can be misleading since some slower-growth occupations may be generating a large number of job openings, or, alternatively, only a small number of workers may be employed in high-growth occupations. (For a fuller discussion of the projections, see Module 5.)

The survey questionnaire includes a list of occupations appropriate to each industry in the survey. Each surveyed employer is asked to give information about the number of full- and part-time employees for each occupation represented within the establishment. Employers are asked to list any occupations that do not fit under the titles provided in the questionnaire. Larger employers are asked to include information about new occupations in their firms that require substantial training or are emerging due to technological changes in the industry. This information provides valuable data for improving future occupational lists and for identifying occupations that are changing in nature or are new altogether. Currently, occupational employment estimates by industry are developed for approximately 750 occupations.

A fourth system for classifying occupations is used by the Bureau of the Census. This system over time has come to look much like the *Standard Occupational Classification*.

NOICC/SOICC ORGANIZATION

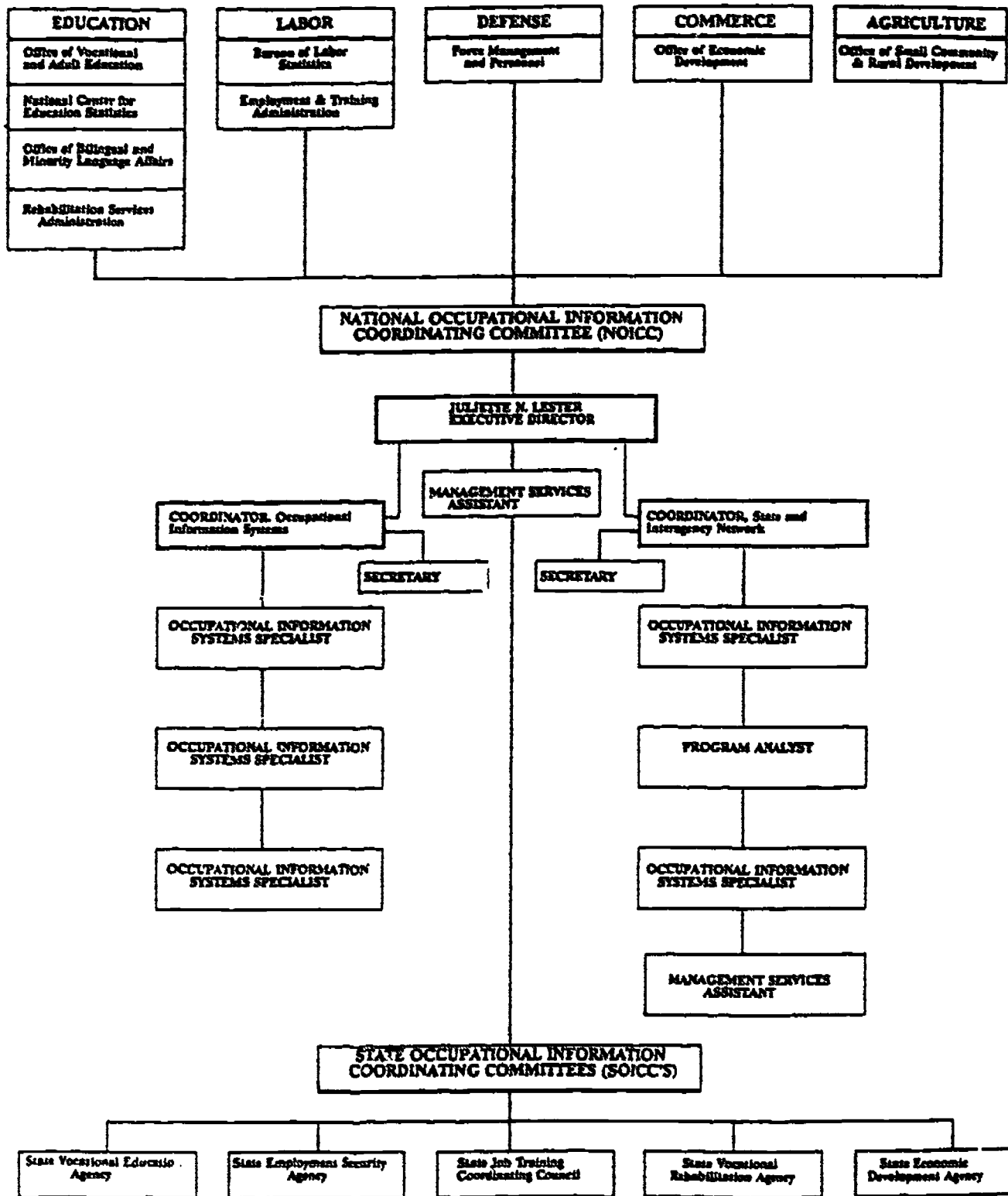


Figure 2.3

October 24, 1970

TECHNICAL TERMS AND CONCEPTS RELATED TO LABOR MARKET INFORMATION AND DATA COLLECTION PROGRAMS

**The National
Occupational Information
Coordinating Council
(NOICC)**

The National Occupational Information Coordinating Council NOICC is a federal interagency committee originally established by Congressional legislation in 1976 to promote the development and use of occupational and labor market information. NOICC is composed of representatives from several agencies within the federal government.

Federal mandates have directed NOICC's efforts to develop and implement, in cooperation with state and local agencies, an occupational information system to meet the needs of those wishing to enter, and those already part of, the work force. In June of 1988, foreseeing that new and changing technologies, growing international competition and demographic shifts will create major changes in the labor market, NOICC released its first long-range plan in an effort to analyze how it might best respond to rapidly changing information needs. NOICC's primary responsibilities are:

- **to meet the career information and development needs of young people and adults,**
- **to foster communication and coordination between the users and producers of occupational and career information,**
- **to address the occupational information needs of planners and administrators, and**
- **to support state occupational information programs.**

To carry out these duties, NOICC has defined specific objectives:

- **to support printed and computer managed career information delivery systems (CIDS) for state and local sites for the use of individuals who are making career decisions,**
- **to continue to serve those who work in the administration of human resources with occupational information systems (OIS),**
- **to conduct special studies of the effects of technological change and how these changes affect present occupations and create new ones, and**
- **to strengthen NOICC's ties to state and local governments and provide technical assistance to public and private agencies to work cooperatively to list job opportunities.**

In setting these goals, NOICC has defined several trends that demand attention. They are:

- **continuing technological and structural unemployment, causing displaced workers;**
- **changing demographic conditions, due to increased immigration and the aging of our work force; and**
- **increasing the number of "at-risk" young people.**

In addition to the Improved Career Decision Making (ICDM) curriculum, NOICC initiatives that have responded to these needs include the following programs:

- **Career Information Delivery Systems (CIDS)**
They are systems that collect, organize, analyze and deliver

national, state and local information to individuals who are exploring careers or seeking employment. These systems are the primary source of LMI related career information. CIDS generally provide national, state and local information on civilian and military occupations, educational institutions and training programs. CIDS are used to help individuals learn about the wide range of career opportunities available to them. CIDS help individuals become more aware of occupations that suit their aptitudes, interests and preferences, to learn about educational and training opportunities and encourage them to seek out more information on their own.

- **Occupational Information Systems (OIS)**

An OIS is a specialized database organized and formatted for two primary user groups:

1. education and training program planners and administrators; and
2. individuals and professional staff involved in career planning, guidance and job search activities.

The four primary information components of the OIS database are information on occupational demand, occupational supply, occupational characteristics and complementary information.

- **National Career Development Guidelines**

This initiative represents a major nationwide effort to foster career development throughout the lifespan. The Guidelines are statements of desired client and counselor competencies and agency capabilities. They provide the framework for a comprehensive career development program.

- **Employee Career Development Project (ECDP)**

This is a counselor training project that focuses on assisting adult workers in career transition. It is designed to train counselors and human resource advisors to help working adults make informed decisions about their future education and training needs. The ECDP is designed to meet the needs of adults as defined by NOICC's National Career Development Guidelines. It can also contribute to the development of an employer-based career development model.

The Role of the State Occupational Information Coordinating Committees (SOICCs)

The Role of the State Occupational Information Coordinating Committees (SOICCs)

In order to implement these initiatives, NOICC works at the state level through State Occupational Information Coordinating Committees (SOICCs), composed of representatives from state vocational education boards, vocational rehabilitation agencies, employment security agencies, job training coordinating councils and economic development agencies, and other state agencies that generate education, training and employment statistics. SOICCs exist in each of the fifty states, as well as Washington D.C., Puerto Rico, American Samoa, Guam, the Northern Mariana Islands, and the U.S. Virgin Islands.

**The Role of the State
Employment Security
Agency (SESA)**

Labor Market Area (LMA)

In summary, the primary objective of NOICC and the SOICCs is to improve communication and coordination among developers and users of occupational and career information.

The Role of the State Employment Security Agency (SESA)

The State Employment Security Agency administers the unemployment insurance program, operates the employment service, and gathers data for the Bureau of Labor Statistics (BLS) and other labor market information programs. In performing these three functions, the SESA develops a rich and powerful data base which is used to generate employment information.

Labor Market Area (LMA)

In defining a LMA, the Department of Labor uses commuting time and distance factors in combination with certain density criteria. A labor market area is defined as: that geographic area in which a concentration of workers can live, work, and change jobs without changing their residences. Its existence is based primarily on the ability of labor to exercise its freedom of choice in accepting job opportunities within practical commuting limits, without undue hardships of dislocation, or change in customary social habits or living standards. The basic factor in defining a local labor market area, therefore, is the relationship between place of residence and place of work.

LMAs are not any one size; they may be large, covering several counties, or they may be small, covering a single county. The outer limits of an area's boundary are determined in large part by transportation time and cost, rather than by the distance. Furthermore, in certain areas, because of the nature or geographical concentration of the job opportunities, people are willing to travel shorter or longer distances to work.

There are only two U.S. Department of Labor designations of labor market areas currently in use: small LMAs and major LMAs. Small labor market areas are defined as having a central community and surrounding territory that do not meet the standards for size or metropolitan character specified for major LMAs. Small LMAs must include a town or city that acts as the "employment nucleus" of the area, but they are not required to include whole counties, which may or may not overlap into labor market areas. Major labor market areas are those that have a central city (or adjoining cities) with a population of 50,000 or more as designated by the U.S. Bureau of the Census. With few exceptions, major LMAs correspond with

Metropolitan Statistical Areas (MSAs) defined by the office of Federal Statistical Policy and Standards as a county or group of contiguous counties with a total population of at least 100,000. The area must also contain at least one city with a population of 50,000 or more. Outlying counties are included in an MSA based on their population densities and the volume of commuting to central counties.

Also with few exceptions, (New England is defined by towns and Louisiana by parishes), MSAs are comprised of counties as their

External versus Internal Labor Markets

major building blocks. Although a MSA may cross state boundaries, it must include or exclude whole counties rather than only portions of a county, so the political integrity of the county unit is maintained.

External versus Internal Labor Markets

Labor markets are the arena in which employers hire workers. Different employers view this process in varying ways. Some firms fill all or most jobs with people from outside the organization, or an "external" labor market. They may use a private placement service or a public one like the Job Service to do their screening. Others, especially larger organizations, create "internal" labor markets, in which new employees may be hired in only entry level jobs while other jobs are filled by promotion. Knowing how different firms recruit and hire can dictate strategies for finding a job.

Employers view the demand for labor services in a way that is different from the way they view transactions in final output or financial markets. Employers do not hire labor for the pleasure of having a number of people on the payroll; they hire workers with a particular mix of skills and experience, such as an engineer as opposed to a doctor. Workers are hired because they help produce a product or service. This means that the demand for labor is a derived demand; that is, the demand for labor is dependent on the consumer's desire for the products or services produced by the firm. These consumers may be individuals, households, other businesses, nonprofit agencies, or government.

Supply and Demand

Supply and Demand

The demand for labor varies as new jobs and occupations are created by social, economic, and technological changes in society. For example, population growth increases both the demand for products and services and the supply of people available to work. Social changes may affect the demand for certain kinds of workers. As women have increased their participation in the labor market, the demand for child care workers and restaurant workers has also grown; these services once provided within the home have increasingly become services purchased in the market place.

The adoption of new technologies, or ways of doing things, changes both the kinds of skills workers need and the kinds of products or services that business can provide. The introduction of electronic bank teller machines, for example, has decreased the need for more human bank tellers, but increased both the number of people needed to service these machines and the hours and locations where banking services are available.

Much economic activity takes place at fixed locations. Thus, demand in a local labor market may differ from that in the state or nation as a whole. Factors that affect the demand for labor at a local level include the natural resources available in an area, the kinds of products or services already available in the area, the educational institutions in the area, the forecast of future demand for products and services by local businesses, by the local community and the global economy, and the hiring practices of local businesses.

The supply of labor is the number of persons working and those seeking work. There is no fixed supply of labor in an economy since people move in and out of the labor market. People choose to be in the labor market in response to changes in individual circumstances, the local demand for labor, general economic conditions, and cultural norms.

Jobs differ in the kinds and numbers of special skills they require. Some jobs require special skills that cannot be learned quickly, but are acquired over a period of years through a combination of education, special training and experience in the labor force. Shortages can occur in these occupations when employers seek more workers than have obtained the necessary training or when employers are unwilling to offer good enough wages or working conditions to retain already trained workers. These include occupations such as nursing or engineering.

Most openings in the labor market are created, not through growth in the overall number of jobs in the economy, but through jobs left vacant as workers leave the labor force to retire, stay home, attend school, move out of the area, or move from one occupation to another. This concept is sometimes referred to as the separation rate. It is important to recognize that workers move among occupations for a variety of reasons. As they acquire more training and experience or their life circumstances change, people may leave one occupation to pursue another. Moreover, workers are sometimes forced to change occupations as technological changes or plant closings result in their specialized skills no longer being needed. Other workers may be forced to leave an occupation as demand drops for a particular product or service they provide.

Measuring the Labor Force

Measuring the Labor Force

Current Population Survey (CPS)

To gather data between census years, the Bureau of the Census conducts the Current Population Survey (CPS). The CPS is a sample household survey gathered monthly in all fifty states. Census Bureau interviewers contact approximately 59,500 households throughout the nation. The same questions about labor force activities of all persons 16 years old and over are asked of the sample households. On the basis of the labor force activity of these persons during the calendar week including the 12th day of each month and the preceding four-week period, they are classified in one of three categories: unemployed, employed or not in the labor force.

In specified months there are additional questions that collect information about income, education, fertility and households. Because it is a sample survey, most data are not valid except at the national level. Limited data are available at state and metropolitan area levels. The U.S. Bureau of Labor Statistics is the major user of CPS data for calculating the national unemployment, labor force and employment statistics each month.

Local Area Unemployment Statistics Program

The Local Area Unemployment Statistics (LAUS) program develops monthly estimates of unemployment, employment and the labor force for the state, counties and selected cities within the state. The program uses methodologies provided by the U.S. Bureau of Labor Statistics.

The basis of the LAUS methodology is data from the Current Population Survey (CPS). Eleven states have a sufficiently large sample of households in the CPS to provide statistically significant data each month. The other states with smaller samples use the survey results in combination with a standardized estimating methodology. This methodology uses data from Unemployment Compensation records, the Current Employment Statistics Program, and the decennial Census of Population to augment information collected in the CPS. Definitions used in the methodology follow those of the Current Population Survey.

Benchmarking

Benchmarking

This is the process of re-estimating statistics as more complete data become available. Estimates are usually calculated using only a sample of the universe (total count). Therefore, benchmarking allows for the correction of previous estimates. New benchmark levels are introduced on an annual basis for many programs that measure employment and unemployment.

Seasonal Adjustments

Seasonal Adjustments

These are statistical modifications in a time series such as unemployment rates. They are made to compensate for predictable fluctuations that recur more or less regularly every year. These fluctuations can be so strong as to disrupt the underlying changes in trends. For this reason, some states report unemployment rates on a seasonally adjusted basis, compensating for such influences as the summer closing of schools, temporary hiring for the holiday season, seasonal weather influences and the like. Such adjustments facilitate the evaluation of the more important underlying reasons for month-to-month changes in joblessness.

Covered Employment (State)

Covered Employment (State)

This refers to employment in any industry insured under the provisions of the Unemployment Insurance Law.

Labor Surplus Area

Labor Surplus Area

A civil jurisdiction is classified as a labor surplus area when its average unemployment rate is at least 20% above the average unemployment for all states. During periods of high national unemployment, the 20% ratio is disregarded and an area is classified as a labor surplus area if its unemployment during the previous two calendar years was 10% or more. This designation allows establishments in the area preference in bidding for certain federal contracts.

Labor Turnover

Federal Data Collection Programs for Industries

Labor Turnover

Strictly defined, this refers to the gross movement of workers into and out of employment with individual establishments over a certain period of time. Most often, when workers separate or move out of employment, openings are generated. To the Bureau of Labor Statistics, turnover consists of accessions and separations that have the following component parts:

Accessions = New hires + Recalls + Other accessions

Separations = Quits + Layoffs + Other separations

Job creation, on the other hand, is the term used for new positions that previously did not exist. Both components together represent total job openings.

Federal Data Collection Programs for Industries

Current Employment Statistics Program (CES)

The Current Employment Statistics Program is one of the oldest data collection programs of the Bureau of Labor Statistics. It provides the most up-to-date picture of employment, hours worked and earnings by place of business and industry. This program has evolved from some of the earliest efforts in the United States to obtain monthly estimates of employment and unemployment. These data not only give a snapshot of the current employment situation, but also, over time, describe cycles of economic expansion and recession.

State labor market information agencies identify a sample of establishments in all nonagricultural activities, including government, in the state. Currently, the CES program samples include about 300,000 firms nationwide. Sampled employers receive a survey form each month requesting data on total employment, women employed, production or non-supervisory worker employment, gross payroll, associated total hours worked, and total overtime hours worked (in manufacturing). State analysts compile the survey returns and use sample responses to prepare and publish data on total employment, hours and earning averages.

Covered Employment and Wages Program (CEW)

The Covered Employment and Wages Program collects employment and wage data from employers covered by the states' Unemployment Insurance (U.I.) Law. The CEW program is the most comprehensive source of employment and wage data available by location and industry. The CEW program files contain data on employment, wage and taxes due by county of employment, ownership, Standard Industrial Classification (SIC) and the number of reporting units (employers).

Mass Layoff Statistics (MLS) Program

The Mass Layoff Statistics Program collects and reports data on employers and claimants involved in major permanent layoffs and

plant closings. Employers with layoffs of 30 days or more are considered to have permanent layoffs. A layoff of less than 30 days is considered temporary for purposes of this program. The MLS program identifies potential layoffs by monitoring Unemployment Insurance weekly initial claims. If a firm has 50 or more claims filed in a three-week period, a telephone contact is made to collect information about the firm and the nature of the layoffs. Information solicited includes the reason for the layoffs, the expected duration and the number of employees affected. Demographic information about persons affected by the layoffs is collected from the claimant's Unemployment Insurance claim file. There are several groups of industries in each division. For instance, under "services" one would find business services, legal services, educational services, health services, etc. Health services includes hospitals, offices of dentists, medical and dental laboratories, outpatient care facilities, nursing and personal care facilities. It is important to understand this type of industry breakdown because it provides a useful means for analyzing labor force activity.

Definitions of Terms and Concepts Related to Career Development and Labor Market Information
Module 2
References

- Herr, E. L., & Cramer, S. H. (1984). *Career guidance and counseling through the life span* (2nd ed.). Boston: Little, Brown & Company.
- Hoyt, K. B. (1991, Winter). The concept of work: Bedrock for career development. *Future choices*, 2(3), 23-30.
- Jepsen, D. (1991, May). *Personal communication*.
- National Occupational Information Coordinating Council (1989). *National career development guidelines handbook*. Washington, DC: author.
- Pietrofesa, J., Hoffman, A., & Splete, H. (1984). *Counseling: An introduction* (2nd ed.). Boston: Houghton Mifflin.
- Splete, H. (1977). *Career development counseling*. Boulder, CO: Colorado Career Information System.
- Super, D. E. (1976). *Career education and the meaning of work*. Monographs on career education. Washington, DC: The Office of Career Education, U. S. Office of Education.
- Wilson, P. (1986). *School counseling programs: A resource and planning guide*. Madison, WI: Wisconsin Department of Public Instruction.

LABOR FORCE CONCEPTS

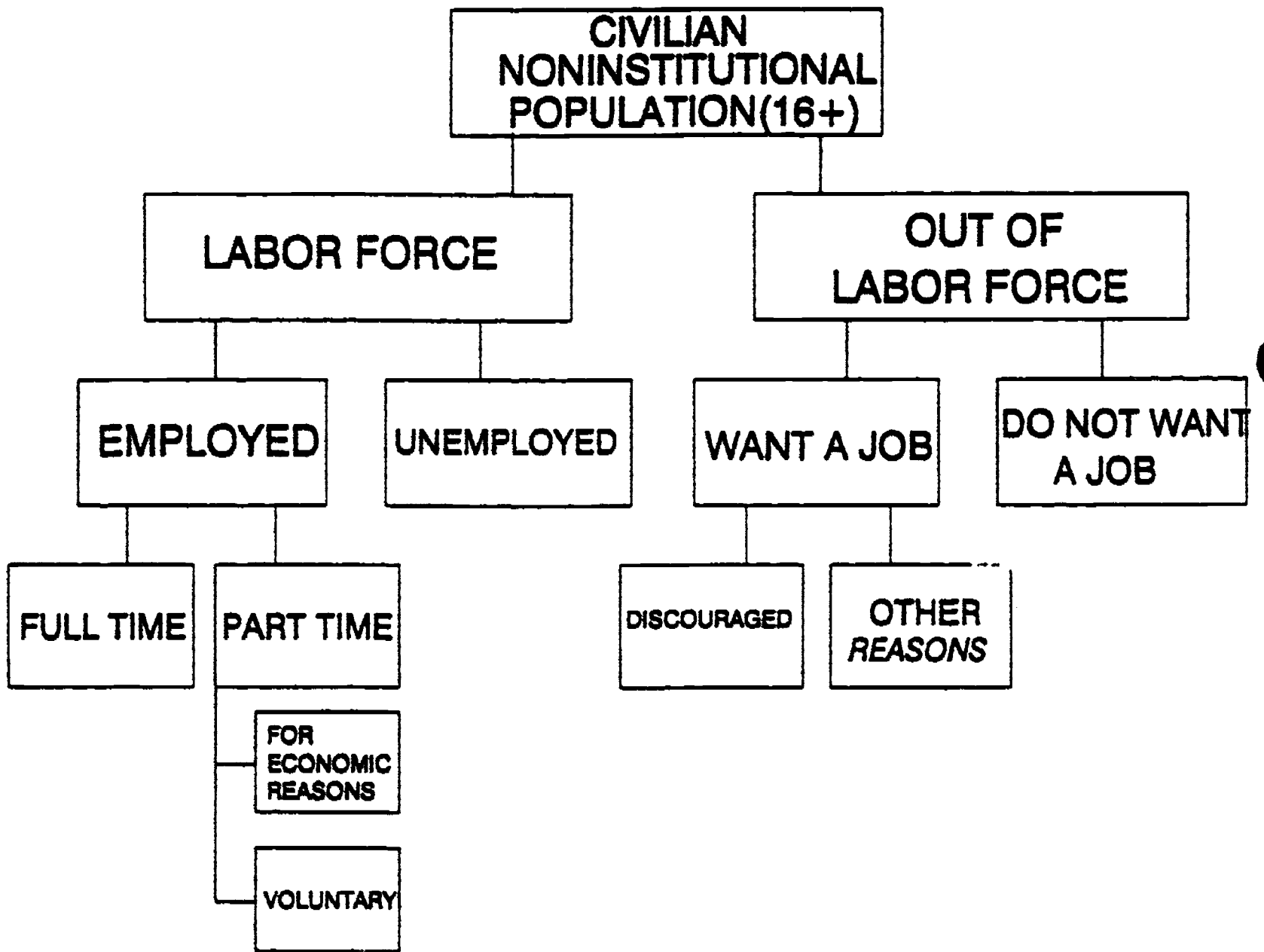


Figure 2.1

Industrial Sectors

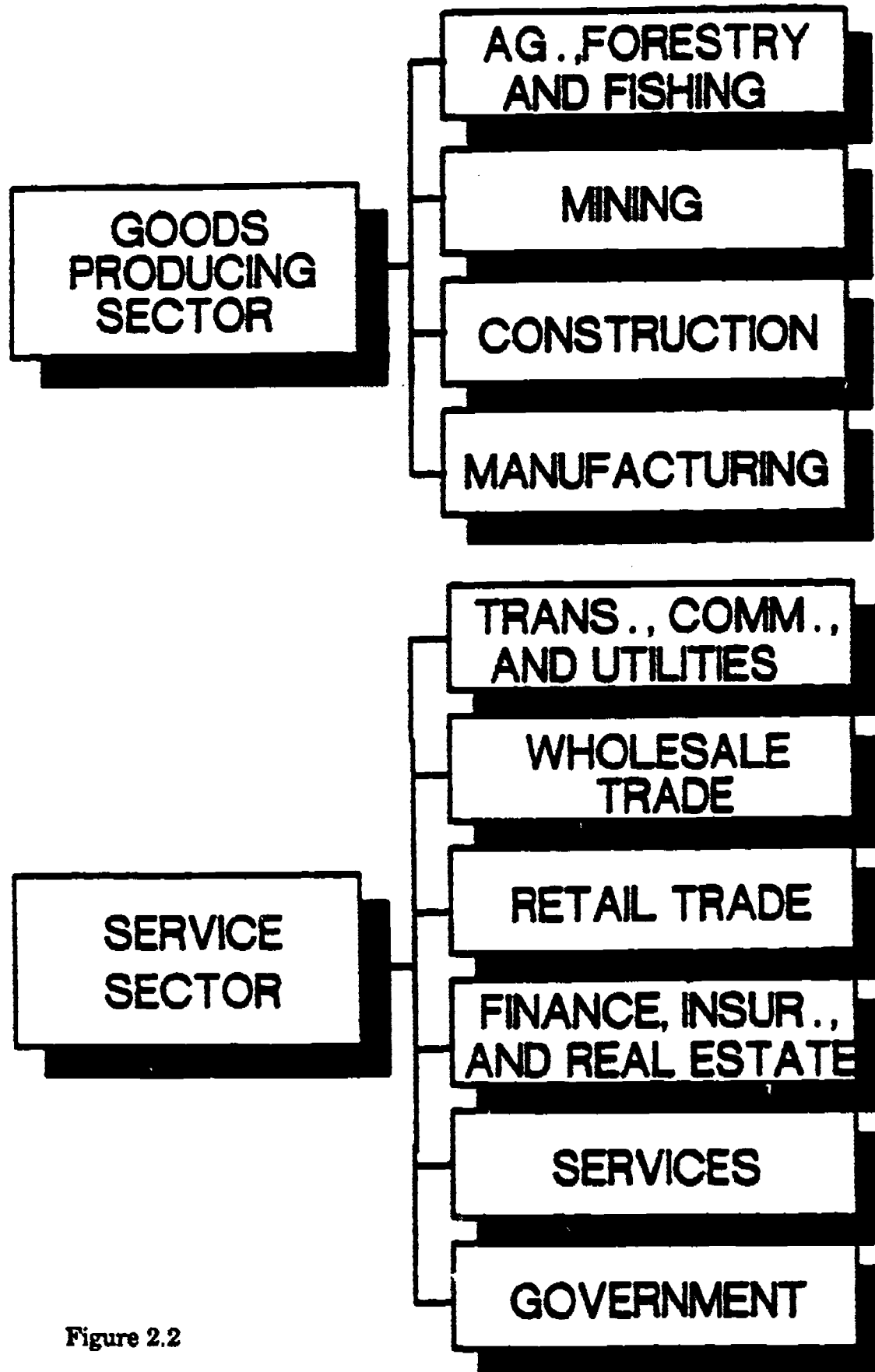


Figure 2.2

NOICC/SOICC ORGANIZATION

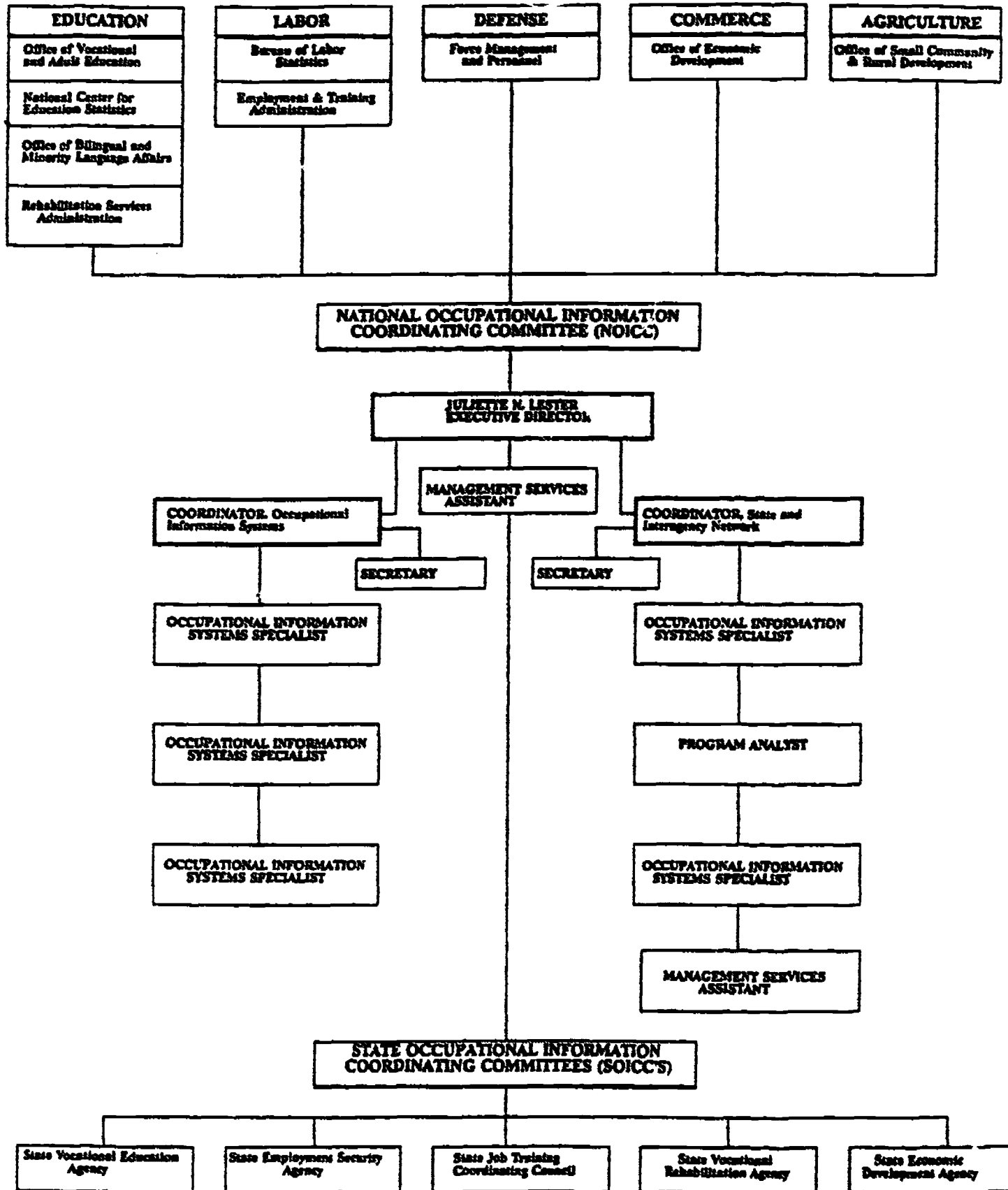


Figure 2.3

Module 3

Demographic Trends That Impact Career Decision Making



National Career Development Guidelines-Counselor Competencies

Knowledge of changes taking place in the economy, society, and job market.

Knowledge of changing gender roles and how these impact on work, family, and leisure.

DEMOGRAPHIC TRENDS THAT IMPACT CAREER DECISION MAKING

MODULE 3

Outline Topic	Delivery Methods	Trainer's Notes
Introduction	Lecturette pp. 1	
Demographic Trend #1: The Maturation of America	Lecturette pp. 1-5 <i>Figure 3.1</i> <i>Number of Older Americans Will Experience Fastest Growth Rate From 1990 to 2000</i> <i>Figure 3.2</i> <i>The Middle Aging of the Work Force</i>	
Demographic Trend #2: The Increasing Diversity of Our Population	Lecturette pp. 5-7 <i>Figure 3.3</i> <i>Non-Whites Are A Growing Share of the Work Force</i> <i>Figure 3.4</i> <i>Most New Entrants to the U.S. Labor Force Will Be Non-White, Female or Immigrants</i>	
Demographic Trend #3: The Increasing Number of Women in the Labor Force	Lecturette pp. 7-9 <i>Figure 3.5</i> <i>Women are a Growing Share of the Work Force</i>	
Summary	Lecturette p. 9	
Activities	6, 15	

DEMOGRAPHIC TRENDS THAT IMPACT CAREER DECISION MAKING

MODULE 3

(Dr. Paul Voss, University of Wisconsin-Madison, contributed many of the comments in this module.)

INTRODUCTION

By knowing this country's demographics, we can identify predictable factors that will have a direct bearing on the future labor force.

Introduction

There are a number of relatively predictable factors that will have a direct bearing on the future labor force in this country. Many are demographic in nature; this refers to the number of births, deaths, and the distribution of the population across the country. By knowing the demographics of our country and how they are changing, we can identify some predictable forces. Demographics help us understand a great deal about the workers in our labor force: How many young adults will enter the work force over the next ten years? How many workers are likely to retire during that period? Will there be a labor shortage or surplus?

These are the kinds of questions that can be answered with the help of demography. In this module we will discuss demographic trends that interact with and affect the work place. (For an extensive discussion of the occupational, industrial and labor force trends that often are related to demographics, see Module 5.)

Many of the demographics that are part of America's future are quite clear. America will not look the same in the year 2000. Three major demographic trends that will affect the work force include:

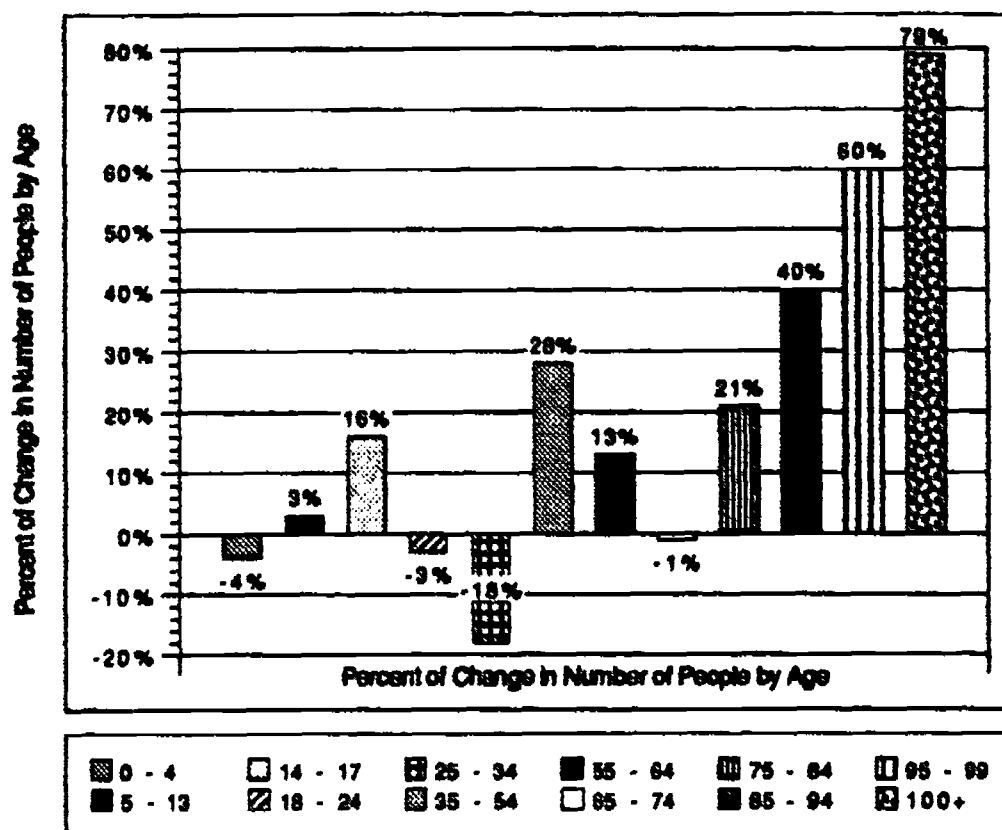
1. the maturation of America;
2. the increasing diversity of our population; and
3. the increasing number of women in the labor force.

DEMOGRAPHIC TREND #1: THE MATURATION OF AMERICA

Demographic Trend #1: The Maturation of America

America is graying. There are few demographic forces at work in our society that are as powerful in their consequences and as predictable and certain in their outcome as the aging of our population. Specifically, over the coming decade, a shrinking pool of younger people will be available to enter the work force due to prior trends in lower birthrates. In addition, people are living longer; there is an increase in life expectancy.

Number of Older Americans Will Experience Fastest Growth Rate from 1990 to 2000



Source: U.S. Bureau of the Census, 1989
Figure 3.1

There is an increasing number of people at the upper end of the age spectrum. This effects the age of the work force and also the projected occupations and industries that provide goods and services to the elderly.

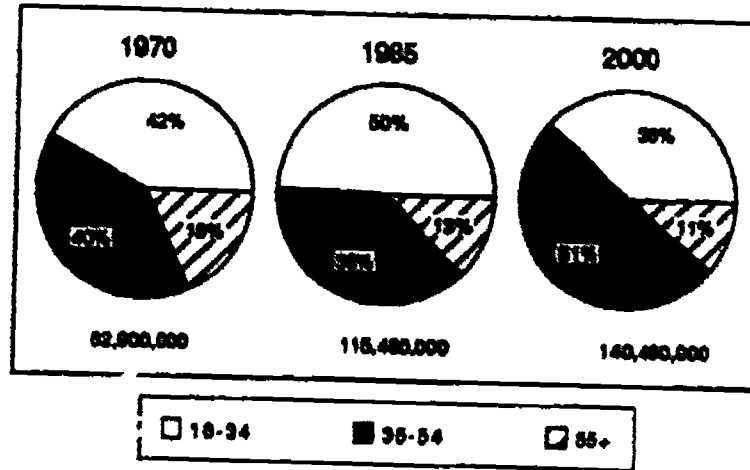
There are two separate components to this phenomenon that imply different sets of consequences for the work force. The first is the increasing number of people at the upper end of the age spectrum. The size of the population over the age of 85 has increased by 38% during the past decade, due to medical advances and better health care.

What does the increase in older persons imply for tomorrow's work force? The aging population has implications for the demand side of the labor equation. The Bureau of Labor Statistics projected an increase in many occupations between 1988 and 2000. Those showing the greatest gains in rate of increase include occupations that provide services and treatment to the elderly. For example:

<u>Occupations</u>	<u>Percentage of Increase</u>
Health diagnosing occupations	25%
Health assessment and treating occupations	38%
Social welfare service aides	52%
Physical therapists	57%
Home health aides	68%
Medical assistants	70%

The second component involves what is commonly referred to as the aging of the "baby boom" generation. The baby boom generation has matured; they will be entering their prime working age from 1985-95. As a result, the average age of the work force will increase as the baby boomers reach middle age.

The Middle Aging of the U.S. Work Force



Source: Workforce 2000, 1987

Figure 3.2

The baby boom generation is aging. Their influence will continue to be felt in all our institutions.

The baby boomers have had an overwhelming impact dating from the 1940s and their influence will continue to be felt through the next few decades. Between 1946 and 1965, 75 million babies were born in this country: 70% more than the number in the preceding 20 years and around 25% more than the number in the 20 years following 1965. These "baby boomers" now represent one third of our total population and comprise one half of our work force.

Since their arrival, this generation has, at different times, placed enormous strains on the institutions of American society and will continue to do so. From overcrowded maternity wards in the late 1940s we moved to overcrowded elementary schools in the 1950s. The building of new high schools was followed by an expansion of programs at our colleges and universities in the 1960s.

During the 1970s, we accomplished an enormous feat by putting the baby boomers to work. This involved a tremendous movement of people into the labor force. Approximately two million jobs per year were created to make room for the baby boomers. This was not without cost to our society, however. Those at both ends of the age continuum paid a price. There was high youth unemployment, especially among disadvantaged minorities. There was also a loss of older, experienced workers, many of whom took early retirement due to incentive programs that were designed to eliminate them from the work force.

As the age wave moved forward, it continued to have a powerful impact on our institutions.

Today, the peak of the baby boomers is well into middle-age.

The "baby bust" generation has caused labor shortage in certain industries.

As a result of the baby bust, employers are paying attention to underutilized non-traditional workers, such as older people, younger minorities and persons with disabilities.

As the age wave moved forward, we experienced another set of social and economic responses. During the 1970s, we had a surplus of elementary schools, as a result of smaller enrollments. A similar impact at the college level was seen in the 1980s, when the baby boomers left universities. Their absence is now being felt in the 1990s. College administrators are trying to initiate programs to attract nontraditional students to their campuses. Some colleges find themselves financially overburdened with the maintenance of excess facilities and tenured faculties.

Today, the peak of the baby boomers is well into middle-age. Most forecasters believe the consequences of their aging, for at least the next decade, are rosy. The baby boomers are moving into the most stable, productive years of their lives.

When looking at the individuals themselves, however, we see a picture that is slightly different from that of the aggregate group. These same people who competed for space in public schools, admission to college, and for entry level slots in the work force, are now competing for a small number of senior level management and supervisory positions. Although some will make it through this "promotion squeeze," many will experience considerable disappointment and frustration when they find themselves stuck in lower level jobs for a long portion of their work lives.

Coming on the heels of the baby boom bulge is a much smaller generation sometimes referred to as the "baby bust" or the "birth dearth" generation, born in the 1970s. In this population lies the impending deficits in our work force. Their outlook is considerably different. Their smaller numbers mean that instead of competing among themselves for scarce positions, the competition will shift. Employers whose survival depends on young people to work, such as fast-food industries, will be competing for the limited number of young workers.

As a result of the baby bust, employers today are paying attention to underutilized nontraditional workers, such as older people and younger minorities. Another underutilized labor source is persons with disabilities. More persons with disabilities will be entering the labor market, due to the recent passage of the Americans With Disabilities Act, which assures their rightful position in the work place.

Automation is another way employers increase productivity and reduce labor needs. The work place will not only be automated in the manufacturing sector, but also in the service sector where labor needs can be kept down in the hotel and restaurant industries (automated video checkout), banking (automatic teller machines), and the supermarket (barcode checking system).

A clear indicator of these labor shortages is the commonplace appearance today of Help Wanted signs in fast-food establishments. The shortage is clearer in the number of entry level workers. For example, in 1980 there were 42.5 million persons aged 15-25; in 1995, there will be 35.0 million persons in this age cohort. That is a

The labor shortage is exacerbated by basic skill deficits in entry level workers.

DEMOGRAPHIC TREND #2: THE INCREASING DIVERSITY OF OUR POPULATION

reduction of 7.5 million or 17.5%. Where there was once an oversupply of young workers competing for scarce jobs, there is now a limited supply of workers for many entry level positions.

The tight labor supply is exacerbated by another problem. Many employers have found that a portion of entry level workers have deficits in their basic skills. This lack of skills was confirmed in a number of surveys completed by American companies. In general, employers report 50% of all job applicants do not possess satisfactory writing skills; 44% are not qualified in job-specific technical expertise; 37% do not have proper command of the English language; nearly 33% are deficient in math; and almost 30% do not read well.

To summarize, the American population is maturing. One result is a very real labor deficit at the entry level stage. This shortage will be with us during most of the 1990s. To add to the problem, many of the workers entering the labor force have a deficit in their basic skills. This will affect the labor market in several ways. There will be a greater need for training and retraining, and new sources of entry level workers will come from other segments of the population such as young minorities, older people, and persons with disabilities. Some say this labor shortage will be the number one factor guiding business decisions in the near future.

Demographic Trend #2: The Increasing Diversity of Our Population

Not only is the work force older, but its composition is changing. Blacks, Hispanics and other minorities will make up a large share of the expansion of the labor force. Non-whites will comprise 29% of the net additions to the work force between 1985 and 2000 and will be more than 15% of the work force in the year 2000.

NON-WHITES ARE A GROWING SHARE OF THE WORKFORCE (numbers in millions)

	1970	1985	2000
Working Age Population (16+)	137.1	184.1	213.7
Non-White Share	10.9%	13.6%	15.7%
Labor Force	82.8	115.5	140.4
Non-White Share	11.1%	13.1%	15.5%
Labor Force Increase (Over Previous Period)	X	32.7	25.0
Non-White Share	X	18.4%	29.0%

Source: Workforce 2000, 1987

Figure 3.3

The composition of the work force is changing.

According to *Workforce 2000*, the cumulative impact of the changing ethnic and racial composition of the labor force will be dramatic. The net growth of workers will be dominated by women, minorities and immigrants.

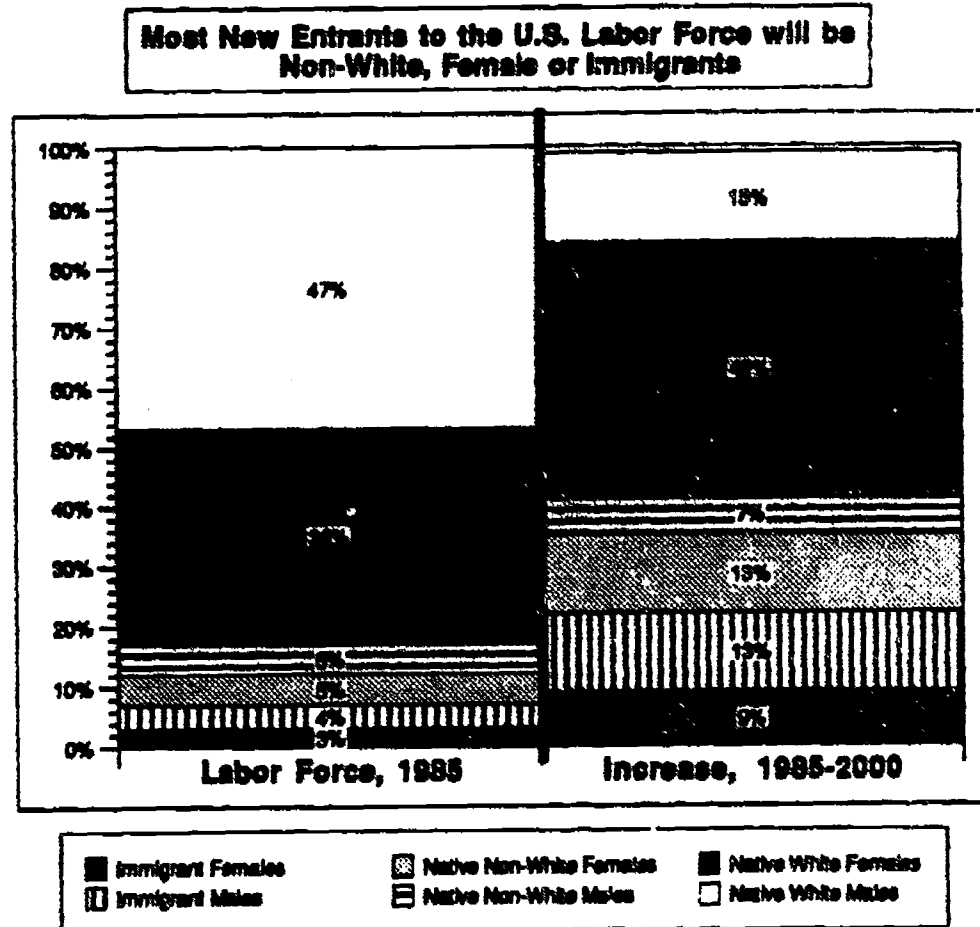


Figure 3.4

By almost every measure of employment, blacks and Hispanic minorities suffer greater disadvantages.

At the same time, it is expected that the passage of the Americans with Disabilities Act will result in an increased number of persons with disabilities in the work force.

By almost every measure of employment, i.e., participation rates, earnings and education, blacks and Hispanics suffer great disadvantages. Of particular concern is the decline in labor force participation rates among minority males. At the present time, minorities are often concentrated in low-paying jobs due to discrimination and a lack of education and training. They are currently underrepresented in occupations that are projected to grow and overrepresented in occupations that are projected to increase slowly or decline.

Smart managers who want to maintain a talented work force are beginning to court and train qualified but underutilized blacks, Hispanics, Asians, women and others who have often been discounted because of stereotyping or occupational segregation. Employers are reexamining their personnel policies, such as recruitment, incentive

Personnel policies and employee benefit programs are changing to attract and keep qualified workers who do not fit the traditional mold.

Finding good employees is one issue and keeping them is another.

DEMOGRAPHIC TREND #3: THE INCREASING NUMBER OF WOMEN IN THE LABOR FORCE

programs and employee benefits to determine how they can organize work tasks to meet the needs of the new work force. This commitment is exemplified by George Harvey, chief executive of Pitney Bowes, a Connecticut-based office equipment company. Since 1985 Harvey has established the 35-15 plan: at least 35% of all new employees hired must be women, and 15% or more must be members of a minority. He has also banned sexist comments from the work place, and persistent offenders are fired.

Finding and promoting good employees is one issue, and keeping them is another. Companies that are serious about moving women and minorities up the organizational ladder might need to rethink some traditional policies and practices. This might result in flexible or part-time schedules, and providing work site child care services to help parents balance work and family responsibilities.

One bright aspect of the employment picture is the upward mobility of black women, who will comprise the largest share of the increase in the non-white labor force. Young black women have also surpassed their male counterparts in their labor force participation rate and in earning advanced degrees in higher education.

Demographic Trend #3: The Increasing Number of Women in the Labor Force

The last demographic trend discussed in this module is the increasing number of women in the labor force. By the year 2000, approximately 47% of the work force will be women. It is expected that 61% of women will be in the paid labor force.

	1950	1960	1970	1980	1990	2000
Women in the Workforce	18,389	23,240	31,543	45,487	57,230	68,870
Female Labor Force Participation Rate	30.9	37.7	43.3	51.5	57.5	61.1
Female Share of the Workforce	29.6	32.4	38.1	42.5	45.8	47.5

Source: Workforce 2000, 1987

Figure 3.5

It should be noted that labor market activity has become the norm rather than the exception for most women today, and this is true for all colors and for all marital statuses.

Historically, women participated in the labor force, but in different ways than we are seeing today.

Historically, women have always participated in the labor force, but in different ways than we are seeing today. At the beginning of this century, most of the women in the paid labor force were single and other unmarried women, such as widows. The work performed by the majority of women who were married was unpaid domestic labor in the home.

Before World War II:

- **12% of office firms in a 1931 survey had a formal policy of firing women workers when they married;**
- **29% of firms had policies against hiring married women; another 24% had less formal, but discretionary, policies against hiring married women; and**
- **in 1928, 61% of school boards would not hire a married woman; 52% of them would not retain a woman teacher who married. This figure increased until the eve of World War II, when 87% would not hire a married woman and 70% could not retain one.**

Many firms in the first half of this century used marriage rules to encourage a turnover of the female labor market. Firms could afford a turnover because there was always a large pool of available young, single women who were not in school and were willing to work for entry level wages.

In the 1960s women demanded equality. Yet most women were still segregated in lower paying, less valued jobs.

Dramatic changes in the status of all women, both married and single, began to take place in the turbulent 1960s. As blacks and whites joined hands in the Civil Rights movement for racial equality, women began to organize and demonstrate for gender equity. More women entered the labor force, but the vast majority of women were still employed in the lower paying, less valued occupations.

In the 1970s women entered the labor force in great numbers.

In the 1970s significant changes in women's participation in the labor force began to appear. Women entered the labor force in great numbers. Women were beginning to gain entry into occupations that had been previously dominated by males, such as legal and medical careers. Although the increased participation of women was seen as positive movement for both the individual and the economy, a closer examination shows that the majority of women were still clustered in "traditionally female" jobs that were characterized by low status, fewer opportunities for advancement and low rates of pay. In the early 1970s, more than two-fifths of all women were employed in ten occupations: secretary, retail trade sales worker, bookkeeper, private household worker, elementary school teacher, waitress, typist, cashier, sewer and stitcher, and registered nurse.

However, in the 1970s, for the first time, more women than men were enrolled in college. Participation in higher education resulted in a delay in marriage and also paved the way to more attractive careers for women.

Over time, it became clear that educated women, who were professionally trained, did not have to abandon their long career

Changes in women's work patterns have increased attention to dual career families, adequate child care, and caring for aging parents.

SUMMARY

preparation when they married and had children. More specifically, the distinction between a job and a career had become clear to the women who were full participants in the labor force. There was increased attention to family issues, such as coping with the stresses of being working parents in dual career homes, finding good day care programs for the children, and caring for aging parents.

Despite the improved status of women in the work force, barriers still exist. For a discussion of these issues, see Module 8.

Summary

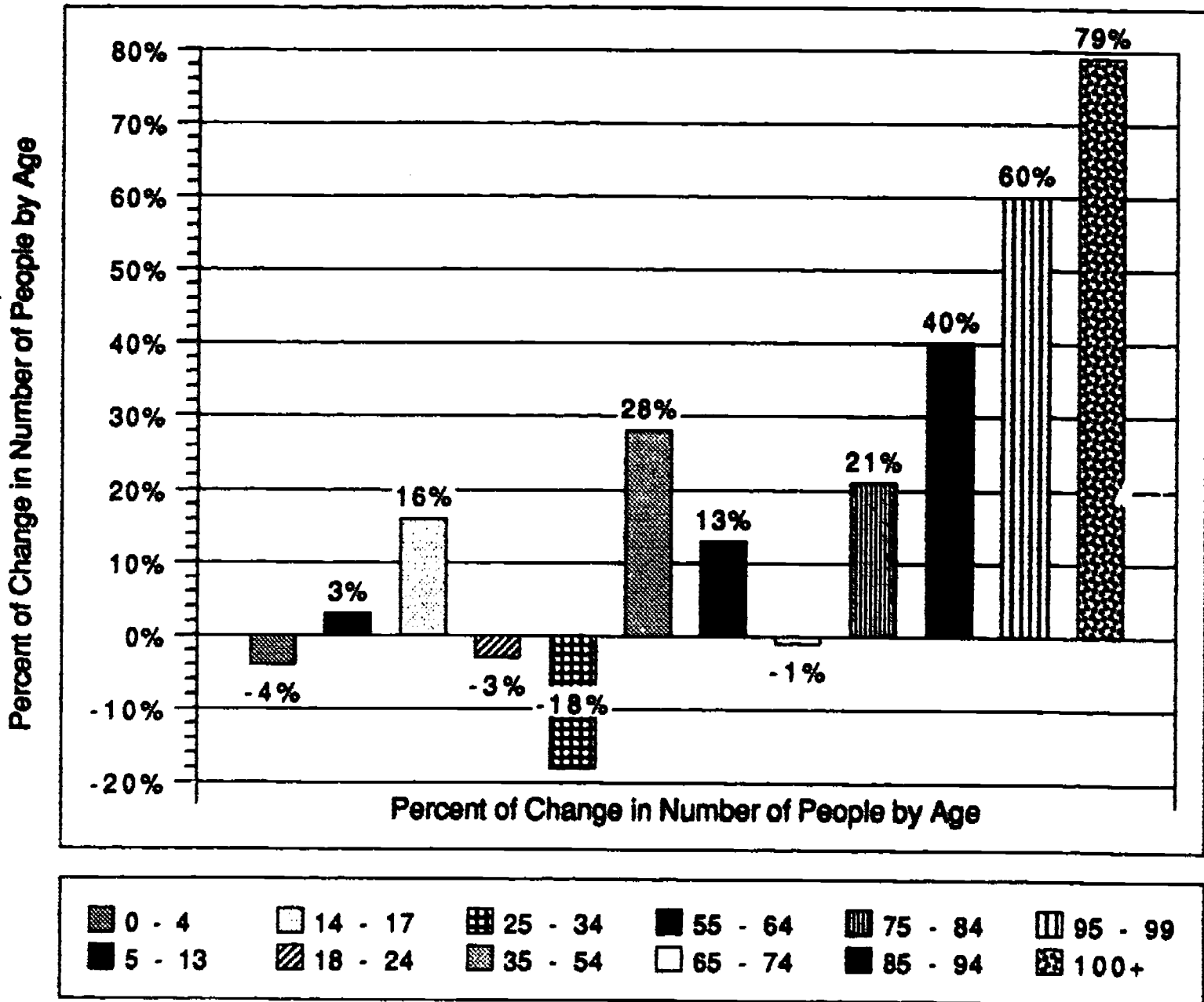
We live in a changing labor market. In order to make sense of the many changes, we need some "handles" to grasp. One of these handles is the body of information gleaned from a number of relatively predictable trends in our population. By understanding demographics we can understand some of our labor force needs. Demographics tell us that the work force of the year 2000 will look much different than the work force of today. There will be fewer young people available for work, and the average age of the work force will increase as the American population matures. Minorities, women and persons with disabilities will represent a growing share of the work force. These demographic changes, coupled with technological changes, will create opportunities and stresses in the labor market.

The three trends discussed in this module are national in scope. Local trends may or may not follow these patterns. Understanding these trends and how they appear in a local, regional or state labor market is valuable when making career decisions.

Demographic Trends That Impact Career Decision Making
Module 3
References

Johnston, W. B., & Packer, A. H. (1987). *Workforce 2000*. Indianapolis: Hudson Institute.

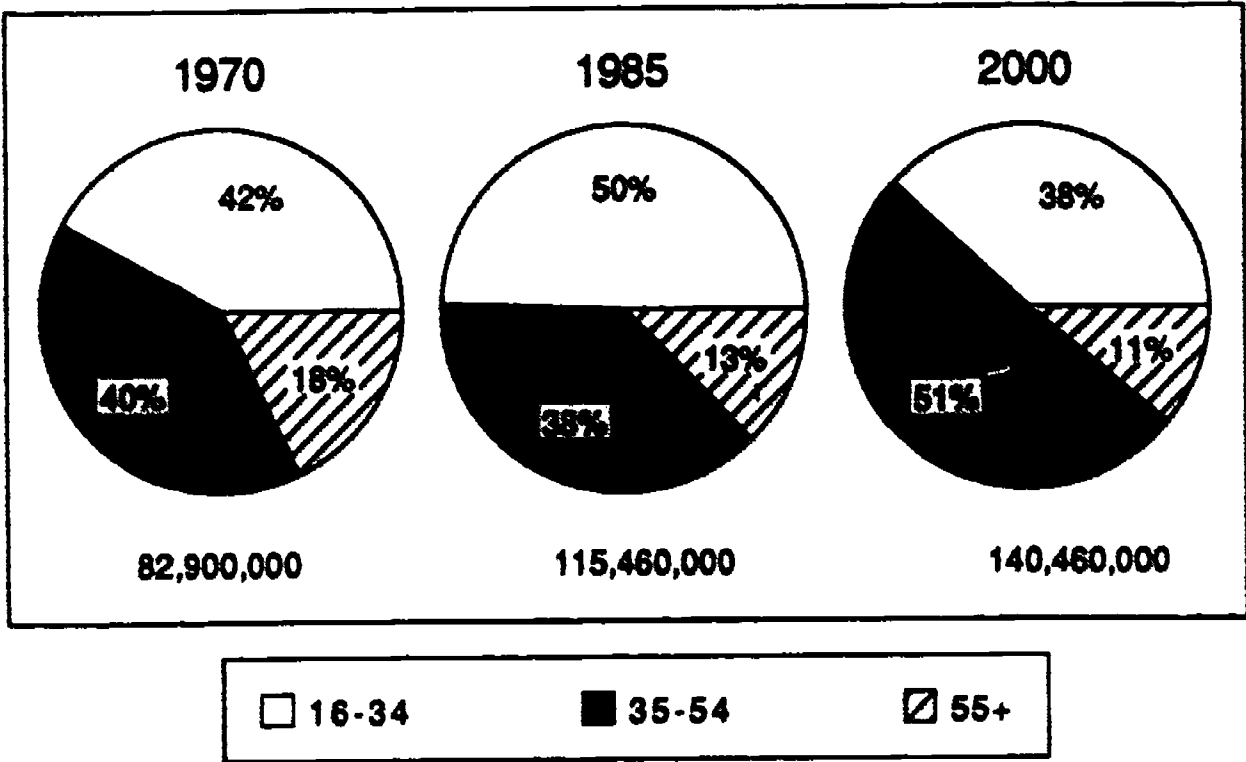
Number of Older Americans Will Experience Fastest Growth Rate from 1990 to 2000



Source: U.S. Bureau of the Census, 1989

Figure 3.1

The Middle Aging of the U.S. Work Force



Source: Workforce 2000, 1987

Figure 3.2

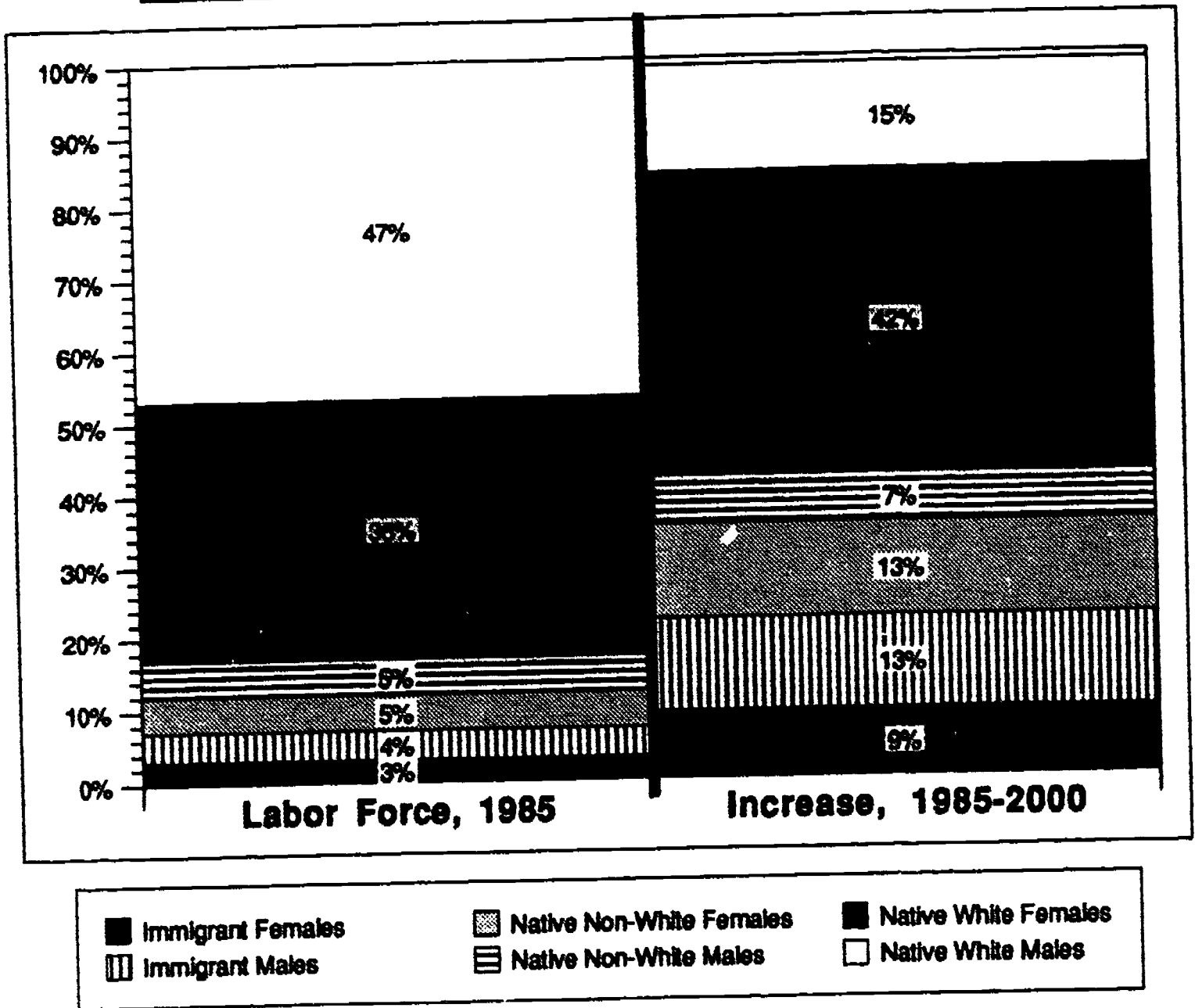
**NON-WHITES ARE A GROWING SHARE
OF THE WORKFORCE**
(numbers in millions)

	1970	1985	2000
Working Age Population (16+)	137.1	184.1	213.7
Non-White Share	10.9%	13.6%	15.7%
Labor Force	82.8	115.5	140.4
Non-White Share	11.1%	13.1%	15.5%
Labor Force Increase (Over Previous Period)	X	32.7	25.0
Non-White Share	X	18.4%	29.0%

Source: Workforce 2000, 1987

Figure 3.3

Most New Entrants to the U.S. Labor Force will be Non-White, Female or Immigrants



Source: Workforce 2000, 1987

Figure 3.4

Women are a Growing Share of the Workforce

(number in thousands, except percent)

	<u>1950</u>	<u>1960</u>	<u>1970</u>	<u>1980</u>	<u>1990</u>	<u>2000</u>
Women in the Workforce	18,389	23,240	31,543	45,487	57,230	66,670
Female Labor Force Participation Rate	33.9	37.7	43.3	51.5	57.5	61.1
Female Share of the Workforce	29.6	33.4	38.1	42.5	45.8	47.5

Source: Workforce 2000, 1987

Figure 3.5

Module 4

Theories of Career Development and Decision Making



National Career Development Guidelines-Counselor Competencies

Knowledge of developmental issues individuals address throughout the life span.

Knowledge of counseling and career development theories and techniques.

Knowledge of decision making and transition models.

Skills to use appropriate individual and group counseling techniques to assist individuals with career decision and career development concerns.

Knowledge of basic concepts related to career counseling, such as career development, career progressions, and career patterns.

THEORIES OF CAREER DEVELOPMENT AND DECISION MAKING

MODULE 4

Outline Topic	Delivery Methods	Trainer's Notes
Goal, Purpose and Scope	Lecturette p. 1	
Introduction	Lecturette p. 1	
What Is Career Development?	Lecturette p. 1	
What is a Career Development Facilitator?	Lecturette pp. 1-2	
Career Development Facilitators Need to Be Competent in Using Theories	Lecturette p. 2	
What Are Career Development Theories?	Lecturette p. 2	
Why Do Career Development Facilitators Use Theories?	Lecturette pp. 2-3	
How Do Theories Help Career Development Facilitators?	Lecturette p. 3	
What Theories Do Career Development Facilitators Use?	Lecturette pp. 3-4	

Outline Topic	Delivery Methods	Trainer's Notes
Selected Career Development Theories	Lecturette pp. 4-6	
Emerging Career Development Theories	Lecturette p. 6	
Promoting Decision Making in Life and Career Development	Lecturette p. 6-8	
The Process of Career Counseling: A Model	Lecturette p. 8	
Client Debriefing/ Processing and Related Concerns	Lecturette p. 9	
Goal or Problem Identification	Lecturette pp. 9-11	
Using Career and Labor Market Information in Career Counseling	Lecturette pp. 11-12	
Developing, Implementing and Evaluating An Individual Career Plan	Lecturette pp. 12-13	

Outline Topic	Delivery Methods	Trainer's Notes
<p>How Do Career Development Theories Help in Making Diagnoses?</p>	<p>Lecturette p. 13</p>	
<p>How Do Career Development Theories Help in Setting Goals?</p>	<p>Lecturette pp. 13-14</p>	
<p>How Do Career Development Theories Help Clients?</p>	<p>Lecturette pp. 14-15</p>	
<p>Conclusion</p>	<p>Lecturette pp. 15-16</p>	
<p>Background Information</p>	<p>pp. B4-1 to B4-19</p>	
<p>Activities</p>	<p>6, 7, 21, 23</p>	

THEORIES OF CAREER DEVELOPMENT AND DECISION MAKING

MODULE 4

GOAL, PURPOSE AND SCOPE

Goal, Purpose and Scope

This module focuses on theories of career development and career choice, with special attention to information resources, decision making and career counseling. This discussion of theories and their uses for facilitating career development is designed for the purpose of stimulating and refining the knowledge and skill of practicing and aspiring career counselors, other career development professionals, paraprofessionals and their colleagues. In this module, career development and the role of the career development facilitator will be discussed. A rationale for using theories in the career development process will be presented. Highlights of selected theories of career development will be summarized. Finally, a career counseling model will be offered to provide an overview of the career counseling process and to serve as a tool to illustrate how various theories can help in the process of facilitating career development.

INTRODUCTION

Introduction

In the United States and much of Western Society, people are expected and encouraged to work for a living in nations constitutionally based on equal opportunities for all. Substantial resources are directed to making education and work opportunities available and valuable to all citizens. Because numerous individual, social and other barriers may interfere with human and constitutional rights and ideals, people often need various forms of assistance to find work opportunities to enrich their lives. People need help in their career development.

WHAT IS CAREER DEVELOPMENT?

What Is Career Development?

Career development has been defined as the interaction of psychological, sociological, economic, physical and chance factors that shape the sequence of jobs, occupations or careers that a person may engage in throughout a lifetime. Career development is a major aspect of human development. It includes one's entire life span and concerns the whole person. Career development involves a person's past, present and future work roles. It is linked to a person's self-concept, family life, and all aspects of one's environmental and cultural conditions.

WHAT IS A CAREER DEVELOPMENT FACILITATOR?

What Is a Career Development Facilitator?

A career development facilitator is a person who is trained to assist people in their career development. Career development facilitators work with people of all ages; from young children, adolescents, their parents and teachers; through young, middle-aged and older adults; to others preparing to retire and retirees seeking vocational and avocational pursuits. To serve these diverse populations, career development facilitators work in a wide range of public and private educational, social and fraternal environments such as schools,

CAREER DEVELOPMENT FACILITATORS NEED TO BE COMPETENT IN USING THEORIES

WHAT ARE CAREER DEVELOPMENT THEORIES?

WHY DO CAREER DEVELOPMENT FACILITATORS USE THEORIES?

Scouting, 4H, Young Men's and Women's Christian Associations, local chapters of the American Association of Retired Persons; in public and private sector agencies and private practices and in business and industry settings.

Career Development Facilitators Need to be Competent in Using Theories

Career development professionals and paraprofessionals have special competencies for planning, organizing, implementing and administering career development programs and services to individuals and groups in a wide variety of settings. Competencies of career development facilitators are described in professional publications such as: *The National Career Development Guidelines* (1989) published by the National Occupational Information Coordinating Committee (NOICC), *The Vocational/Career Counseling Competencies* (1991), the *Ethical Standards* (1988) of the National Career Development Association, and *The Professional Counselor* (Engels and Dameron, 1990). Among the most important competencies of career development facilitators are knowledge of and skill in using career development theories.

What Are Career Development Theories?

Counseling theories are conceptual frameworks for describing or understanding complex human developmental processes. Theories describe, explain, generalize and summarize what we do in counseling to help clients make constructive changes that lead to success and satisfaction. Theories of career choice and development are points of view, conceptual tools, or road maps for counselors to use in working to help people choose, create, design, refine, develop and/or manage their careers. Career development theories are based on a need for progress from where we are to more desirable circumstances and situations.

Why Do Career Development Facilitators Use Theories?

The "why" we do something rather than the "how" we do it is explained through the use of theories. The reason we use theories is to help us reduce or manage uncertainty and make more responsible decisions. Jepsen (1984) notes that many practitioners see little use for theory. Isaacson (1985) points out that beginners in most fields are primarily and almost exclusively interested in how to do something rather than why to do something. In effect, many new, inexperienced counselors would prefer specific instructions, such as cookbooks and proven recipes, to confidently and accurately help clients develop their careers.

Following this line of reasoning, the practice of a career development facilitator would be purely technical. In reality, the "why" can be more fundamentally important than the "how." The "why" is based on the theoretical or factual background that serves as the frame of reference with which the professional approaches each student, client, or patient (Isaacson, 1985). It is this frame of reference that helps the practitioner move beyond a cookbook approach to the process of facilitating growth and development. In a field such as career

HOW DO THEORIES HELP CAREER DEVELOPMENT FACILITATORS?

development, where the unknown may outweigh the known, theory can help the counselor and client make informed efforts to reduce uncertainty and its impact (Herr, 1977).

How Do Theories Help Career Development Facilitators?

Theories help make sense of experiences; they bridge the gap between knowledge and the unknown. Career development theories offer rationales, guidelines, directions and goals for facilitating career development. While much professional knowledge in the field of counseling has been generated, there remains a great amount of uncertainty and undiscovered knowledge. The most dependable, efficient bridge to that potential knowledge lies in the realm of theory. Just as physicians need both knowledge and theory to diagnose and treat patients, so do counselors who deal with far less physical concerns. Career development theory helps to:

- make sense of what we experience and learn;
- bridge gaps between knowledge and the unknown;
- summarize information;
- explain information;
- make predictions;
- point out relations between means and ends;
- formulate goals; and,
- stimulate research aimed at improving the knowledge and skill bases for career counseling.

(Shertzer and Stone, 1974)

In brief, theories provide more systematic and dependable approaches to facilitating career development than mere hunches, conjectures or intuitive guesses. The ultimate test of a career theory is how well it works to achieve the goals agreed to by career development facilitators and their clients. Despite many serious research and development needs in career theory, there is some empirical evidence to suggest that good career development theories can be very practical with a variety of clients in many settings.

WHAT THEORIES DO CAREER DEVELOPMENT FACILITATORS USE?

What Theories do Career Development Facilitators Use?

There are many theories of career development and career choice. Moreover, just as is the case for most counseling theories, it must be said that approaches to facilitating career development are more techniques-in-search-of-theories than actual theories (Isaacson, 1985; Zunker, 1986). At the same time, however, extant efforts at theory building have progressed over time and offer much practical insight for practitioners.

How does an understanding of career development theories help me as a counselor? How can theories help me use career and labor market information more effectively with individuals and groups? How do theories help me provide career exploration and decision making assistance? How do they help me work with individuals who need help finding a job? To answer these and similar questions, a brief description of some selected theories of career development and a model of the counseling process follow. The model is presented as one example of a structure to help career development facilitators in

SELECTED CAREER DEVELOPMENT THEORIES

their work with clients. Additionally, the model provides a format for illustrating how theories can help with various aspects of facilitating career development.

Selected Career Development Theories

While there are many ways to categorize career development theories, Jepsen (1984) has constructed a global classification system that will be used in this module. Career development theories can be divided into two major classes: Structural and Developmental. Numerous theories could be included in each area, however, coverage in this module will be abbreviated to highlight some major points of selected theories. The Background Information in this module contains more detailed explanations of these theories, and their implications for practice. Readers wanting more complete explanations of the theories covered here and other career development theories can find such information in works by the originators of the theories, such as books by Brown and Brooks (1990) and Osipow (1983), and in other works listed in the Selected Readings sections of this module.

Structural theories focus on individual characteristics and differences among and between persons. The structural theories discussed in this module are: Trait and Factor Theory, Holland's Theory of Vocational Personalities and Environments, and Socioeconomic Theories.

Trait and Factor

Trait and factor

This theory originated with Parsons (1909) who believed that the best way to choose an occupation was to know one's self and the world of work and make a connection between the two sets of knowledge. Williamson (1939) and others expanded this theory through the use of tests and other assessment tools to measure people's traits and the traits required in certain occupations. Two major assumptions of trait and factor theory are that individual and job traits can be matched, and that close matches are positively correlated with job success and satisfaction.

Holland's Theory of Vocational Personalities and Environments

Holland's theory of vocational personalities and environments

Over a series of years, Holland (1966, 1973, 1985) presented his theory, which is based on assumptions that: people's occupations are extensions or manifestations of their personalities; that people working in an occupation have similar personality characteristics; and that human personalities and work environments can be classified into six categories of vocational personalities and environments. The six personality types and work environments are labeled: realistic, investigative, artistic, social, enterprising and conventional and share the acronym RAISEC. Holland suggests that people can function and develop best and find job satisfaction in work environments that are compatible with their personalities.

Socioeconomic Theory

Socioeconomic theory

Sociologists and economists provide detailed explanations and descriptions of how one's culture, family background, social and economic conditions and other factors outside an individual's

control, strongly influence one's identity, values, and overall human and career development. Socioeconomic theory is also known as the chance or accident theory. This approach to understanding career development suggests that many people follow the path of least resistance in their career development by simply falling into whatever work opportunities happen to come their way.

Developmental theories focus on intrapersonal differences across the life span of an individual's human development. The developmental theories that will be discussed are: Super's, Krumboltz's, Decision Making and Cognitive.

Super's Theory

Super's theory

Super (1957) and other theorists of career development recognize the changes that people go through as they mature. Career patterns are determined by socioeconomic factors, mental and physical abilities, personal characteristics and the opportunities to which persons are exposed. People seek career satisfaction through work roles in which they can express themselves and implement and develop their self-concepts. Career maturity, a main concept in Super's theory, is manifested in the successful accomplishment of age and stage developmental tasks across the life span. Super pays close attention to the interrelationships among and between career stages and life roles, such as child, spouse and parent.

Krumboltz's Social Learning Theory

Krumboltz's Social Learning Theory

Krumboltz (1979) developed a theory of career decision making and development based on our social learning, or environmental conditions and events, genetic influences and learning experiences. People choose their careers on the basis of what they have learned. Certain behaviors are modeled, rewarded and reinforced.

Decision Making Theories

Decision Making Theories

Some decision making theories hypothesize that there are critical points in our lives when choices are made that greatly influence our career development. These decision making points are such events as educational choices, entry level job positions, changing jobs, etc. Other decision making theories are concerned with ongoing choices across the life span. The decisions that we make are influenced by our awareness of the choices that are available to us and our knowledge of how to evaluate them.

Cognitive Theories

Cognitive Theories

Cognitive theories of career development are built around how individuals process, integrate and react to information. The ways in which individuals process information are determined by their cognitive structures. These structures influence how individuals see themselves, others and the environment. Cognitive theories suggest ways to help clients build or refine a hierarchy of thinking skills and decision making skills that influence career development.

EMERGING CAREER DEVELOPMENT THEORIES

PROMOTING DECISION MAKING IN LIFE AND CAREER DEVELOPMENT

The selected theories that have been very briefly highlighted can be seen as representative of the majority of career development theories. At the same time, however, it must be noted that theory development and expansion need to continue to appropriately address the career development needs of specific populations, especially women and minorities.

Emerging Career Development Theories

Recent publications by Brown and Brooks (1990), Isaacson (1987) Zunker (1986) and other works on career development theory cited in the references to this module pay considerable attention to the need to expand and refine existing theories. New theories must be developed that address the needs of specific populations, such as females, the gifted and talented, people of color, ethnic minorities, ex-offenders and persons with disabilities. It should be noted that while emerging theories exist and are being developed, they are beyond the scope of this module. Readers are advised to consult the works cited in the References List, most notably works by: Brooks (1990); Atkinson, Morten & Sue (1989); Greeley, (1975); Ivey, (1987); Pedersen, (1988); Gottfredson, (1981, 1984); Schlossberg, (1984); Gilligan, (1982a, 1982b); Sue (1978, 1981); Heinrich, Corbine and Thomas (1990); and Lea and Richardson (1991); for coverage of these vital developments.

Promoting Decision Making in Life and Career Development

Knowing how to identify opportunities for choice and how to make responsible choices can empower people to enrich their lives and careers. Unfortunately, many people have neither taken the time nor made the efforts to logically think through and plan their career development. An abundance of research (Fredrickson, 1982; Isaacson, 1987; Zunker, 1986) indicates that the socioeconomic "chance" or "accident" theory is the single best descriptor of most people's career development. Many people fail to notice opportunities and responsibilities for choice in life or look to others to choose for them. Career development facilitators need to provide their clients with guidance and assistance in the decision making process.

The career development facilitator is frequently faced with clients who are unaware or ignorant of their career opportunities. Clients often say "tell me what to do" or "I want to take that test that will tell me what to do." Counselors do not tell their clients what to do. The goal of most counseling is to help clients become aware of opportunities for choice and to assist them in learning to make important choices. Therefore, most counselors are advocates for decision making; for informed, knowledgeable, responsible and wise choices as a primary means of positive self-governance.

Think and Do was the title of the workbook that accompanied the basal reader, *Fun With Dick and Jane*, which was used in most public and private schools in the United States during the 1940s and 1950s. The simplistic title of that workbook delivered an essential message -- think, before doing.

In our action-oriented society today, with its catch phrases such as, "Do it now," "Don't just sit there -- do something," "Just do it," comes an implicit message that action is always better than inaction, that even random behavior or impulsive behavior is valued over inaction. Thinking before doing lies at the heart of wise decision making and underscores the goals of most counseling: to help clients become aware of opportunities and responsibilities for choice; and to help them learn appropriate ways to establish priorities, set goals and make choices. Counselors work to help clients appreciate, own and exercise their personal responsibility for self-governance. If life is a car, each of us is a driver. As Miller-Tiedeman and Tiedeman (1990) say, each of us is or can be the captain of our own destiny in the ship of life.

As we think through the decision making process, what guidelines do we have? One approach is to look for guidance in the works of those we admire as people of character (Moline, 1981). Joan of Arc, Ghandi, Helen Keller, Abraham Lincoln, Mother Teresa, and others of prominence and virtue across the ages can be looked to as models of and for wise, prudent, intelligent and responsible decisions and accomplishments. Additional moral and ethical guidance in decision making can be found by looking at hierarchies for choices in our lives. For example, one could look to works on cognitive and affective development, such as Bloom's Taxonomies (Krathwohl, Bloom & Masia, 1964) and Kohlberg's (1981) or Gilligan's (1982) models of moral development. In fact, it is difficult to imagine a decision of magnitude that does not have moral and ethical dimensions and implications (Janis & Mann, 1977).

Moral, ethical and responsible decision making requires more than knowledge of factual information. One might look at a hierarchy of decision making, starting with data, and moving through information, and knowledge, to wisdom. If knowledge tells us how to do something efficiently, wisdom helps us think about whether we want or ought to do it. In moving from knowledge and skill or application to wisdom, we move to a higher moral level. People of character, positive role models, can be seen as providing examples of applied wisdom and moral behavior. Ultimately, it seems such a moral level of applied wisdom is the desired outcome, or at least an ideal, for responsible self-governance. For these reasons, it is important that counselors work to help clients to notice and positively and responsibly exploit their opportunities for choice in the decision making process.

Many career theories do not give much attention to the process of choice. In spite of the importance of decision making to all counseling, many career theories seem to fall short in their attention to this vital dimension of career development. Brown (1990) suggests this deficit could be attended to through adaptation of non-career focused approaches to decision making by people such as Janis and Mann (1977) and others who specialize in various approaches to decision making processes. Jepsen and Dilley's (1974) definitive discussion of prescriptive and descriptive models of decision making provides excellent background information and model comparisons for

THE PROCESS OF CAREER COUNSELING: A MODEL

those seeking useful decision making models. Additionally, a wealth of new (1985 and more recent) works on or emphasizing career counseling techniques by: Brown & Brooks, (1991); Peterson, Sampson and Reardon (1991); Gysbers & Moore, (1987); Isaacson (1985) and Spokane, (1991); for example, offer much needed attention to various aspects of facilitating career development and career decision making across the life span, with numerous highly practical case excerpts and illustrations.

The Process of Career Counseling: A Model

A number of writers have described what is involved in the career counseling process beginning with Parsons (1909) up to the present (Brooks, 1984; Brown & Brooks, 1991; Crites, 1981; Gysbers & Moore 1987; Isaacson 1985; Kinnier & Krumboltz, 1984; Peterson, Sampson & Reardon, 1991; Reardon, 1984; Spokane, 1991; and Super, 1983, 1984). Building on the work of these authors, especially Gysbers and Moore (1987), an outline of the career counseling process follows that has two major phases:

- identifying the clients goal or problem; and,
- resolving the goal or problem

The Process of Facilitating Career Development and Career Counseling

- I. Client goal or problem identification
 - A. Establishing a client-counselor relationship, including client-counselor responsibilities
 - B. Gathering client self and environmental information to understand the client's goal or problem
 1. Who is the client?
 - a. How does the client view himself/herself, others, and his/her world?
 - b. What language does the client use to represent these views?
 - c. What themes does the client use to organize and direct his/her behavior based on these views?
 2. What are the client's current status and environment?
 - a. Client's life roles, settings, and events
 - b. Relationship to client's goal or problem
 - C. Understanding client self and environmental information by sorting, analyzing, and relating such information to client's goal or problem through the use of:
 1. Career development theories
 2. Counseling theories
 3. Classification systems
 - D. Drawing conclusions-making diagnoses
- II. Client goal or problem resolution
 - A. Taking action with interventions selected based on diagnoses
 1. Counseling techniques
 2. Assessment, personal styles analyses
 3. Career and labor market information

- B. Developing an individual career plan
- C. Implementing an individual career plan
- D. Evaluating the impact of the interventions used: Did the client accomplish the goal or resolve the problem?
 1. If goal or problem was not resolved, recycle.
 2. If goal or problem was resolved, close counseling relationship.

(Adapted from Gysbers, N.C. & Moore, E.J. (1987))

These phases and elements in the career counseling process may take place during one interview or may unfold over two or more sessions. While the steps logically follow one another on paper, in actual practice, they may not. There often is a back-and-forth flow to the process; some clients may only need limited counseling and may choose to terminate it at any point, preferring instead to work alone or with other resources.

Client Debriefing/Processing and Related Concerns

For many counselors, it is essential that clients continually "process" or debrief throughout the progress of counseling. At the conclusion of each counseling session, the counselor and client should summarize what has been discussed and what actions, if any, are to be taken. In active debriefing or processing, the counselor pays close attention to client behavior, understanding, insights and lessons learned. The counseling focus is on client self-governance and how the lessons learned can be generalized and applied by the client in the future. It is essential that attention be directed to helping clients learn decision making skills. Likewise, when clients' homework assignments are used as activities between counseling sessions, it is essential that they be discussed and evaluated. There is a need for closure on specific topics before moving on to new topics. Closure is also necessary at the end of individual sessions and at the conclusion of the counseling relationship.

In summary, some people may require or desire little or no formal career counseling and still develop their full potential, while others may need assistance. For those who need help, there is no one best career counseling process for all counselors and clients. However, the use of a career counseling model and an understanding of underlying theories can provide a structure to the counseling process. The remainder of this module will address practical questions about theory in terms of the context and stages of the career counseling model that has been presented. This discussion will follow the outline of the model.

Goal or Problem Identification

Some clients seek help to improve the quality of their lives. No apparent problems are present, and their goal is self-improvement. At the same time, other clients are in difficulty. They have problems and they need and want assistance to address or resolve them. The point is that one starts where one's clients are. Do not assume there is a problem when one may not exist. Some clients want information only, not counseling. Other clients may ask for information initially,

CLIENT DEBRIEFING/ PROCESSING AND RELATED CONCERNS

GOAL OR PROBLEM IDENTIFICATION

but later they may talk about a problem that is troubling them. Clients may engage in an initial "testing" time to see if it is safe to discuss a problem with a counselor.

Sometimes, the client's goal or problem identification is straightforward. No feelings of anxiety, insecurity or frustration are evident; the client merely wants information about jobs in the local labor market. At other times, problem or goal identification is more complex, and the counseling focus may need to be on both personal-emotional and career concerns. The need for information about jobs may be mixed with doubts about self-worth, emotional issues or family problems. If such personal concerns are substantial, the career specific aspects of counseling may need to be delayed or de-emphasized until some progress is made in helping the client deal with his/her more compelling personal issues.

Establishing the Client-Counselor Relationship

Establishing the Client-Counselor Relationship

Effective counseling requires a positive counselor-client relationship. Respect for the uniqueness, dignity, worth and potential of the client, empathy, and counselor-client rapport are vital to the relationship. Readers could look to works by Brammer (1988), Benjamin (1981) or any number of other rich resources on building and maintaining the counseling relationship.

A final aspect of the counseling relationship focuses on the nature, structure, potential costs, ethical obligations and possible results of career counseling. What are the client's expectations regarding time, cost, confidentiality and outcomes? Are client expectations realistic? What respective responsibilities do the counselor and client have in the relationship? Counselor and client need to reach a common understanding concerning the nature, structure and expected results of career counseling.

Gathering Client Self and Environmental Information

Gathering Client Self and Environmental Information

While the counseling relationship is being established, the task of gathering client self and environmental information begins as a means to help understand the client's goal or problem. Kinnier and Krumboltz (1984) pointed out that although the ways in which this is done vary according to counselor style and theoretical orientation, the opening questions are similar. "Who are you?, What is troubling you? Why have you decided to seek counseling now? Tell me more about yourself and what you want," and, "What do you want to gain from counseling?"

Understanding Client Self and Environmental Information

Understanding Client Self and Environmental Information

While working to develop the counselor-client relationship, the counselor uses the key interviewing skill of active listening to systematically elicit, gather, understand and interpret client information and behavior. These interviewing skills are based on in-depth knowledge of theories of human behavior and human growth and development. In turn, these theories of human development provide the necessary language and constructs to interpret and explain the information presented and the behavior exhibited by clients. In this phase of counseling, considerable effort must be

Drawing Conclusions - Making Diagnoses

directed to helping clients assess their many life and career roles (human, citizen, sibling, spouse, parent, subordinate, supervisor, etc.) with some attention to how clients' career issues might affect their significant others.

Drawing Conclusions - Making Diagnoses

As the counselor gathers, understands and interprets client information and behavior during career counseling, the counselor begins to draw tentative conclusions or diagnoses about their meaning. Conclusions or diagnoses made initially are not one time judgements applied for all time. They are, instead, hypotheses that the counselor substantiates, modifies or discards as the career counseling process unfolds.

Crites (1981) suggested that there are three types of diagnoses that a counselor may want to consider making: differential, dynamic and decisional.

- **Differential diagnosis** focuses on the identification and categorization of client goals or problems. Differential diagnosis answers the question, "What is the client's problem or goal?" Descriptive labels such as undecided and indecisive are often used.
- **Dynamic diagnosis**, the second type, focuses on why--on reasons and possible causes for the client's problem or goal.
- **Decisional diagnosis** focuses on assessing and helping clients develop decision making strategies, processes and skills.

Client Goal or Problem Resolution

Client Goal or Problem Resolution

After extensive efforts to get to know the client and identify, clarify and specify the client's goals or problems, the counselor and client work to achieve goals and/or resolve problems (Crites, 1981a).

Counseling tools such as appraisal data, personal and labor market information, all play a part in how and when problem or goal resolution occurs. For example, formal use of tests, inventories, structured questionnaires, essays and interviews can facilitate client self-understanding. These assessments also allow a client to compare himself/herself to workers in various occupations.

Using Career and Labor Market Information in Career Counseling

In this phase of goal resolution or problem solving, career and labor market information can be used to:

- help clients gain current and accurate information about occupations and the world of work;
- instruct individuals about the realities of the work world;
- help clients expand their occupational and career horizons;
- help clients narrow their range of potential occupations;
- help clients obtain and interpret subjective career information, such as how it feels to work in career fields and specific occupations;

USING CAREER AND LABOR MARKET INFORMATION IN CAREER COUNSELING

DEVELOPING, IMPLEMENTING AND EVALUATING AN INDIVIDUAL CAREER PLAN

- motivate individuals to explore new options; and
- help individuals develop a balance between their needs and wants and occupational supply and demand in the labor market.

Developing an Individual Career Plan

When clients begin gathering and organizing information, they can relate and apply it to their career planning and decision making. By putting information together in certain ways and categories, relationships become more apparent. This tight focus can help clients identify and commit to clear career goals with specific objectives, such as the education, skills or training they will need. Clients can then draw up strategies and specific plans for accomplishing their goals.

Implementing an Individual Career Plan

What types of education/skills/training are needed by clients for specific careers? Self-appraisal information and experience auditing can and must be done by the client. This information can be translated directly into job-related knowledge, attitudes, skills and deficits or limitations. When these relationships are seen and understood, client self-confidence and self-worth can be increased (Gyabers, 1983). The client's short and long term goals can be refined and formal implementation of plans can commence or continue.

Evaluating and Closing the Counseling Relationship

The final phase of goal or problem resolution is assessing the behavioral changes that may have occurred during counseling and evaluating the impact of the interventions used during the process. One way to accomplish this is to have the client review and summarize what has taken place and generalize beyond the counseling process into the future. This is the point in the counseling process where maximum debriefing is essential, especially to tease out implications for future plans, actions and client success. Was the counseling effective? What steps have we taken toward the goal? Are we on the right track? Have we reached our goal? What steps could be taken in the future? Finally, the counselor and client can mutually review, summarize, and draw conclusions and implications from the counseling relationship and process.

During the summary, counselor and client may identify some unfinished business, such as a personal problem or educational deficits. The client may need more information or more time to consider and reflect on the information already available. As a result, the counselor may recycle previously used interventions, to allow more time for counselor-client consideration and reflection, or the counselor may try other interventions. The counselor may say, "We tried this . . . , shall we try again or make a new plan?"

Also, during the summary, the counselor may find that the client is unsure about closing the counseling relationship. In this event, the client's feelings of insecurity need to be addressed. The counselor may want to open up this topic by saying, "It seems as if we have achieved what we set out to do during our time together. Sometimes when people reach this point, having made some of the changes you

HOW DO CAREER DEVELOPMENT THEORIES HELP IN MAKING DIAGNOSES?

HOW DO CAREER DEVELOPMENT THEORIES HELP IN SETTING GOALS?

have made, they wonder if they are ready to handle new situations. Could it be that you feel this way?" If a counselor senses a client's hesitancy to end the relationship, these feelings need to be addressed directly. Part of closing the process is working through any emotional investment associated with the career counseling relationship (Brammer & Shostrum, 1982). The client should not feel emotionally dependent on the counselor.

Using Career Development Theories in Career Counseling

The preceding description of the phases and activities of a career counseling process is an overview of many of the issues and tasks in career counseling, such as: approaches to stimulating client self-knowledge; decision making; goal setting; resource utilization and goal attainment. The next step in this module is to focus directly on how career development theories can help in understanding and facilitating client career development.

How Do Career Development Theories Help in Making Diagnoses?

Diagnoses are based on all available client data and information, such as achievement tests, interest inventories, etc. In counseling, all available data are analyzed in terms of the models of human behavior that best help the counselor understand the client's goals or problems.

The career development facilitator and client analyze the data through the lens of career development theory, searching for clues and ideas to help them identify goals or resolve problems. Human beings and their behavior, however, are highly complex. There is no exact science to define them. Nevertheless, theories are guideposts to human behavior.

Socioeconomic theories can also be helpful in making diagnoses. These theories provide ideas concerning what to look for in people's growth, development, and environment that will help in understanding how they discover, refine and maintain their identity. For example, an understanding of clients' family values could help us understand the value structure underlying their choices in terms of gender stereotyping and occupational selection.

How Do Career Development Theories Help in Setting Goals?

During goal or problem identification, clarification, and specification, Crites (1981a) suggests that "the client and counselor collaboratively identify the attitudes and behaviors in the career problem that are interfering with the decision making process and together they survey the range of possible solutions." During this period, career theories can be helpful.

All career development theories contain ideals and goals that can help to guide career development. For example, decision theories also can help a client make a specific choice, such as a short-term goal. Decision theories can also help a client learn a process of decision making, which the client can use to set long-term goals to enrich all aspects of his/her life.

HOW DO CAREER DEVELOPMENT THEORIES HELP CLIENTS?

By inference, every career theory can be seen to have some concept of self-actualization, competence or career maturity that can serve as an ideal or long-term goal to aim for in counseling. Holland's concept of congruence, consistency and identity, Super's concept of career maturity, and Miller-Tiedeman and Tiedeman's concept of being captain of the ship of one's "lifecareer" can serve as long term goals or ideals to aim for in career counseling.

How Do Career Development Theories Help Clients?

Crites (1981a) suggests that there are at least three major outcomes of career counseling - - making a choice, acquiring decision making skills, and enhancing general adjustment. Knowledge gained from theories can be helpful in dealing with each of these outcomes.

Making a Choice

To enable counselors to help individuals make career choices, trait and factor theory offers interest, aptitude, values and career maturity assessment. Trait and factor theory helps clients assess their personality traits that might be desirable in certain careers. Personality and developmental theories also suggest possible patterns of previous behaviors that may facilitate or hinder choice making. Socioeconomic theory offers clients an understanding of possible environmental pressures (parents, peers, spouses) and how they affect career development. Cognitive theories provide insight into how individuals process and use information in choice making. Cognitive theories can illustrate the need for clients to develop skills in processing the information that is available to them. Decision theories and strategies provide clients with specific and general approaches to making choices and to overall decision making ability and responsibility.

Acquiring Decision Skills

The second outcome of the counseling process is acquiring decision skills. Counselors' abilities to assist individuals in acquiring decision making skills can be increased by the knowledge provided by career development theories. Decision making theory provides possible models to use and outlines and explains the decision making process so counselors can use and share this knowledge with their clients. While some clients may need direct help in seeing how to go about making a decision, others may need help in how they process information as they make decisions. In the latter cases, cognitive theories may provide some answers concerning how to help work with the problems clients may have in processing information.

Enhancing General Adjustment

The third outcome is general adjustment. Because work roles, work settings, and work-linked events play a substantial part in people's lives, attention to adjustment is crucial. A number of theories provide good insights into this issue. Holland's theory, especially his concept of congruence, can help one understand and assess relationships between personality and work environments. Developmental theories, such as Super's, can also be helpful, particularly the concept of developmental tasks at certain stages of

life, such as selecting a mate, rearing children, etc. Understanding developmental tasks to be mastered at different ages and stages across the life span and how the person has performed them can provide insight into the nature and quality of a person's adjustment. A related developmental concept is career maturity, or, for adults, career adaptability. Instruments are now available to help obtain measures of career maturity or of the general adjustment and adaptability of individuals to their work roles.

Decision making theory can be helpful in promoting a person's general adjustment. Tiedeman and O'Hara's model examines the processes that lead up to choice as well as what happens once a person is on the job. Tiedeman and O'Hara use such terms as **induction, reformation, and integration** to describe the phases a worker may go through as he/she deals with job adjustment and advancement. Similarly, the concept of life career roles and role conflict can be useful to help explain and remedy life and job adjustment problems and issues.

Summary

In this module, discussion has focused on career development theories and their importance in facilitating career development. Career development theories were classified into structural and developmental categories. Highlights of selected theories from each classification scheme were briefly described. A model of career development was presented to offer some guidelines and structure for the process of career development facilitation. Illustrations of how career development theories fit into the counseling model were presented. Special attention was paid to decision making and career and labor market information as major aspects and tools in facilitating life career development.

Conclusion

Career development is a complex process. Career development facilitators need theories as a basis for what they do, how they do it and why they do it. Many career development theories stress the role of self-concept in career exploration and decision making. Therefore, the first task of the effective counselor is to get to know the client. In making diagnoses of or drawing conclusions about an individual's problems and concerns, every effort should be made to individualize the process, with attention to both interpersonal and intrapersonal differences. Self-understanding in occupational terms (worker roles) needs to be connected to the individual's other life roles. Career development and career choices may also need to be mutually agreed upon by the client and significant others, such as a spouse and dependents.

All who work to facilitate career development must demonstrate:
understanding of the complexity of human development;
understanding of career development as a major subset or part of human development; respect for the complexity of human, social and global issues; commitment to career development; awareness of client needs and coordination of resources for meeting those needs; the

CONCLUSION

requirement for continuing professional education and respect for the worth, dignity, uniqueness and potential of all people.

Career development workers need to help clients expand ways they can: understand themselves, dream, set priorities, establish short term and long term life career goals; plan; explore, understand and enter the work world; compare their work-related needs, plans, desires and expectations to options available in the labor market; refine goals; and act to achieve goals. Helping clients learn to gather, analyze, and use career and labor market information is a vital aspect of this process. Using career development theories is essential in working to help people find empowerment, satisfaction and success throughout their life career development.



THEORIES OF CAREER DEVELOPMENT AND DECISION MAKING

BACKGROUND INFORMATION MODULE 4

Jepsen's (1984) global classification system will be used to organize this Background Information section for Module 4.

Career development theories can be divided into two major classes:

1. **structural**, focused on individual characteristics and differences among and between individuals, and
2. **developmental**, focused on intrapersonal differences across the life span of a person's human development.

While numerous theories could be included in each area, the coverage in this chapter will be limited to major points of the following selected theories:

Structural Theories

- Trait and Factor
- Holland's Theory of Vocational Personalities and Environments
- Socioeconomic Theory

Developmental Theories

- Super's Theory and Adult Career Development Theories
- Krumboltz's Social Learning Theory
- Decision Making Theories
- Cognitive Theories

Readers wanting fuller summaries of the genesis, history, development, research base and impact of the theories covered, as well as theories not included, can seek that information in source works of the theories, in works cited at the start of this section, especially Brown and Brooks (1990) and Osipow (1983), and in additional works listed in the Suggested Readings section at the close of this chapter.

Structural Theories

Trait and Factor

Trait and Factor counseling was first called "vocational guidance" (Parsons 1909) and then, "vocational counseling," before getting its current title. Parsons' work in vocational guidance, which started in 1905, established a longstanding trend in career counseling and remains strongly influential today. Parsons conceptualized a simple three step process for facilitating vocational development by helping counselors emphasize:

1. "...clear understanding of yourself, aptitudes, abilities, interests, resources, limitations, and other qualities."
2. "...knowledge of the requirements and conditions of success, advantages and disadvantages, compensations, opportunities, and prospects in different lines of work."
3. "...true reasoning on the relations of these two groups of facts"
(Parsons, 1909).

Parsons' view of the vocational guidance process culminated in helping the counselee fit into a chosen occupation. Because of Parsons' acknowledged historical primacy in facilitating career development and because elements of trait and factor approaches have remained influential for over 85 years, a brief history seems in order.

Parsons' conceptualization and approach to vocational counseling readily lent itself to expansion and extension, especially by industrial psychologists, the United States Government, the National Vocational Guidance Association and others working to understand occupational success and organize information about occupational possibilities and characteristics throughout the 1920s and 1930s. During the same period, parallel efforts were undertaken by differential psychologists and psychometrists who focused on measurement of individual differences. The Great Depression in the 1930s and entry into World War II in December 1940, greatly expanded these assessment and information movements as there was greater governmental and public concern for the American work force.

Williamson (1939) and others clarified the concepts of trait and factor theory, identifying a six step process:

1. analysis: gathering data from the client and all available sources;
2. synthesis: assembling, summarizing and arraying analysis data;
3. diagnosis: description and explanation of client and client concerns based on inferences drawn from data;
4. prognosis: predictions of potential success of alternatives and suggestions;
5. counseling: facilitating client understanding of courses of action and respective possibilities of success; and
6. follow up: processing/debriefing with a client to learn what happened; see if additional concerns exist and evaluate the effectiveness of counseling.

Many aspects of this process remain in career counseling today, especially attention to assessment and occupational information in career counseling, career and educational placement and personnel selection. However, contemporary approaches are more encompassing in underlying assumptions, scope and focus, and numerous concerns have been raised in terms of the limitations of trait and factor counseling.

Narrow Assumptions

Fredrickson (1982), Isaacson (1985) and Brown (1990), among others, highlighted and critiqued problematic assumptions of the trait and factor approach, such as:

- one best job for each person (no empirical basis);
- one main type of person for each occupation (no empirical basis);
- conscious, reasoned choice of occupation as the norm for most workers (ignoring the pervasive role of chance); and
- occupational choice as a single choice point (rather than a continuous process of slow, incremental development across the life span with many subsequent choices throughout life).

Literal interpretation of these and other assumptions finds them overly simplistic and generally unsupported by research. Matching a person's traits with perceived job requirements is insufficient for effective counseling and career development. Today, it is generally agreed that people are highly complex and that occupations are sufficiently more varied and diverse than these assumptions suggest. At the same time, a broader interpretation of career development leaves room to see the potential value of some of the assumptions of trait and factor theory, such as the idea that people and jobs have measurable traits or characteristics, and these traits can be

instrumental for success in specific occupations. The fact is that influences of trait and factor approaches are evident in much counseling today. The rich legacy of established empirical data in some aspects of trait and factor theory also distinguish the formative contributions of this theory as a major base for many contemporary approaches to career counseling.

Among implications of the trait and factor approach for career counselors, one should note:

- Standardized assessment has both strengths and limitations in helping individuals achieve better understanding of themselves, their abilities, aptitudes, interests and other characteristics;
- Because testing has so pervasive a role in current society and because career assessment data summaries appear to be objective, people may unwittingly equate career assessment with testing. The counselor must help clients appreciate the difference between tests that have right and wrong answers and other forms of assessment, especially interest inventories, which are commonly used in career counseling;
- Counselors need to understand, explain, and help clients exploit objective occupational information and labor market opportunities; and
- Because subjective information can complement other forms of labor market information, counselors need to help clients appreciate, access and exploit subjective career information on topics such as how it feels to work in a particular occupation.

Holland's Theory of Vocational Personalities and Environments

Over a series of years, Holland (1966, 1973, 1985) presented his theory based on the assumptions that:

- people's occupations are manifestations of their personalities;
- people in occupations have similar personality characteristics; and,
- people and work environments can be classified into six categories of vocational personalities and environments.

Both personality and environmental typologies share the same six labels and the acronym, RIASEC. Holland's personality and environment types are:

Realistic

Farmers, skilled trades workers and engineers typify this group of people who prefer working with things, tools and animals rather than data or people. These people are focused primarily on the here and now, tend not to be socially adroit, and prefer repetitive tasks, rather than more creative or intellectual tasks. Realistic work environments are focused on mechanical and technical knowledge and skills and provide material reward structures.

Investigative

Scientists, highly specialized technicians and mathematicians typify this group of people who prefer using intelligence and abstract reasoning in disciplined inquiry, data gathering and analysis rather than working with people or things. Investigative environments encourage and reward disciplined, scientific inquiry.

Artistic

Writers, performers, and artisans typify this group of highly creative people who concentrate on feelings, originality, self expression and intuition and may be nonconformist. They may work with tools in creating original works or they may work with people through their expressive media. Artistic environments stimulate, encourage and reward creative expression, artistic accomplishment and resultant art objects.

Social

Counselors, social workers, and hospitality workers typify the people in this group who greatly prefer working with people to working with data or things. They enjoy working with and helping others through service, teaching and communication. Social environments encourage and reward skill and knowledge in teaching, communicating and modeling values and providing services related to social justice, such as equity and advocacy.

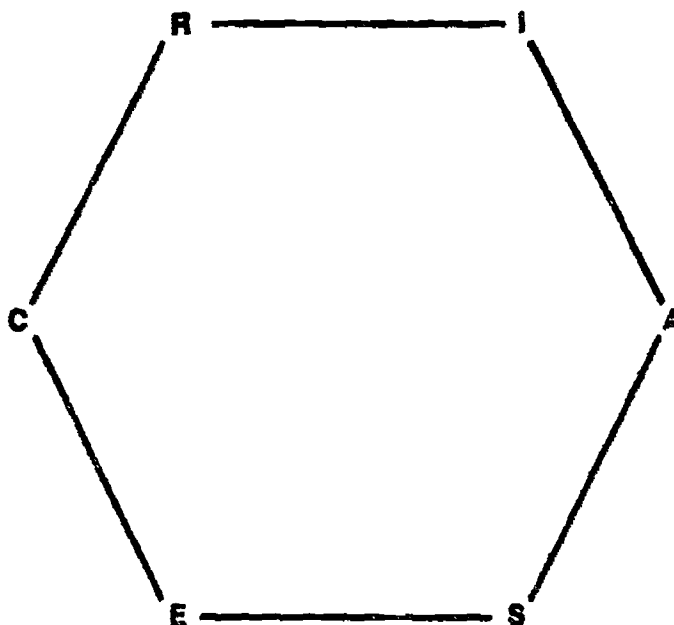
Enterprising

Salespeople, supervisors, and attorneys typify the people in this group who seek and enjoy leadership and persuasion of others for purposes of accomplishing organizational, political or financial goals. Enterprising environments encourage and provide material rewards for leadership, persuasion of others and sales.

Conventional

Accountants, financial workers, secretaries and clerical workers typify people who enjoy working with data more than with people or things and who enjoy order, clear rules and strong, stable leaders. Conventional environments encourage and reward the ability to follow directions.

Holland assumes that, while no one is exclusively described by one personality type, most people can be typed by a combination of three related personality types. He uses codes consisting of the first letters of each RIASEC type to describe people. Seen in this light, a person who works as a farmer, is seen as Realistic, but would also be typed by two additional designators, such as conventional and investigative. This farmer would be typed using the three RIASEC letters, RCI. Holland applies the same subtyping scheme of using three letters to more closely describe and codify occupational settings. Relationships between and among Holland's six personality and occupational types can be illustrated on a Hexagon (Holland, 1985) with the personality and environment types arrayed in the same sequence listed above.



Holland's hexagon model

Figure 4.1

Central concepts underlying Holland's theory are labeled: consistency, differentiation, congruence, identity and calculus.

- **Consistency:** Consistency is the degree to which pairs of personality and environment types are related or similar. As one notes in the hexagon in Figure 4.1, some pairs are more closely related than others. For example, Realistic and Investigative types share more similarities and are more consistent than Realistic and Enterprising types. Similar types are closest on the hexagon; dissimilar types are furthest apart. The simplest way to depict consistency is using the first two letters, e.g., RI is more consistent than AC. The person whose personality types are closest on the hexagon is described as consistent and, theoretically, should have a greater opportunity for a potentially successful personality-work environment match.
- **Differentiation:** Differentiation, the degree to which a person or environment is closely related to one single type, is measured by Holland's Vocational Preference inventory or his Self Directed Search (Holland, 1985). A highly differentiated person shows great similarity to one type, and little similarity to any other type. Someone who shows equal similarity to more than one type is described as undifferentiated.
- **Congruence:** Congruence is the degree of fit between people and their environments. It is important in terms of rewards and situational and other environmental characteristics. Artistic people tend to thrive in artistic environments, while they would have greatest difficulty in conventional environments. The next preferable state to an actual match of a social person in a social environment would be a social person in an artistic or enterprising environment.
- **Identity:** Identity relates to the clarity and stability of a person's occupational interests, abilities and commitment. Environmental identity consists of the clarity and stability of an organization's announced goals and rewards (Holland, 1985).
- **Calculus:** Relationships within, between and among personality types and occupational environments can be mathematically calculated. Correlations derived from Self-Directed Search scores provide some confirmation for the theoretical stipulation that similar types are closer on the hexagon, while greater distance equates with dissimilarity.

Holland's theory provides many implications for facilitating career development, such as:

- Because Holland's system can be helpful in career exploration and decision making, counselors might teach the system to clients as a means to enhance client career exploration and decision making.
- Because Holland's categories can be problematic for multipotential clients (Fredrickson, 1982), counselors must help all clients appreciate that the Holland codes are general concepts, and not all-encompassing.
- Because Holland codes and types are employed in assessment processes, counselors need to know how to interpret the codes for client use.
- Because Holland codes are widely used and have some empirical support, counselors can use the codes as tools to facilitate client exploitation of occupational information resources.
- Because Holland has developed instruments and tools for counselor and/or client assessment and other uses, counselors need to be able to evaluate the appropriateness of such instruments for use with or by clients.

Socioeconomic Theories

Sociologists, economists and researchers in related fields have much to offer those interested in promoting career development. Sociologists afford informed perspectives through study and analysis of cultural, social, familial, religious and related developmental and demographic influences. Economists provide global and detailed ideas, strategic outlooks in world and domestic

economies, and mountains of data to support labor market information bases, labor supply and demand projections and similar potential resources for career development.

Socioeconomic theories of career development have considerable potential value for facilitating career development. "Zeitgeist", the German term meaning spirit of the times, captures the central concept underlying much of this approach to explaining and describing career development. A major part of this view stipulates that who one is and what one does are heavily influenced by when, where and the socioeconomic conditions in which one lives.

While these theories do not directly guide counseling practice, they certainly provide rich information and perspectives that take on increasing value in the face of population shifts, greatly increased numbers of dual career couples, heightened rates of divorce and single parenting and all their attendant impacts and implications for counselors. This point is underscored when those specific changes are coupled with the sweeping national and international social and economic changes inherent in the Information Age and global economy.

In more specific terms, Isaacson (1987) cites Hotchkiss and Borow's 1984 view of how social changes impact career development in terms of: socialization of individual workers as a function of their respective work places, social lives and affiliations; economic and situational bases for material and social values and lifestyles; and substantial impact to career development due to relocations and changes in work place status and responsibility.

Chance or Accident

Miller and Form (1951), two occupational sociologists who conducted major studies of large groups of workers, reached a conclusion that can be seen as a direct challenge to all who work to facilitate career development. They concluded that chance was the major factor that influenced career development.

"One characteristic is outstanding in the experience of most of their case histories that have been cited. In their quest of a life work there has been a vast amount of floundering, and chance experience appears to have affected choices more than anything else. No single motivating influence appears that has finally crystallized into a wish for a certain occupation. Chance experiences undoubtedly explain the process by which most occupational choices are made (p. 660)."

Osipow (1969) expanded this point on chance or accident as the strongest and clearest explanation of human and career development.

"The view may be summarized in a single sentence. People follow the course of least resistance in their educational and vocational lives. It may be a moot point as to whether the least resistance theory is more valid than one of the more self-conscious views of career development. The fact remains that in many cases people do react to their environments and follow those educational and vocational avenues which they perceive to be open to them with a minimum of difficulty (p.15)."

Both these views, chance (or accident) and least resistance, theorize that most people consciously or unconsciously abdicate, avoid or are ignorant of the opportunities for personal responsibility for self-direction and self-development, and consequently, end up reacting to external forces outside their control (Caplow, 1954; Hall, 1983; Hotchkiss and Borow, 1990). Concepts such as being in the "right" place at the "right" time continue to seem highly descriptive of this passive process called the chance theory.

Implications of Socioeconomic Theories

Among implications of socioeconomic theories are the following:

- Because current economic, social and other changes are unprecedented in their magnitude, pace and scope in a shrinking world and global economy, counselors must stay aware of changes, trends and scholarly and popular advances for helping clients become able to cope and prosper in such times.
- Because demographic changes such as population diversity and increased entry of women into nontraditional employment are profound, counselors must stay abreast of professional and popular literature and work to educate clients and the various publics they serve as to practical and sensitive ways to facilitate those changes.
- Because socioeconomic factors are so pronounced in their potential effects on career development, counselors need to help clients appreciate these potential effects and find ways to maximize opportunities.
- Because culture and family can profoundly effect development, counselors need to hold and model a multicultural perspective and to help clients become aware of these influences and their respective potential advantages and disadvantages for clients from a variety of specific populations and subpopulations.
- Because chance and least resistance are such powerful and pervasive influences in human and career development, counselors need to help clients appreciate and exploit opportunities for choice in life; own personal responsibility for self-governance and development; set goals and master personal decision making knowledge and skill.

Developmental Theories

Super's Developmental Theory

While several theories focus on career as a developmental process, one theorist stands out in this area. Drawing heavily on the works of Buehler (1933), Donald Super commenced over 40 years of study and refinement of his theory, emphasizing the lifelong process of career development as a major subset of human development, with strong emphases on career maturity, self-concept and multiple life roles. Fourteen basic propositions form the base of Super's theory, which he describes as "a life-span, life-space approach to career development". (Super, 1990)

1. People differ in their abilities and personalities, needs, values, interests, traits and self-concepts.
2. People are qualified, by virtue of these characteristics, for a number of occupations.
3. Each occupation requires a characteristic pattern of abilities and personality traits, with tolerances wide enough to allow both some variety of occupations for each individual and some variety of individuals in each occupation.
4. Vocational preferences and competencies, the situations in which people live and work, and, hence, their self-concepts change with time and experience, although self-concepts, as products of social learning, are increasingly stable from late adolescence until late maturity, providing some continuity in choice and adjustment.
5. This process of change may be summed up in a series of life stages (a "maxicycle") characterized as a sequence of growth, exploration, establishment, maintenance and decline, and these stages may in turn be subdivided into (a) the fantasy, tentative, and realistic phases of the exploratory stage and (b) the trial and stable phases of the establishment stage. A small (mini) cycle takes place in transitions from one stage to the next, or each time an individual is destabilized by a reduction in force, changes in type of manpower needs, illness or injury, or other socioeconomic or personal events. Such unstable or multiple-trial careers involve new growth, re-exploration, and re-establishment (recycling).
6. The nature of the career pattern, that is, the occupational level attained and the sequence,

frequency, and duration of trial and stable jobs, is determined by the individual's parental socioeconomic level, mental ability, education, skills, personality characteristics (needs, values, interests, traits, and self-concepts), and career maturity and by the opportunities to which he or she is exposed.

7. Success in coping with the demands of the environment and the organism in that context at any given life-career stage depends on the readiness of the individual to cope with these demands (that is, on his or her career maturity). Career maturity is a constellation of physical, psychological, and social characteristics; psychologically, it is both cognitive and affective. It includes the degree of success in coping with the demands of earlier stages and substages of career development, and especially with the most recent.
8. Career maturity is a hypothetical construct. Its operational definition is perhaps as difficult to formulate as is that of intelligence, but its history is much briefer and its achievements even less definitive. Contrary to the impressions created by some writers, it does not increase monotonically, and it is not a unitary trait.
9. Development through the life stages can be guided, partly by facilitating the maturing of abilities and interests and partly by aiding in reality testing and in the development of self-concepts.
10. The process of career development is essentially that of developing and implementing occupational self-concepts. It is a synthesizing and compromising process in which the self-concept is a product of the interaction of inherited aptitudes, physical makeup, opportunity to observe and play various roles, and evaluations of the extent to which the results of role playing meet with the approval of superiors and fellows (interactive learning).
11. The process of synthesis of or compromise between individual and social factors, between self-concepts and reality, is one of role playing and of learning from feedback, whether the role is played in fantasy, in the counseling interview, or in such real-life activities as classes, clubs, part-time work, and entry jobs.
12. Work satisfactions and life satisfactions depend on the extent to which the individual finds adequate outlets for abilities, needs, values, interests, personality traits, and self-concepts. They depend on establishment in a type of work, a work situation, and a way of life in which one can play the kind of role that growth and exploratory experiences have led one to consider congenial and appropriate.
13. The degree of satisfaction people attain from work is proportional to the degree to which they have been able to implement self-concepts.
14. Work and occupation provide a focus for personality organization for most men and women, although for some persons this focus is peripheral, incidental, or even nonexistent. The other foci, such as leisure activities and homemaking, may be central. (Social traditions, such as sex-role stereotyping and modeling, racial and ethnic biases, and the opportunity structure, as well as individual differences, are important determinants of preferences for such roles as worker, student, leisure, homemaker, and citizen) (Brown and Brooks, 1990 Used with permission of the publisher).

Career maturity is a most important concept in Super's theory of career development. Career maturity is manifest in one's ability and preparedness to address successfully age and stage appropriate developmental tasks at any particular point across the life span. In terms of adult career development, Super (1983) revised this concept of career maturity with the more descriptive label, career adaptability.

Super's attention to life stages and life roles in career development is summarized in his life-career rainbow, depicted in Figure 4.2, entitled, "The Life-Career Rainbow: Six Life Roles in Schematic Life Space" (Brown and Brooks, 1990). This rainbow depiction has been used in a number of studies and curricula to illustrate the simultaneous interworkings and relationships among and between developmental life-career stages and life roles, such as child, sibling, parent, worker, with added attention to biological, psychological and socioeconomic influences.

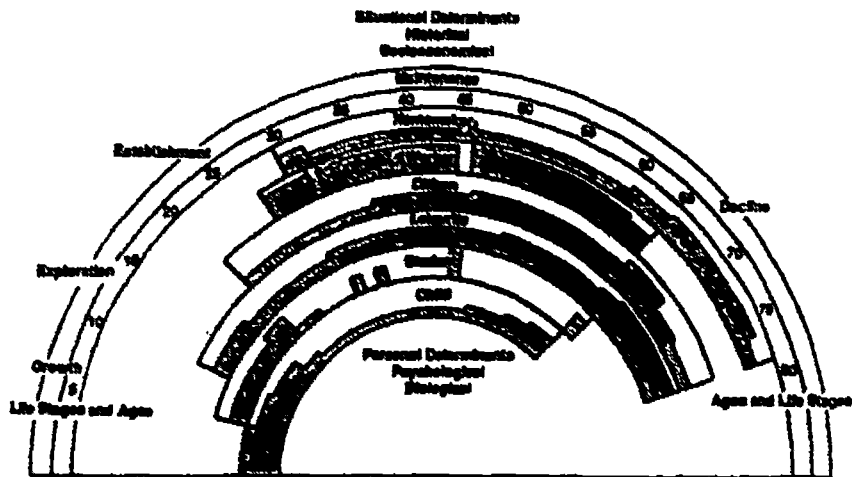
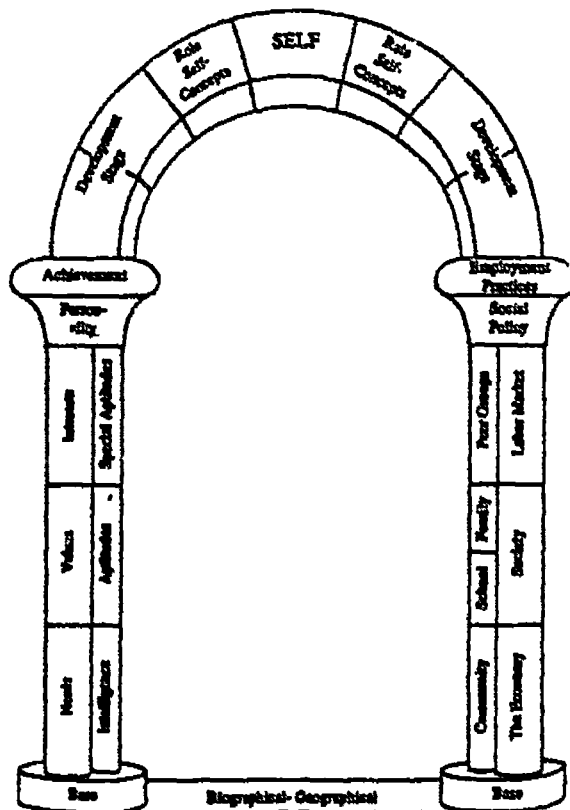


Figure 4.2

The Life-Career Rainbow

(Used with permission of Jossey-Bass.)

Super (1990) clarified the career rainbow illustration in the late 1980s with his presentation of the Archway or Segmented Model which called attention to, "...the segmented but unified and developmental nature of career development to highlight the segments, and to make their origin clear." The archway might be called a scholarly tribute to human complexity in its extensive and informative attention to many facets of the complex process of career development as central to the overall wondrously complex process of human development.



Assumptions Underlying the Cognitive Information Processing (CIP) Perspective of Career Development

Figure 4.3

(Used with permission of Jossey-Bass.)

Implications of Super's Theory

- Because career development is a complex process which is a subset of the larger, more complex developmental process of life, it becomes essential that counselors acknowledge these complexities and work to see if and the extent to which this or any theory has utility in describing, explaining or facilitating the development of an individual. In other words, counselors should work to see if and how the theory fits, applies to, or is pertinent to any specific client(s), as appropriate, rather than "fitting" the client into the theory.
- Because work and career are so pervasive in life, it is essential that counselors help clients appreciate the interrelatedness of life and career and act accordingly, i.e., help clients see the interrelatedness of their occupational and life roles, so that clients make occupational choices that take life roles into account. For example, a married parent considering job relocation may be helped to see the importance of involving the spouse and children in making the potential relocation decision.
- Because opportunities and requirements for occupational decisions occur across the life span, counselors need to help clients appreciate this point as yet another reason to acquire decision making competence.
- Because career maturity varies greatly among people, it is essential that counselors help clients appreciate this variability and that counselors tailor their work to appropriately meet diverse needs of clients.

Krumboltz's Social Learning Theory

While socioeconomic theories concentrate on global dimensions and influences of national and international environments (social, cultural, economic, etc.), social learning theories of human behavior work to describe and explain how a person's environment influences that person's development and decision making.

John Krumboltz developed a social learning theory of career decision making (Krumboltz & Baker, 1973; Mitchell & Krumboltz, 1990), expanding on works of others, perhaps most notably Bandura (1977).

Social learning theory emphasizes three main forms of learning experiences, reinforcement, modeling and classical conditioning. Reinforcement, or instrumental learning, focuses on rewards one gets from self, others or the environment following one's behavior. Positive reinforcers are strongest, but one's behavior is also influenced by negative reinforcers, such as threats or unpleasant experiences.

Classical conditioning, associative learning, or contiguous pairing, focuses on how people learn by associating ordinary or value neutral environmental events or stimuli, such as the ringing of a bell at an airport baggage unloading carousel just before the bags start moving on a conveyor belt, or the sight of a particular building, such as a jail, with a reward or punishment. Someone could see a jail as a place of punishment, while another person might see jail as a place that protects the public, and another might see it as a place of rehabilitation.

In an Information Society, people often learn what they know through vicarious means. The social learning ideal of modeling focuses on how people learn their skills and preferences by observing others directly or indirectly, e.g., through television or through reading about the ideas and experiences of others.

These concepts of learning are seen as explaining how and why people learn and behave in career development and career decision making across the life span. While many career theories focus on interests, Krumboltz points out that interests are derived from learning experiences. Thus, learning (rather than interests) influences people's choices, and changes in learning produce

changes in people's interests, desires and behaviors. Social learning theory explains career maturity as stemming from sufficient or insufficient learning. Hence, people need an array of learning experiences to enhance their career development. Career development is facilitated by helping people learn about and explore careers through direct and vicarious experiences.

Implications

Some implications stemming from the social learning approach are as follows:

- Because interests and decision making skills are learned, provide experiences through a coordinated career development program to enable people to be exposed to as wide a variety of experiences as possible.
- Because career decision making is a learned process and because it is similar to decision making in noncareer areas of life, teach decision making as a skill that can be used in all areas of life.
- Because learning is essential in a rapidly changing Information-Learning Society, counselors need to be actively involved in positively impacting career education and career education policy at all levels across the life span.
- Because learning is essential for vocational survival in an Information Age, counselors and educators need to encourage, stimulate and emphasize study skills and other means of learning to learn, rather than merely learning to solve particular immediate problems.
- Because people establish their values, interests and decision making competencies through learning, career development facilitators need to stimulate and provide learning experiences through comprehensive focused career development programs, such as those based on the National Career Development Guidelines (NOICC, 1989), to make it easier to expose people to wide varieties of career possibilities.
- Because modeling is such a potentially strong form of learning, career development facilitators need to provide direct and vicarious opportunities for positive modeling in a wide variety of career opportunities.

Specific Decision Theories

Decision making theory suggests that although career development is a continuous process, there are critical decision points that occur when individuals face the selection of an entry job for the first time, a change in jobs, a change in educational plans, or a major occupation or career change. Tiedeman and O'Hara (1963) established a theory that fits in the area of decision theories of career development, especially in terms of concentrated expansions by Dudley and Tiedeman (1977) and Miller-Tiedeman and Tiedeman (1990). In its early manifestation, Tiedeman and O'Hara's ideas bear an interesting correspondence to the very simplistic, important sequence of concepts in the title of the workbook that accompanied the Dick and Jane readers of the 1940s and 1950s--Think and Do.

The Tiedeman and O'Hara model is an attempt to help individuals bring to their consciousness all of the factors inherent in making decisions so that they will be able to make choices based on the full knowledge of themselves and on appropriate external information. Tiedeman and O'Hara's model divides the process of decision making into two aspects, anticipation and accommodation or implementation. The anticipation period consists of an individual's preoccupation with the steps and details from which decisions are fashioned. The accommodation period is the change from imagination and choice to the implementation and reality-based adjustments that occur between self and external reality, once a choice is made and implemented (Dudley & Tiedeman, 1977).

In the case of both anticipation and accommodation, the following substages were added to explain further the process of decision making (Dudley & Tiedeman, 1977; Gordon, 1981):

Anticipation Period

Exploration Stage

- Aware of problem
- Lack information of self and occupation
- Not motivated to explore options

Crystallization Stage

- Identify alternatives
- Cost and benefit of goals considered
- Values are hierarchically arranged
- No commitment publicly

Choice Stage

- Motivation toward choice determined by certainty that is related to thoroughness of decision process

Relief from anxiety begins

Clarification Stage

Image of future becomes more accurate and elaborate

Removes doubts

Details are made more explicit

Accommodation Period

Induction Stage

- Reality contact with work environment
- Identification of self with work environment
- Acceptance by group

Reformation Stage

- Assertively involved in group
- Tries to bring group's values more in line with self values
- Stronger sense of self than group

Integration Stage

- Differentiation in identification achieved
- Synthesis of self and group
- Successful image of self and group considers one successful

In this and all decision making models, clients may need considerable help to notice opportunities for choice and own or accept responsibility for choice and for the consequences of choice.

Another decision-making model was developed by Gelatt, Varenhorst, Carey, and Miller (1973). It was published by the College Entrance Examination Board under the title *Decisions and Outcomes*. These authors identified the three major requirements of skillful decision making as follows:

1. Examination and recognition of personal values (the deciding self)
2. Knowledge and use of adequate, relevant information (before deciding)
 - possible alternative actions
 - possible outcomes (consequences of actions)
 - probability of outcomes (relationship between actions and outcomes)
 - desirability of outcomes (personal preferences)
3. Knowledge and use of an effective strategy for converting this information into action

Still another decision-making model was developed as a part of the Career Skills Assessment Program of the College Board (1977). The steps involved and examples are as follows:

Steps	Examples
1. Define the problem.	"What should I do the year after I graduate from high school?"
2. Establish an action plan.	"I'll spend ten hours between now and December 15 investigating possibilities."
3. Clarify values.	"What's important to me is to train for a job that will bring me into daily contact with many different people."
4. Identify alternatives.	"I'll list possibilities: (1) attend the community college, (2) work a year first, (3) . . ."
5. Discover probable outcomes.	"I'm going to talk with a number of people who are now doing the kind of work I like and see how they got started."
6. Eliminate alternatives systematically.	"I've dropped State College from consideration. Now I'll look more closely at the remaining two alternatives."
7. Start action.	"By January 15 I'll apply to three colleges that have work experience programs."

Note: Reprinted with the permission of Educational Testing Service, the copyright owner.

Miller-Tiedeman and Tiedeman's recent (1990) work expands the concept of choice points in life to a concept of ongoing choices and decision processes as a central dimension of "lifecareer" development. In fact, the process of decision making is so central to their analogy of "lifecareer" as a life-long voyage that the ship in their voyage is called "Decision Making." Gelatt has also refined his views on decision making in an effort to address the incredible magnitude, scope and pace of change in contemporary life. The title of his article, "Positive Uncertainty: A Strategy for Making Decisions in Modern Times" (1987), seems to suggest that, in times of rapid change, decision makers will need to be able to tolerate considerable ambiguity in planning and in choice. It logically follows, as well, that career development facilitators may need to increase their efforts to help people establish multiple occupational plans (Plan A, Plan B, etc.) to accommodate unexpected, unanticipated or other changes.

Jepsen and Dilley's (1974) landmark literature review, comparison and analysis of decision making theories provides an excellent base and perspective for assessing how several decision theories could be applied to career development. Brown (1990) and Brown and Brooks (1991) offer insightful chapters on decision theories and their application in career counseling.

Implications

Among implications of career decision making approaches, the following may be very important for facilitating career development:

- Because decision making is related to personality and values development, provide or suggest experiences to individuals that contribute to their emotional maturities, self-concepts and values orientations.
- Because one of the first steps in decision making is gathering information, help clients gain access to information resources and the know-how to use them.
- Because individuals habitually employ different decision making strategies, facilitate learners' discovery of what their strategies are and how they might be improved.
- Because decision making is a learned process, teach the specific skills of decision making to individuals.
- Because making choices is the responsibility of the choosers, give individuals the tools with which they can identify and make their own decisions.
- Because decision making is central to responsible self-governance, counselors need to help

clients appreciate, own and exercise their responsibility for choices and the consequences of choices and to develop and refine decision making competencies.

- Because decision making is central to responsible self-development and because people vary in their capacities and decision styles, counselors need to be able to explain, demonstrate, teach and critique a variety of decision making models to clients.
- Because some decisions will affect significant others, help clients learn to share decision making responsibilities as appropriate.

Cognitive Theories

Cognitive-Behavioral Theory

The application of cognitive theory to career development is relatively new. It grew out of the cognitive-developmental and cognitive-behavioral models used in counseling therapy. Theorists such as Bandura, Beck, Ellis, Meichenbaum, and Skinner laid much of the groundwork for these theories. During the past decade, others have modified and extended their ideas and applied them to career counseling (Keller, Biggs, & Gysbers, 1982).

According to Rest (1974), cognitive-developmental theories are built around structural organization, developmental sequence, and interactionism.

- **Structural organization.** Human information processing is of central importance in cognitive models. Individuals are seen as active interpreters of their environment. Individuals selectively attend to certain stimuli, place a meaningful order on these stimuli, and develop principles to guide behavior and solve problems. The way persons process information is determined by relatively fixed patterns called cognitive structures. These structures or thought processes define how persons view themselves, others and the environment. The way people think will determine how they behave. Thus, changes in cognitive structures must take place before changes in behavior can occur.
- **Developmental sequence.** Individual development is seen as progressing through a fixed sequence of hierarchical stages. Each stage involves a different way of thinking. Greater cognitive differentiation and integration are required as persons advance to higher levels. As they pass through different stages, their views of themselves and the world are expanded and become more complex.

Perry (1970) was one of the first to define the stages a person goes through in the career development process using a cognitive model. Knefelkamp and Sleptitza (1976) revised and extended this model. Their revised model contains four categories and nine stages. The categories include dualism, multiplicity, relativism, and commitment within relativism and are described as follows:

1. **Dualism** is characterized by simplistic thinking and reliance on external factors to control decisions. Individuals lack the ability to analyze and synthesize information and tend to make false dichotomies. Occupations are seen as being either right or wrong for them, with little understanding of the complexity that is actually involved.
2. **Multiplicity** occurs when individuals accept a decision making process provided by a counselor. The locus of control is still outside, but they are beginning to analyze occupational factors in more detail. An awareness of the relationship between consideration of multiple factors and an occupational decision begins to develop.
3. **Relativism** occurs when the locus of control is shifted from an external reference point to an internal one. Individuals see themselves as being primarily responsible for the decision making process and begin to use higher levels of processing to analyze occupations.

Individuals are able to deal with the positive and negative aspects of many occupations and can see themselves in a variety of life roles, including the worker role.

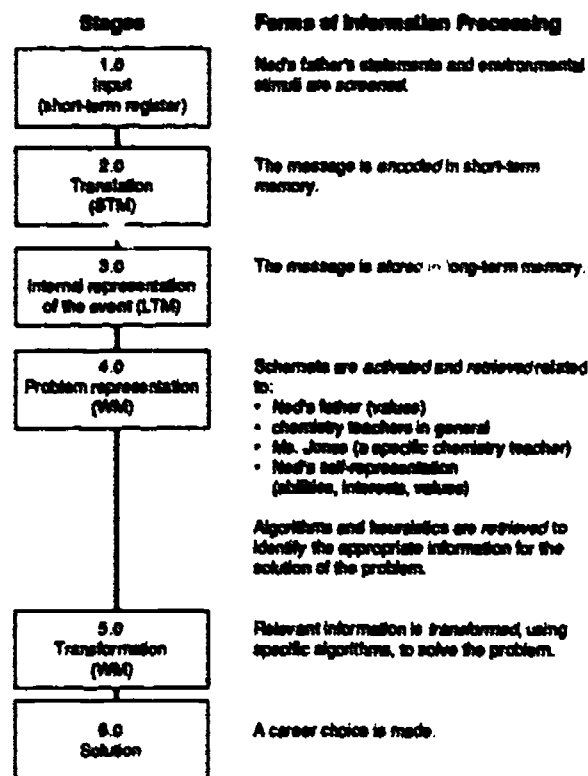
4. **Commitment within relativism** occurs when individuals begin to realize that commitment to an occupation is not simply a narrowing of the old world, but also is an expansion into a new world. The self becomes more integrated with the environment. Career identity and self-identity become more closely related. Values, thoughts and behaviors become more consistent with one another. Individuals can now deal with more challenges and changes.

Development is seen as the result of interaction between people and their environment. Individual maturity or readiness must be matched with environmental opportunity in order for growth to occur. Growth is produced when individuals are confronted by stimuli from the environment that their cognitive constructs cannot handle. To reduce this tension, individuals must change their cognitive structures to accommodate greater complexity. Too much dissonance can be overwhelming, however, and can prevent growth. Therefore, it is important that growth take place at a steady, gradual pace.

The following is a list of five cognitive intervention strategies that have been found to be effective.

1. **Guided career fantasy exploration.** Individuals are asked to imagine a typical workday in different professions, what they would like to be doing at different periods in the future, what benefits they would enjoy in different jobs, and so forth.
2. **Rational emotive therapy.** This strategy is aimed at eliminating the irrational ideas that prevent individuals from thinking and acting productively. As they develop more rational belief systems about themselves and their environments, they become better able to make appropriate career decisions.
3. **Elimination of dysfunctional cognitive schema.** Effort is directed toward identifying and eliminating the following: drawing conclusions where evidence is lacking, making decisions on the basis of a single incident, exaggerating the negative or ignoring the positive aspects of a career event, overly self-attributing negative occupational occurrences, and perceiving career events only in extreme terms.
4. **Self-instruction techniques.** Individuals are taught to talk to themselves about the processes that promote goal attainment. This self-talk may include such actions as identification of goals, the steps necessary to achieve goals, potential problems blocking progress, alternate solutions, and self-praise for each step that is accomplished.
5. **Cognitive self-control.** Individuals are taught to promote career development by seeking relevant information, self-monitoring their own behavior, using self-reinforcement and self-punishment to develop appropriate behavior, and engaging in alternative activities that interfere with or eliminate undesired behavior.

Peterson, Sampson and Reardon (1991) have focused on cognitive information processing (CIP) theory, stemming from cognitive psychology, and emphasizing how people use information in career decision making and how CIP can help career development facilitators integrate existing career theories. Peterson, Sampson and Reardon's approach is based upon ten central assumptions, focused on decision making and the decision maker.



Cognitive Process Components Used In Transforming Information

Figure 4.4

(Used with permission of the publisher.)

They define "...career maturity as the ability to make independent responsible career decisions based on the thoughtful integration of the best information available about oneself and the occupational world" (Peterson, Sampson and Reardon, 1991). Their emphasis on learning is similar to the theories of Krumboltz and Gysbers, et al., with an emphasis similar to Miller-Tiedeman and Tiedeman on client acquisition, refinement and utilization of responsible career decision making (and by extension, all decision making) throughout life. What is unique about their work in the area of career development is their extensive attention to effective information processing and transformation, essential activities in an Information Society.

Implication	Theory
1. Career choice results from an interaction of cognitive and affective processes.	CIP emphasizes the cognitive domain in career decision making; but it also acknowledges the presence of an affective source of information in the process (Pope and Kramholt, 1987; Luzzo, 1980). Ultimately, involvement in a career goal involves an interaction between affective and cognitive processes.
2. Making career choices is a problem-solving activity.	Individuals can learn to solve career problems (that is, to choose careers) just as they can learn to solve math, physics, or chemistry problems. The major difference between career problems and math or science problems is in the complexity and ambiguity of the alternatives and the greater uncertainty as to the correctness of the solution.
3. The capabilities of career problem solvers depend on the availability of cognitive operations as well as knowledge.	One's capability as a career problem solver depends on one's self-knowledge and on one's knowledge of occupations. It also depends on the cognitive operations one can draw on to derive relationships between these two domains.
4. Career problem solving is a high-memory-load task.	The realm of self-knowledge is complex; so is the world of work. The drawing of relationships between these two domains exists affecting to both domains simultaneously. Such a task may easily overload the working memory store.
5. Motivation	The motivation to become a better career problem solver stems from the desire to make satisfying career choices through a better understanding of oneself and the occupational world.
6. Career development involves continuous growth and change in knowledge structures.	Self-knowledge and occupational knowledge consist of sets of organized memory structures called schemas that evolve over the person's life span. Both the occupational world and one's self are ever changing. Thus, the need to develop and integrate these schemas never ceases.
7. Career identity depends on self-knowledge.	In CIP terms, career identity is defined as the level of development of self-knowledge memory structures. Career identity is a function of the complexity, integration, and stability of the schemas comprising the self-knowledge domain.
8. Career maturity depends on one's ability to solve career problems.	From a CIP perspective, career maturity is defined as the ability to make independent and responsible career decisions based on the thoughtful integration of the best information available about oneself and the occupational world.
9. The ultimate goal of career counseling is achieved by facilitating the growth of information-processing skills.	From a CIP perspective, the goal of career counseling is therefore to provide the conditions of learning that facilitate the growth of memory structures and cognitive skills so as to improve the client's capacity for problem-solving behavior.
10. The ultimate aim of career counseling is to enhance the client's capabilities as a career problem solver and a decision maker.	From a CIP perspective, the aim of career counseling is to enhance the client's career decision-making capabilities through the development of information processing skills.

Figure 4.5

(Used with permission of the publisher.)

Some implications of cognitive theory are as follows:

- Because counseling strategies are based on the current abilities individuals possess, identifying where individuals are in their developmental sequence is the first step in helping them advance to the next level.
- Because individuals cannot skip stages, but must instead advance one step at time, a counseling strategy that is aimed at a level beyond an individual's next stage of development will be ineffective and may even be detrimental. If individuals do not have the cognitive complexity to understand and integrate the information that is presented, they may become frustrated and temporarily fixated at their current level. Counselors need to design strategies that will guide individuals through their developmental stages with as few disruptions as possible.
- Because the emphasis is on process rather than content, counselors need to help individuals think in increasingly complex ways about themselves and their environments. Counselors need to interact with individuals at their level and then provide enough cognitive dissonance to stimulate the expansion of their thought processes. This process is called "plus-one staging." Individuals are helped to move from one stage to the next in a deliberate manner. Support and challenge is used to stimulate growth, and support is used to prevent overloading and to stimulate self-confidence.
- Because the cognitive approach to career development is based on the broader cognitive theories of counseling and therapy, counselors need to apply techniques useful in cognitive therapy to career counseling (Keller, Briggs and Gysbers, 1982).

Emerging Career Theories

As noted previously, coverage of theories in this Module is global rather than all-encompassing and detailed. Additionally, while emerging theories are beyond the scope of this brief overview of career development theory, it is essential to point out significant concerns regarding the relative utility of existing career theories for work with a variety of specific populations. Therefore, a brief introduction to emerging career development theories and practices will be presented along with some attention to implications and suggestions for further study.

Sex Role Stereotyping

Sundal-Hansen (1984) raises vital points on the many interrelated life-career roles of all people and other important overlapping aspects of inter-personal, intra-personal, cognitive, emotional, psychological, familial, socioeconomic, political and spiritual contexts of life career development. her literature review contains a lucid discussion of the pervasive negative consequences of gender-role stereotyping for both women and men. She also presents evidence of many restrictive aspects of female socialization ,from early childhood throughout the life span, which contribute to a "deficit model" which limits women's options, devalues their contributions and keeps them from developing their human potential in getting the world's work done.

Positive Life Career Goals for All

As a major goal of career development facilitation, Sundal-Hansen (1984) proposes education and modeling and advocacy activities aimed at freeing all males and females "...from rigid sex-role constraints perpetuated by stereotypes and socialization and implemented in societal institutions, structures and policies." Among her many constructive recommendations for positively facilitating career development for all are: empowering all clients to become less reactive to market and related factors and more proactive architects of their own career socialization and futures; helping males learn to take a greater part in family and parenting responsibilities; helping females learn to be economically independent; and helping males and females learn to discuss and negotiate, thoughtfully and with mutual respect, relationship, marital and family tasks and responsibilities.

Gender Aware Counseling

In addition to sensitive attention to minority ethnic and racial issues in career counseling, Brown and Brooks (1991) present a lucid discussion and illustration of "gender-aware career counseling" which treats men and women as equal human beings while also intentionally incorporating "...an understanding of the pervasive effects of gender and sexism on the client... and on counseling strategies and goals..." They advocate extensive efforts to understand and help clients understand the personal, socioeconomic, political and other contexts of their clients' development, as a prelude to working to facilitate clients' life career development.

Synergy and Work Spirit

Career development facilitators and theorist need to continue studying their own development, values, biases and prejudices as a point of departure in helping themselves, their clients and the various publics and they serve to become more aware of, to commit to and foster and refine a gender fair, gender free, synergy of life career development and positive, fulfilling work spirit for all (Zweig, 1983).

Studies of most of the theories cited in this Module focus on middle-class Caucasian males, resulting in negative criticisms that the theories have little empirical support for their cogency or

utility for populations other than middle-class Anglo males. Concerns about a variety of specific populations and gender, ethnic, cultural and racial issues have been raised by critics, and to a very limited extent, addressed by the theory originators and others. While it appears that more attention has been paid to theoretical issues regarding women than regarding racial or ethnic minorities, overall, very little progress has been made, and much research remains to be done regarding these specific populations (Brooks, 1990).

Selected References on Emerging Theories

Books by Brown (1990), Herr and Cramer (1988), Isaacson (1987), Osipow (1983), Zunker (1986) and other works on career development theory cited in the references to this chapter pay considerable attention to the needs and initial efforts to expand and refine existing theories and develop new ones which pay fuller and more appropriate attention to a wide variety of specific populations such as females, the gifted and talented, people of color, ethnic minorities, ex-offenders and persons with disabilities. For more details literature summaries, thought pieces and efforts at extending theory and practice, readers are advised to consult the Suggest Reading section of this Module, especially works by: Astin (1984); Brooks (1990); Farmer (1987); Gilligan (1982a, 1982b); Gottfredson (1981); Greeley (1975); Hackett and Betz (1981); Heinrich, Corbine and Thomas (1990); Ivey (1987); Lea and Leibowitz (1991); Pedersen (1988); Schlossberg (1984); Sue (1978, 1981); and Sundal-Hansen (1984); for coverage of these vital developments.

**Theories of Career Development and Decision Making
Module 4
Resources**

Trait-Factor Theory

- Brown, D. (1984). Trait and factor theory. In D. Brown & L. Brooks & Associates. *Career choice and development* 2nd ed. (pp. 13-36). San Francisco: Jossey-Bass.
- Crites, J. O. (1981). Comprehensive career counseling: Model, methods & materials. In P.A. Butcher (Ed.), *Career counseling: Models, methods, and materials*. New York: McGraw-Hill Book Company.
- Crites, J. O. (1981). Trait-and-factor career counseling. In P.A. Butcher (Ed.), *Career counseling: Models, methods, and materials*. New York: McGraw-Hill Book Company.
- Kapes, J. T., & Mastie, M. M. (Eds.). (1988). *A counselor's guide to vocational guidance instruments* 2nd ed. Alexandria, VA: The National Career Development Association.
- Osipow, S. H. (1983). Personality traits and career. *Theories of career development* (3rd ed.). Englewood Cliffs, NJ: Prentice-Hall, Inc.
- Osipow, S. H. (1983). The work-adjustment theory-Loftquist and Dawis. *Theories of career development* (3rd ed.). Englewood Cliffs, NJ: Prentice-Hall, Inc.
- Parsons, F. (1909). *Choosing a Vocation*. (Reprinted 1988). Garrett Park, MD: Garrett Park Press.

Holland's Theory of Vocational Personalities and Work Environments

- Holland, J. L. (1985). *Making vocational choices: A theory of vocational personalities and work environments* (2nd ed.). Englewood Cliffs: Prentice-Hall, Inc.
- Weinrach, S. G. & Srebalus, D. J. (1990). Holland's Theory of Careers. In D. Brown, L. Brooks & Associates (1990) *Career choice and development*, 2nd.ed. San Francisco: Jossey Bass.

Socioeconomic Systems

- Borow, H. (1984). Occupational socialization: Acquiring a sense of work. In N.C. Gysbers (Ed.), *Designing careers* (160-189). San Francisco: Jossey-Bass.
- Herr, E. L. (1984). Links among training, employability, and employment. In N.C. Gysbers (Ed.), *Designing careers* (160-189). San Francisco: Jossey-Bass.
- Hotchkiss, L., & Borow, H. (1990). Sociological perspectives on work and career development. In D. Brown, L. Brooks & Associates, *Career choice and development* 2nd ed. (262-307). San Francisco: Jossey-Bass.
- Super, D. E. (1984). Perspectives on the meaning and value of work. In N.C. Gysbers (Ed.), *Designing careers* (27-53). San Francisco: Jossey-Bass.

Roe's Theory of Personality and Occupational Behavior

- Osipow, S. H. (1983). Roe's personality theory of career choice. *Theories of career development* (3rd ed.). Englewood Cliffs, NJ: Prentice-Hall, Inc.
- Roe, A. (1972). Perspectives on vocational development. In J.M. Whiteley & A. Resnikoff (Eds.), *Perspectives on vocational development* (66-82). Washington, DC: American Personnel and Guidance Association.
- Roe, A., & Lunneberg, P. W. (1990). Personality development and career choice. In D. Brown, L. Brooks & Associates. *Career choice and development* 2nd ed. (68-101). San Francisco: Jossey-Bass.

Ginzberg's Theory of Occupational Choice

- Ginzberg, E. (1984). Career development. In D. Brown & L. Brooks (Eds.), *Career choice and development* (169-191). San Francisco: Jossey-Bass Publishers.
- Osipow, S. H. (1983). The Ginzberg-Ginzberg-Axelrad and Herma theory. *Theories of career development* (3rd ed.). Englewood Cliffs, NJ: Prentice-Hall, Inc.

Super's Theory of Career Development

- Osipow, S. H. (1983). Super's developmental self-concept theory of vocational behavior. *Theories of career development* (3rd ed.). Englewood Cliffs, NJ: Prentice-Hall, Inc.
- Super, D. E. (1990). A life-span, life-space approach to career development. In D. Brown, L. Brooks & Associates. *Career choice and development* 2nd ed. (197-261). San Francisco: Jossey-Bass.
- Super, D. E. (1985). Coming of age in Middletown: Careers in the making. *American Psychologist*, 40, 405-414.

Adult Career Development

- Levinson, D. J., Darrow, C. N., Klein, E. B., Levinson, M. G., & McKee, B. (1978). *The seasons of a man's life*. New York: Alfred A. Knopf.
- Neugarten, B. L. (1979). Time, age, and the life cycle. *American Journal of Psychiatry*, 136, 887-894.
- Rodgers, R. F. (1984). Theories of adult development: Research status and counseling implications. In S.D. Brown & R.W. Lent (Eds.), *Handbook of counseling psychology* (pp. 479-519). New York: John Wiley & Sons.
- Schlossberg, N. K. (1984). *Counseling adults in transition*. New York: Springer Publishing Company.
- Sheehy, G. (1974). *Passages: Predictable crises of adult life*. New York: E.P. Dutton & Company.
- Vaillant, G. E. (1977). *Adaptation to life*. Boston: Little, Brown & Co.

Decision Making

- Miller-Tiedeman, A. & Tiedeman, D. V. (1990). Career decision making: An individualistic perspective. In D. Brown, L. Brooks & Associates, *Career choice and development* 2nd ed. (pp. 308-337). San Francisco: Jossey-Bass.
- Mitchell, L. K., & Krumboltz, J. D. (1984). Research on human decision making: Implications for career decision making and counseling. In S.D. Brown & R.W. Lent (Eds.), *Handbook of counseling psychology* (pp. 238-280). New York: John Wiley & Sons.
- Osipow, S. H. (1983). Tiedeman's developmental theory. *Theories of career development* (3rd ed.). Englewood Cliffs, NJ: Prentice-Hall, Inc.

Krumboltz's Theory of Social Learning

- Mitchell, L. K., & Krumboltz, J. D. Social learning approach to career decision making: Krumboltz's theory. In D. Brown L. Brooks & Associates, *Career choice and development* 2nd ed. (pp. 145-196). San Francisco: Jossey-Bass.

Cognitive-Behavioral Theory

- Gysbers, N. C., & Moore, E. J. (in press). *Career assessment and counseling: Skills and techniques for practitioners*. Englewood Cliffs, NJ: Prentice-Hall.
- Keller, K. E., Biggs, D. A., & Gysbers, N. C. (1982). Career counseling from a cognitive perspective. *The Personnel and Guidance Journal*, 59, 367-371.
- Kinnier, R. T., & Krumboltz, J. D. (1984). Procedures for successful career counseling. In N.C. Gysbers (Ed.), *Designing careers* (pp. 307-335). San Francisco: Jossey-Bass Publishers.
- Krumboltz, J. D. (1983). *Private rules in career decision making*. Columbus, Ohio: The National Center for Research in Vocational Education.
- Peterson, G. W., Sampson, J. P. & Reardon, R. C. (1991). *Career Development and Services: A cognitive Approach*. Pacific Grove, CA: Brooks/Cole.

New and Emerging Theories & Issues

- Astin, H. S. (1984). The meaning of work in women's lives: A sociopsychological model of career choice and work behavior. *Counseling Psychologist*, 12, 117-126.

- Atkinson, D. R., Morten, G., & Sue, D. W. (1989). *Counseling American minorities*. Dubuque, IA: Wm. C. Brown.
- Betz, N. E. & Fitzgerald, L. F. (1987). *The Career Psychology of Women*. Orlando, FL: Academic Press.
- Brooks, L. (1990). Recent developments in theory building. In D. Brown, L. Brooks & Associates, *Career choice and development*, 2nd. ed. San Francisco: Jossey-Bass.
- Carlos Poston, W. S. (1990). The biracial identity development model: A needed addition. *Journal of counseling and development*, 69, 152-155.
- Engels, D. W. & Dameron, J. D.(eds.). (1990). *The professional counselor: competencies, performance guidelines and assessment*. Alexandria, VA: American Association for Counseling and Development.
- Farmer, H. S. (1985). Model of career and achievement motivation for women and men. *Journal of Counseling Psychology*, 32, 363-390.
- Gilligan, C. (1982a). *In a different voice*. Cambridge, MA: Harvard University Press.
- Gilligan, C. (1982b). Why should a woman be more like a man? *Psychology Today*. June, 68-77.
- Gottfredson, L. S. (1981). Circumscription and compromise: A developmental theory of occupational aspirations. *Journal of Counseling Psychology*, 28, 545-579.
- Greeley, A. M. (1975). *Why can't they be like us? America's white ethnic groups*. New York: Dutton.
- Hackett, G. & Betz, N. E. (1981). A self-efficacy approach to the career development of women. *Journal of Vocational Behavior*, 18, 326-339.
- Hackett, G. & Campbell, N. K. (1988). Task self-efficacy and task interest as a function of performance on a gender-neutral task. *Journal of Vocational Behavior*, 30, 203-215.
- Hansen, L. S. & Rapoza, R. S. (eds.). (1978). *Career development and counseling of women*. Springfield IL: Charles C. Thomas.
- Heinrich, R. K., Corbine, J. L. & Thomas, K.R. (1990). Counseling Native Americans. *Journal of Counseling and Development*, 69, 128-133.
- Ivey, A. E. (1987). Cultural intentionality: The core of effective helping. *Counselor Education and Supervision*, 26, 168-172.
- Lea, D. & Liebowitz, Z. (1991). *Adult career development*, 2nd ed. Alexandria, VA: National Career Development Association.
- Lee, C. C. & Richardson, B. L. (1991). *Multicultural issues in counseling*. Alexandria, VA: American Association for Counseling and Development.
- Myers, J. E. (1989). *Adult children and aging parents*. Alexandria, VA: American Association for Counseling and Development.
- Pederson, P. B. (1988). *A handbook for developing multicultural awareness*. Alexandria, VA: American Association for Counseling and Development.
- Schlossberg, N. K. (1984). *Counseling adults in transition*. New York: Springer.
- Sue, D. W. (1978). Counseling across cultures. *Personnel and Guidance Journal*, 56, 451.
- Sue, D. W. (1973). Ethnic identity: The impact of two cultures on the psychological development of Asians in America. In S. Sue & N.N. Wagner (eds), *Asian Americans: Psychological perspectives*. Palo Alto, CA: Science and Behavior Books.
- Sue, D. W. (1981). *Counseling the culturally different: Theory and practice*. John Wiley & Sons.

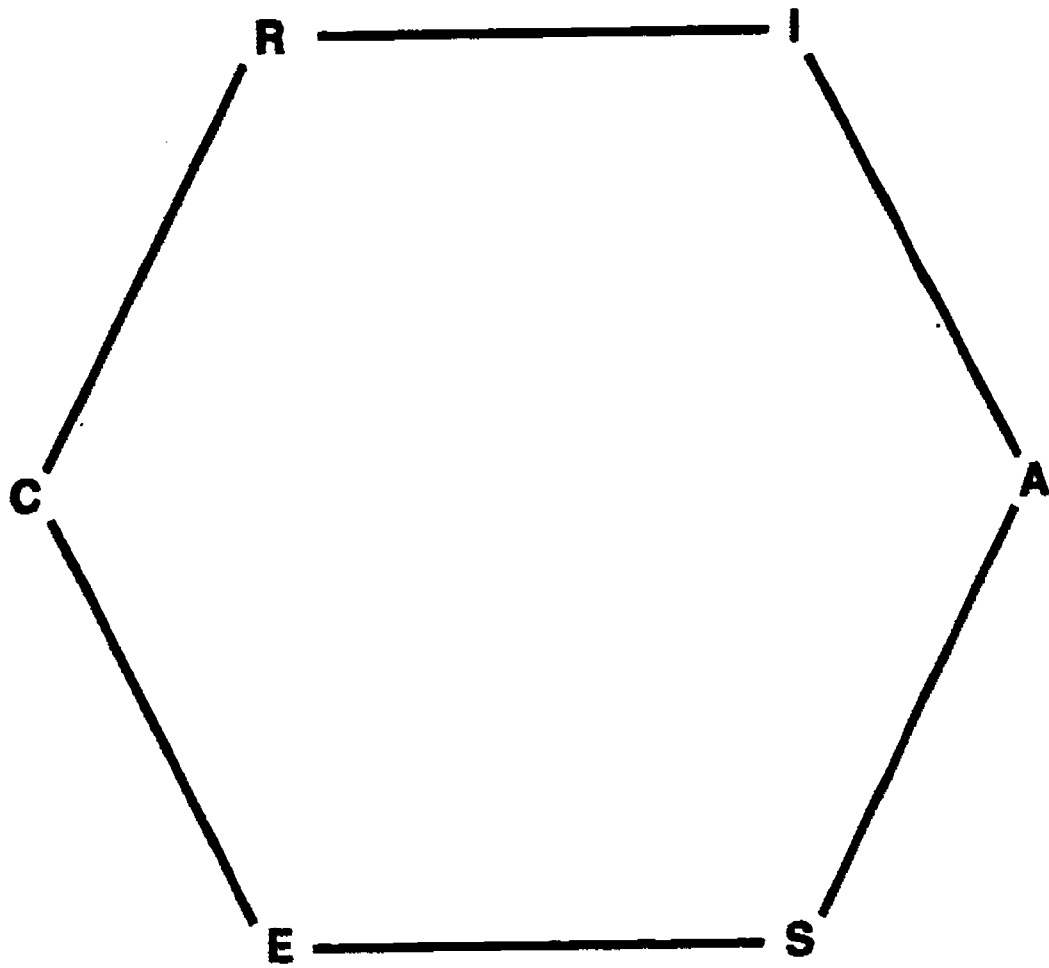
Theories of Career Development and Decision Making
Module 4
References

- Abeles, R. P., & Riley, M. W. (1976-1977). A life-course perspective on the later years of life: Some implications for research. *Social Science Research Council Annual Report*, pp. 1-16.
- Adler, A. (1929). *The practice and theory of individual psychology*. New York: Harcourt, Brace & World.
- Bandura, A. (1977). *Social learning theory*. Englewood Cliffs, NJ: Prentice-Hall.
- Borow, H. (Ed.). (1973). *Career guidance for a new age*. Boston: Houghton Mifflin.
- Brim, O. G., Jr., & Kagan, J. (1980). "Constancy and change: A view of the issues." In O.G. Brim, Jr. & Kagan (Eds.), *Constancy and change in human development*. Cambridge, MA: Harvard University Press.
- Brooks, L. (1984). Career counseling methods and practice. In D. Brown & L. Brooks (Eds.), *Career choice and development* (pp. 337-354). San Francisco: Jossey-Bass Publishers.
- Brown, D. (1984). Trait and factor theory. In D. Brown & L. Brooks (Eds.), *Career choice and development* (pp. 8-30). San Francisco: Jossey-Bass Publishers.
- Brown, D. & Brooks, L. (Eds.). (1990). *Career choice and development*. 2nd ed. San Francisco: Jossey-Bass.
- Caplow, T. (1954). *The sociology of work*. New York: McGraw-Hill.
- Career Skills Assessment Program. (1977). *Career decision-making skills, exercise booklet*. Princeton, NJ: Education Testing Service.
- Center for Policy Research and Analysis, National Governors Association. (1985, May). *Using labor market and occupational information in human resource program planning* (Vol. I). Washington, DC: National Governors Association.
- Crites, J. O. (1969). *Vocational psychology: The study of vocational behavior and development*. New York: McGraw-Hill.
- Crites, J. O. (1981). *Career counseling: Models, methods, and materials*. New York: McGraw-Hill.
- Dickens, C. (1852). London: Bradbury and Evans.
- Dudley, G., & Tiedeman, D. V. (1977). *Career development: Exploration and commitment*. Muncie, IN: Accelerated Development.
- Erikson, Erik. (1950). *Childhood and society*. New York: W.W. Norton and Co.
- Frederickson, R. H. (1982). *Career information*. Englewood Cliffs, NJ: Prentice-Hall.
- Freud, S. (1953). *The standard edition of the complete psychological works* (J. Strachey, Trans.). London: Hogarth.
- Gelatt, H. B., Varenhorst, B., Carey, R., & Miller, G. P. (1973). *Decisions and outcomes: A leader's guide*. New York: College Entrance Examination Board.
- Gilligan, C. (1977). In a different voice: Women's conceptions of self and morality. *Harvard Educational Review*, 47, 481-517.
- Gilligan, C. (1982). *In a different voice: Psychological theory and women's development*. Cambridge, Mass.: Harvard University Press.
- Gilligan, C. (1982a). *In a different voice*. Cambridge, MA: Harvard University Press.
- Gilligan, C. (1982b). Why should a woman be more like a man? *Psychology Today*. June, 68-77.
- Ginzberg, E. (1972). Toward a theory of occupational choice: A restatement. *Vocational Guidance Quarterly*, 20 (3), 169-176.
- Ginzberg, E. (1984). Career development. In D. Brown & L. Brooks (Eds.), *Career choice and development* (pp. 169-191). San Francisco: Jossey-Bass Publishers.
- Ginzberg, E., Ginsburg, S., Axelrad, S., and Herma, J. (1951). *Occupational choice: An approach to a general theory*. New York: Columbia University Press.
- Gordon, V. N. (1981). The undecided student: A developmental perspective. *The Personnel and Guidance Journal*, 59, 433-438.
- Gottfredson, G. D., Holland, J. L., & Ogawa, D. K. (1982). *Dictionary of Holland Occupational Codes*. Palo Alto, CA: Consulting Psychologists Press, Inc.

- Gottfredson, G. D. (1977). Career stability and redirection in adulthood. *Journal of College Student Personnel*, 25(4), 315-320.
- Gottfredson, L. S. (1981). Circumscription and compromise: A developmental theory of occupational aspirations. *Journal of Counseling Psychology*, 28(6), 545-579.
- Gottfredson, L. S. (1978). Providing black youth more access to enterprising work." *Vocational Guidance Quarterly*, 27(2), 114-123.
- Gottfredson, L. S., & Becker, H. J. (1981). A challenge to vocational psychology: How important are aspirations in determining male career development? *Journal of Vocational Behavior*, 18, 121.
- Gottfredson, L. S., Finucci, J. M., & Childs, B. (1984). Explaining the adult careers of dyslexic boys: Variations in critical skills for high-level jobs. *Journal of Vocational Behavior*, 24, 355-373.
- Gysbers, N. C. (1983). *Create and use an individual career development plan*. Columbus, Ohio: The National Center for Research in Vocational Education.
- Gysbers, N. C., & Moore, E. J. (1975). *Beyond career development - Life career development*. *Personnel and Guidance Journal*, 53 (9), 647-652.
- Gysbers, N. C., & Moore, E. J. (in press). *Career assessment and counseling: skills and techniques for practitioners*. Englewood Cliffs, NJ: Prentice-Hall.
- Hansen, L. S. (1978). Promoting female growth through a career development curriculum. In L.S. Hansen & R. S. Rapoza (Eds.), *Career development and counseling of women*. Springfield, IL: Charles C. Thomas.
- Hansen, L. S. "Promoting Female Growth Through a Career Development Curriculum." In L.S. Hansen & R.S. Rapoza (eds.), *Career Development and Counseling of Women*. Springfield, Ill.: Thomas, 1978.
- Hansen, L. S., & Leierleber, D. L. (1978). Born free: A collaborative consultation model for career development and sex-role stereotyping. *Personnel and Guidance Journal*, 56(7), 395-399.
- Hartz, J. D. (1977). *Career Program Resources*. Madison, WI: University of Wisconsin Vocational Studies Center.
- Havighurst, R. (1952). *Developmental tasks and education*. New York: David McKay Co.
- Heinrich, R. K., Corbine, J. L. & Thomas, K. R. (1990). Counseling native americans. *Journal of Counseling and Development*, 69, 128-133.
- Herr, E. L., & Cramer, S. H. (1988). *Career guidance through the life span* (3rd ed.). Boston: Little, Brown.
- Herr, E. L., & Cramer, S. H. (1988). *Career Guidance and Counseling Through the Life Span*. (3rd ed.). Glenview, Ill.: Harper-Collins.
- Holland, J. L. (1985). *Making vocational choices: A theory of vocational personalities and work environments* (2nd ed.). Englewood Cliffs, NJ: Prentice-Hall.
- Holland, J. L. (1966). *The psychology of vocational choice*. Waltham, MA: Blaisdell.
- Holland, J. L. (1973). *Making vocational choices: A theory of careers*. Englewood Cliffs, NJ: Prentice-Hall.
- Holland, J. L. (1974). *Self-directed search*. Palo Alto, CA: Consulting Psychologists Press.
- Hoppock, R. (1967). *Occupational information*. (3rd ed.). New York: McGraw-Hill.
- Hotchkiss, L., & Borow, H. (1984). Sociological perspectives on career choice and attainment. In D. Brown & L. Brooks (Eds.), *Career choice and development: Applying contemporary theories to practice* (Chap. 6). San Francisco: Jossey-Bass.
- Hoyt, K. B. (1972). *Career education: What it is and how to do it*. Salt Lake City: Olympus.
- Isaacson, L. E. (1985). *Basics of career counseling*. Boston: Allyn & Bacon.
- Ivey, A. E. (1987). Cultural intentionality: The core of effective helping. *Counselor Education and Supervision*, 26, 168-172.
- Janis, I., & Mann, L. (1977). *Decision-making: A psychological analysis of conflict, choice, and commitment*. New York: The Free Press.
- Jaramillo, P. T., Zapata, J. T., & MacPherson, R. (1982). Concerns of college-bound Mexican-American students. *The School Counselor*, 29(5), 375-380.

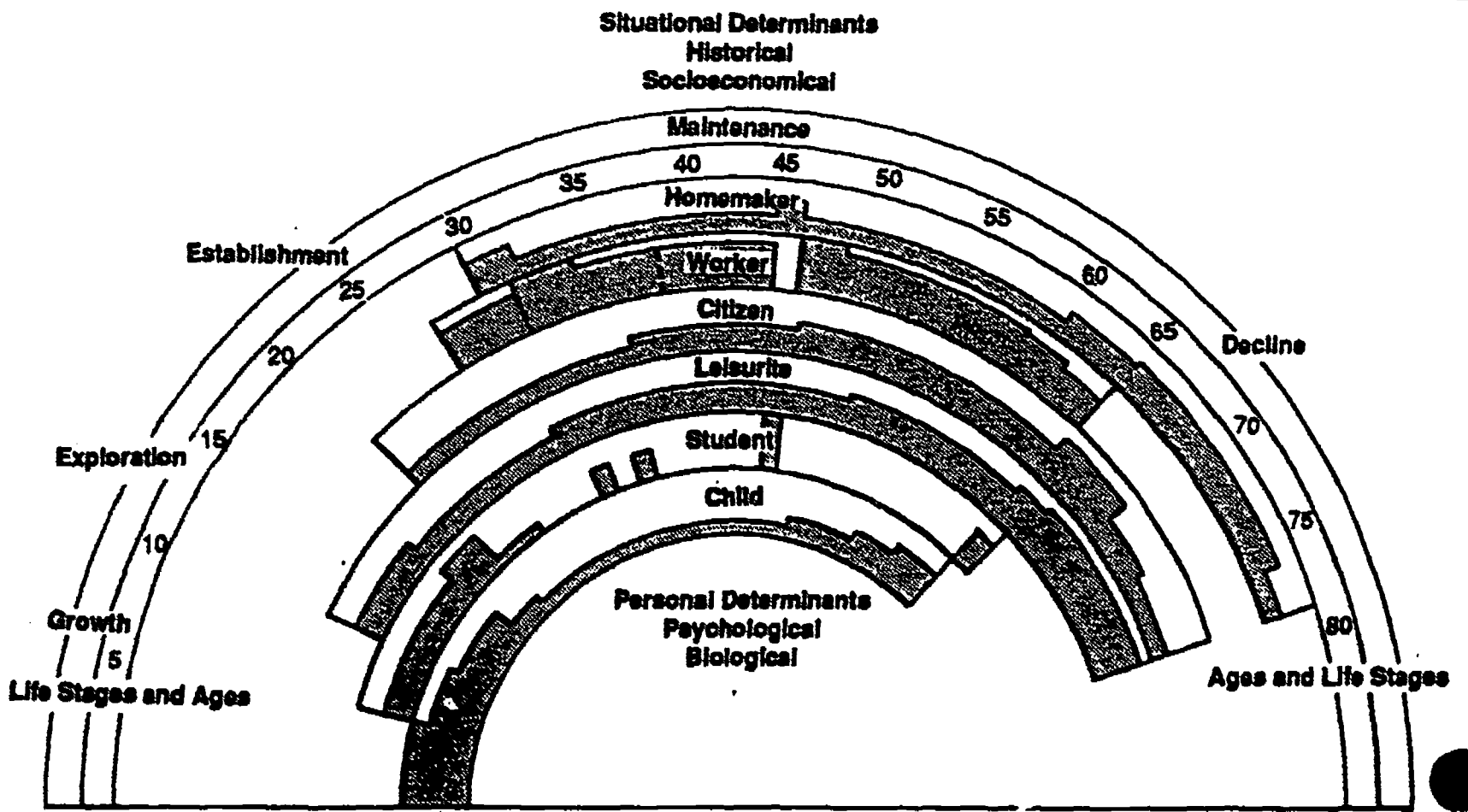
- Jepsen, D. A. (1984). Relationship between career development theory and practice. In N.C. Gysbers (Ed.), *Designing careers: Counseling to enhance education, work, and leisure* (pp. 135-159). San Francisco: Jossey-Bass Publishers.
- Jones, G. B., Hamilton, J. A., Ganschow, L. H., Helliwell, C. B., & Wolff, J. M. (1972). *Planning, developing, and field testing career guidance programs*. Palo Alto, CA: American Institutes for Research.
- Jordaan, J. P. (1974). Life stages as organizing models of career development. In E.L.Herr (Ed.), *Vocational guidance and human development*. Boston: Houghton Mifflin.
- Jordaan, J. P., & Heyde, M. B. (1979). *Vocational maturity during the high-school years*. New York: Teachers College Press.
- Kapes, J. T., & Mastie, M. M. (1982). *A counselors guide to occupational guidance instruments*. Washington, DC: National Vocational Guidance Association.
- Keller, K. E., Biggs, D. A., & Gysbers, N. C. (1982). Career counseling from a cognitive perspective. *The Personnel and Guidance Journal*, 60 (6), 367-371.
- Kinnier, R. T., & Krumboltz, J. D. (1984). Procedures for successful career counseling. In N.C. Gysbers (Ed.), *Designing careers: Counseling to enhance education, work and leisure* (pp.307-335). San Francisco: Jossey-Bass Publishers.
- Knefelkamp, L. L., & Sleptitza, R. (1976). A cognitive-developmental model of career development: An adaptation of the Perry scheme. *The Counseling Psychologist*, 6, 53-58.
- Krumboltz, J., & Baker, R. (1973). Behavioral counseling for vocational decisions. In H. Borrow (Ed.), *Career guidance for a new age* (pp. 235-284). Boston: Houghton Mifflin, pp. 235-284.
- Krumboltz, J. D., Mitchell, A. M., & Jones, G. B. (1979). A social learning theory of career selection. *The Counseling Psychologist*, 6, 71-81.
- Lee, C. C. & Richardson, B. L. (1991). *Multicultural issues in counseling*. Alexandria, VA: American Association for Counseling & Development.
- Levinson, D. J., Darrow, C. N., Klein, E. B., Levinson, M. G., & McKee, B. (1978). *The seasons of a man's life*. New York: Alfred A. Knopf.
- Lewis, R. A., & Gilhousen, M. R. (1981). Myths of career development: A cognitive approach to vocational counseling. *The Personnel and Guidance Journal*, 59 (5), 269-299.
- Maslow, A. H. (1954). *Motivation and personality*. New York: Harper and Row.
- Miller, D., & Form, W. (1951). *Industrial sociology*. New York: Harper and Row.
- Myers, J. E. (1989). *Adult children and aging parents*. Alexandria, VA: American Association for Counseling and Development.
- Naisbitt, J. (1982). *Megatrends*. New York: Warner Books.
- National Career Development Association. (1991). The vocational/career counseling competencies, draft approved, January. Alexandria, VA: Author.
- National Career Development Association. (1988). *Ethical Standards*. Alexandria, VA: Author.
- National Occupational Information Coordinating Committees (1989). *The national career development guidelines*. Washington, DC: U.S. Department of Labor.
- National Vocational Guidance Association. (1973). *Position paper on career development*. Washington, DC: National Vocational Guidance Association.
- Neugarten, B. L. (1968). *Middle age and aging*. Chicago: University of Chicago Press.
- Neugarten, B. L. (1979). Time, age, and the life cycle. *American Journal of Psychiatry*, 136 (7), 889-894.
- Osipow, S. (1969). What do we really know about career development? In N.C. Gysbers & D. Pritchard (Eds.), *National conference on guidance, counseling, and placement in career development and educational-occupational decision-making*. Columbia: University of Missouri. (ERIC Document Reproduction Service No. ED 041 143)
- Osipow, S. (1983). *Theories of career development*. (3rd ed.). Englewood Cliffs, NJ: Prentice-Hall.
- Osipow, S. (1983). *Theories of career development*. (3rd ed.). New York: Appleton-Century-Crofts.
- Parsons, F. (1909). *Choosing a vocation*. Boston: Houghton Mifflin.

- Pedersen, P. B. (1988). *A handbook for developing multicultural awareness*. Alexandria, VA: American Association for Counseling and Development.
- Pedro, J. D., Wolleat, P., & Fennema, E. (1980). Sex differences in the relationship of career interests and mathematics plans. *Vocational Guidance Quarterly*, 29(1), 25-34.
- Perry, W., Jr. (1970) *Intellectual and ethical development in the college years*. New York: Holt, Rinehart and Winston.
- Reardon, R. C. (1984) Use of information in career counseling. In H.D. Burck & R.C. Reardon (Eds.), *Career development interventions*. Springfield, IL: Charles C. Thomas.
- Rest, J. R. (1974). Developmental psychology as a guide to value education: A review of "Kohlbergian" Programs. *Review of Educational Research*, 44, 241-259.
- Roe, A. (1957). early determinants of vocational choice. *Journal of Counseling Psychology*, 4, 212-217.
- Roe, A. (1972). Perspectives on vocational development. In J.M. Whiteley & A. Resnikoff (Eds.), *Perspectives on vocational development* (pp. 66-82). Washington, DC: American Personnel and Guidance Association.
- Schlossberg, N. K. (1984). *Counseling adults in transition*. New York: Springer.
- Schlossberg, N. K., & Pietrofesa, J. J. (1978). Perspectives on counseling bias: Implications for counselor education. In L. S. Hansen & R. S. Rapoza (Eds.), *Career development and counseling of women*. Springfield, IL: Charles C. Thomas.
- Sue, D. W. (1978). Counseling across cultures. *Personnel and Guidance Journal*, 56, 451.
- Sue, D. W. (1981). *Counseling the culturally different*. New York: Wiley.
- Sue, D. W. (1978). "Counseling the culturally Different: A Conceptual Analysis." *Personnel and Guidance Journal*, 1977,55, 422-425.
- Sue, D. W., and others. (1982). "Position Paper: Cross-Cultural Counseling Competencies." *Counseling Psychologist*, 10, 45-52.
- Sue, D. W. (1981). *Counseling the culturally different: Theory and practice*. New York: John Wiley & Sons.
- Super, D. E. (1949). *Appraising vocational fitness*. New York: Harper & Brothers.
- Super, D. E. (1957). *The psychology of careers*. New York: Harper & Row.
- Tiedeman, D. V., & O'Hara, R. P. (1963). *Career development: Choice and adjustment*. Princeton, NJ: College Entrance Examination Board.
- Vaillant, G. S. (1977). *Adaptation to life*. Boston: Little, Brown.
- Wolfe, D. M., & Kolb, D. A. (1980). Career development, personal growth, and experimental learning. In J. W. Springer (Ed.), *Issues in career and human resource development*. Madison, WI: American Society for Training and Development.
- Zingaro, J. C. (1983). A family system approach for the career counselor. *The Personnel and Guidance Journal*, 62, 24-27.
- Zunker, V. G. (1986). *Career counseling: Applied concepts of life planning*. Monterey, CA: Brooks/Cole.
- Zytowski, D. G. (1969). Toward a theory of career development for women. *Personnel and Guidance Journal*, 47, 660-664.



Holland's hexagon model

Figure 4.1



The Life-Career Rainbow

Figure 4.2

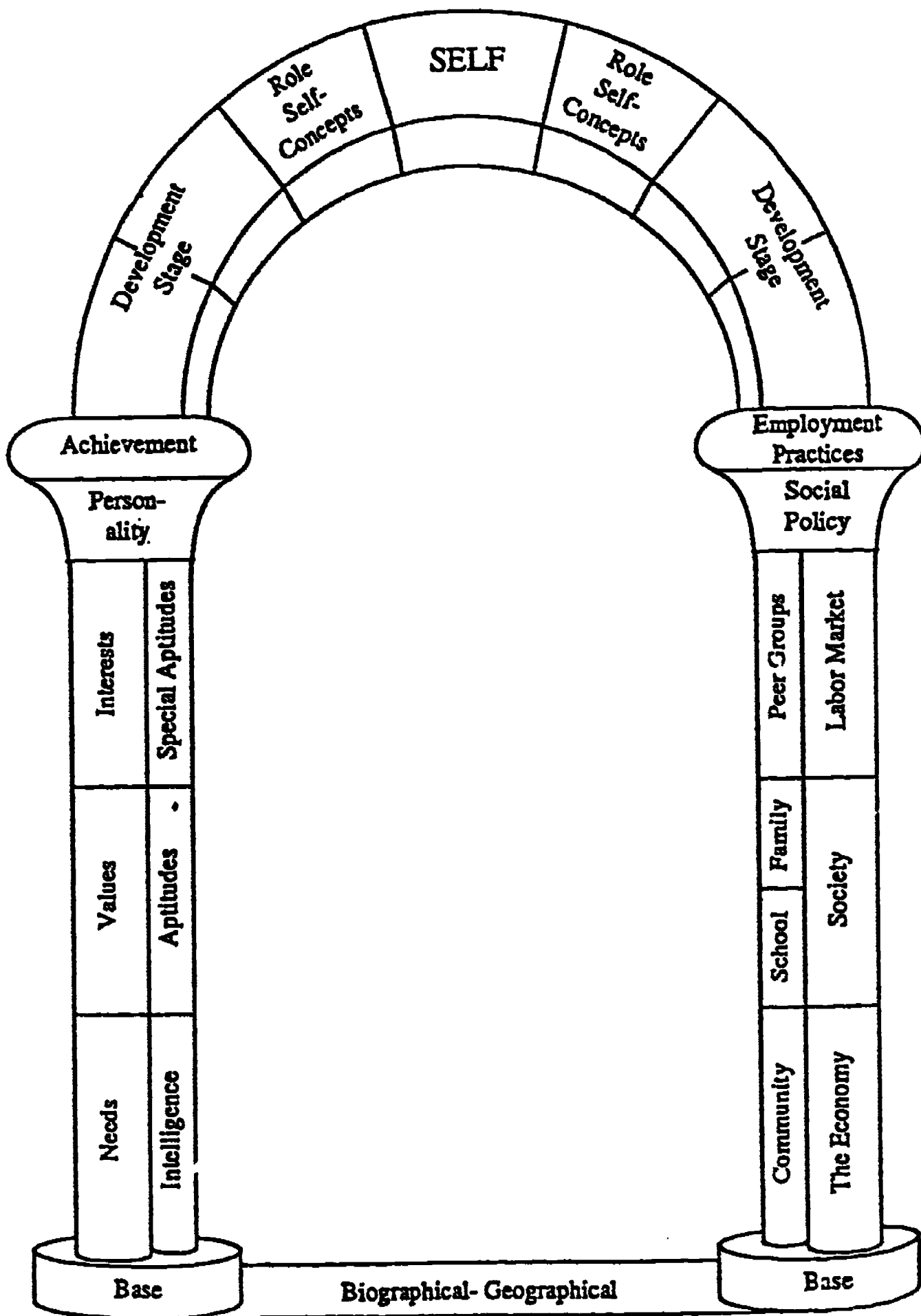
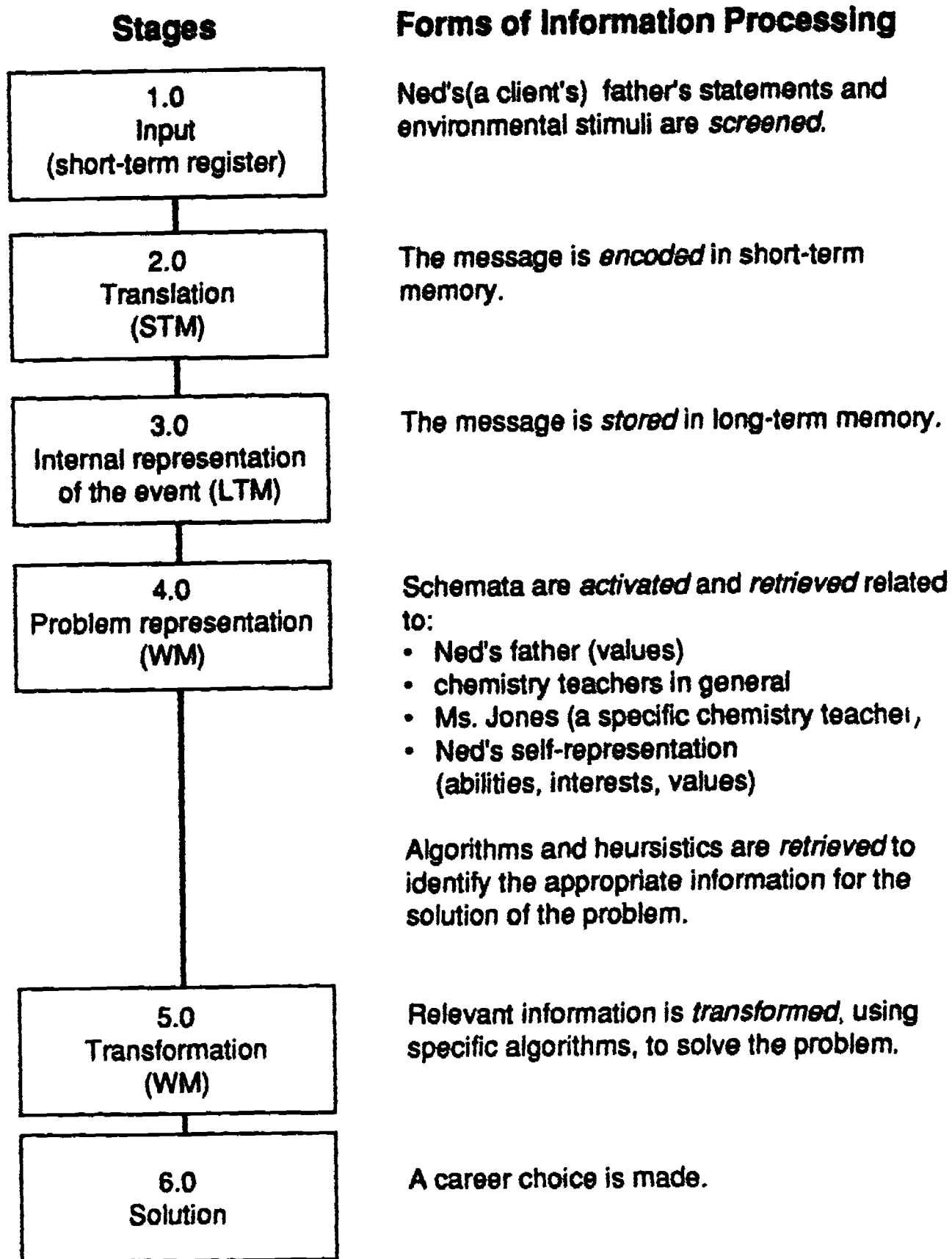


Figure 4.3



Cognitive Process Components Used in Transforming Information

Figure 4.4

Assumption	Explanation
1. Career choice results from an interaction of cognitive and affective processes.	CIP emphasizes the cognitive domain in career decision making; but is also acknowledges the presence of an affective source of information in the process (Heppner and Krauskopf, 1987; Zajonc, 1980). Ultimately, commitment to a career goal involves an interaction between affective and cognitive processes.
2. Making career choices is a problem-solving activity.	Individual can learn to solve career problems (that is, to choose careers) just as they can learn to solve math, physics, or chemistry problems. The major differences between career problems and math or science problems lie in the complexity and ambiguity of the stimulus and the greater uncertainty as to the correctness of the solution.
3. The capabilities of career problem solvers depend on the availability of cognitive operations as well as knowledge.	One's capability as a career problem solver depends on one's self-knowledge and on one's knowledge of occupations. It also depends on the cognitive operations one can draw on to derive relationships between these two domains.
4. Career problem solving is a high-memory-load task.	The realm of self-knowledge is complex; so is the world of work. The drawing of relationships between these two domains entails attending to both domains simultaneously. Such a task may easily overload the working memory store.
5. Motivation	The motivation to become a better career problem solver stems from the desire to make satisfying career choices through a better understanding of oneself and the occupational world.
6. Career development involves continual growth and change in knowledge structures.	Self-knowledge and occupational knowledge consist of sets of organized memory structures called schemata that evolve over the person's life span. Both the occupational world and we ourselves are ever changing. Thus, the need to develop and integrate these domains never ceases.
7. Career identity depends on self-knowledge	In CIP terms, career identity is defined as the level of development of self-knowledge memory structures. Career identity is a function of the complexity, integration, and stability of the schemata comprising the self-knowledge domain.
8. Career maturity depends on one's ability to solve career problems.	From a CIP perspective, career maturity is defined as the ability to make independent and responsible career decisions based on the thoughtful integration of the best information available about oneself and the occupational world.
9. The ultimate goal of career counseling is achieved by facilitating the growth of information processing skills.	From a CIP perspective, the goal of career counseling is therefore to provide the conditions of learning that facilitate the growth of memory structures and cognitive skills so as to improve the client's capacity for processing information.
10. The ultimate aim of career counseling is to enhance the client's capabilities as a career problem solver and a decision maker.	From a CIP perspective, the aim of career counseling is to enhance the client's career decision making capabilities through the development of information processing skills.

Figure 4.5

Notes

Module 5

What Is Information?
How Can It Be Accessed?
How Can It Be Used?



National Career Development Guidelines-Counselor Competencies

Skills to assist individuals in setting goals and identifying strategies for reaching goals.

Knowledge of changes taking place in the economy, society, and job market.

Knowledge of education, training, employment trends, labor market, and career resources.

Knowledge of basic concepts related to career counseling, such as career development, career progressions, and career patterns.

Knowledge of employment information and career planning materials.

Skills to use career development resources and techniques designed for specific groups.

Skills to use computer-based career information systems.

WHAT IS INFORMATION? HOW CAN IT BE ACCESSED? HOW CAN IT BE USED?

MODULE 5

Outline Topic	Delivery Methods	Trainer's Notes
Introduction	Lecturette p. 1	
What is Career and Labor Market Information?	Lecturettes pp. 2-4 <i>Figure 5.1</i> <i>Two Examples of Information</i> <i>Figure 5.2</i> <i>A Continuum from Primary Data to Knowledge</i>	
How Can Career and Labor Market Information Be Accessed? How Can It Be Used?	Lecturette p. 5	
Decision Area: An Occupation	Lecturette pp. 6-31 <i>Figure 5.3</i> <i>CIDS Files and File Cross References</i> <i>Figure 5.4</i> <i>Example From a CIDS Printed Resource</i> <i>Figure 5.5</i> <i>Sample Classroom Activities</i> <i>Figure 5.6</i> <i>Sample Index</i> <i>Figure 5.7</i> <i>Example From the OOH</i> <i>Figure 5.8</i> <i>Example From the DOT</i> <i>Figure 5.9</i> <i>Example From the GOE</i> <i>Figure 5.10</i> <i>Example From the Military Career Guide</i> <i>Figure 5.11</i> <i>Example From the SOC</i>	

Outline Topic	Delivery Methods	Trainer's Notes
Decision Area: A Work Setting	Lecturette pp. 32-37 <i>Figure 5.12</i> <i>Example From the SIC</i> <i>Figure 5.13</i> <i>Industry/Occupational Relationships Route</i> <i>Figure 5.14</i> <i>North Dakota OIS Bookkeeping and Accounting Clerks</i>	
Decision Area: Geographic Region	Lecturette pp. 37-40 <i>Figure 5.15</i> <i>Example of Local Information</i>	
Labor Force, Industry and Occupational Projections	Lecturette pp. 40-86 <i>Figure 5.16</i> <i>Outlook 1990-2005</i> <i>Figure 5.17</i> <i>Sequence of Projection Procedures to Determine Occupational Demand</i> <i>Figure 5.18</i> <i>Labor Force</i> <i>Figure 5.19</i> <i>Labor Force Will Continue to Grow</i> <i>Figure 5.20</i> <i>Labor Force Grows Faster Than Population</i> <i>Figure 5.21</i> <i>Labor Force Growth By Age</i> <i>Figure 5.22</i> <i>Age Distribution of Labor Force is Changing</i> <i>Figure 5.23</i> <i>Women's Share of Labor Force is Growing</i> <i>Figure 5.24</i> <i>Labor Force Participation Rate Trends Differ for Men and Women</i> <i>Figure 5.25</i> <i>Labor Force Growth Slows More for Women Than Men</i> <i>Figure 5.26</i> <i>Labor Force Growth by Race and Hispanic Origin</i> <i>Figure 5.27</i> <i>Labor Force Entrants by Race and Hispanic Origin, Projected 1990-2005</i> <i>Figure 5.28</i> <i>Distribution of the Labor Force by Race and Hispanic Origin</i> <i>Figure 5.29</i> <i>Economic Outlook</i> <i>Figure 5.30</i> <i>GNP Growth and Projected Alternatives</i> <i>Figure 5.31</i> <i>Unemployment Rates and Projected Alternatives</i>	

Outline Topic**Delivery Methods****Trainer's Notes**

*Figure 5.32
Industry Employment*

*Figure 5.33
Employment Growth by Major Economic Sectors, 1975-2005*

*Figure 5.34
Employment Growth, 1975-1990 and Projected 1990-2005*

*Figure 5.35
Job Growth in Services Outpaces Other Industry Divisions, 1990-2005*

*Figure 5.36
Employment Growth Within Services and Retail Trade Will Be Concentrated*

*Figure 5.37
Industries Adding the Most Jobs, 1990-2005*

*Figure 5.38
Industries With the Fastest Job Growth, 1990-2005*

*Figure 5.39
Industries With the Most Rapid Job Declines, 1990-2005*

*Figure 5.40
Industries With the Fastest Growing Output, 1990-2005*

*Figure 5.41
Fastest Growing and Declining Manufacturing Industries, 1990-2005*

*Figure 5.42
Occupational Employment*

*Figure 5.43
Employment Growth by Major Occupational Group, 1990-2005*

*Figure 5.44
Job Openings for Replacement and Growth, 1990-2005*

*Figure 5.45
Fastest Growing Occupations, 1990-2005*

*Figure 5.46
Fast-Growing Occupations Generally Requiring at least a Bachelor's Degree, 1990-2005*

*Figure 5.47
Fastest Growing Occupations Generally Requiring Post-secondary Training But Less Than a College Degree*

*Figure 5.48
Fastest Growing Occupations Generally Requiring No More Than a High School Diploma, 1990-2005*

*Figure 5.49
Job Growth May Be Viewed in Two Ways: Change, 1990-2005*

Outline Topic	Delivery Methods	Trainer's Notes
	<p><i>Figure 5.50 Occupations Adding the Most Jobs, 1990-2005</i></p> <p><i>Figure 5.51 Employment Change in Declining Occupations, 1990-2005</i></p> <p><i>Figure 5.52 Education Pays</i></p> <p><i>Figure 5.53 Annual Earnings of Workers by Highest Level of Educational Attainment, 1987</i></p> <p><i>Figure 5.54 Educational Attainment of Workers by Race and Hispanic Origin</i></p> <p><i>Figure 5.55 Concentration of Blacks and Hispanics by Major Occupation Group, 1990</i></p> <p><i>Figure 5.56 Educational Attainment and Earnings</i></p> <p><i>Figure 5.57 Female Earnings as a Percent of Male Earnings</i></p>	
<p>Other Uses of Information</p>	<p>Lecturette pp. 87-88</p> <p><i>Figure 5.58 Sample of How Labor Market Information is Used</i></p>	
<p>Limitations of Career and Labor Market Information</p>	<p>Lecturette pp. 89-91</p>	
<p>Networks as Sources</p>	<p>Lecturette p. 91</p>	
<p>Activities</p>	<p>5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 23 and Case Studies</p>	

WHAT IS INFORMATION? HOW CAN IT BE ACCESSED? HOW CAN IT BE USED?

MODULE 5

INTRODUCTION

Career decision making is a complex process.

The more knowledge one can obtain about self and the world of work, the better the career choice.

We are surrounded by information. Our challenge is to understand it and integrate it into career decision making.

Various federal and state agencies cooperate to produce most of the data.

Labor market statistics are used in a variety of ways.

The challenge is to understand the information, help others understand their information needs, and integrate that information into the process of career decision making.

Introduction

Career decision making is a complex process. One step in the process is to relate self-knowledge to the available opportunities in the world of work. To do this successfully one must be able to locate, access, evaluate and use information that defines options and opportunities. Career decision making using labor market information is based on the assumption that the more knowledge one can obtain about oneself and the world of work, the better the career choice.

We are surrounded by career and labor market information. The newspaper reports the latest unemployment rate; a business magazine discusses possible labor shortages; a company's annual reports announces a plant expansion; a women's magazine has an article on male and female earnings; a career information system provides students with information about job outlook.

At the heart of many articles, news analysis and research reports are the statistical data collected by the federal and state governments. The data are sometimes referred to as career and labor market information. Various federal and state agencies cooperate to produce most of the data series that form the basis for existing labor market information. These federal and state programs rely upon the cooperation of private businesses and individuals to provide the actual data through various surveys and administrative filing requirements.

Labor market statistics are used in many ways. As raw data they report the labor market environment of the nation, or of a particular locale. Statistics are compiled to tell the story of a selected group of people or to make a compelling argument for changes in policy or programs. Statistics are also selected to augment occupational descriptions and information. It is a challenge to understand the information, to help others understand their information needs and to help them integrate that information into the process of career decision making. To relate to the multitude of educational and career alternatives, career development facilitators need "handles" to help organize, understand and integrate information about the world of work.

In this module we will define career and labor market information and then discuss where you can find it and how you can use it. We will then look more carefully at one kind of career and labor market information, labor force, industry and occupational projections.

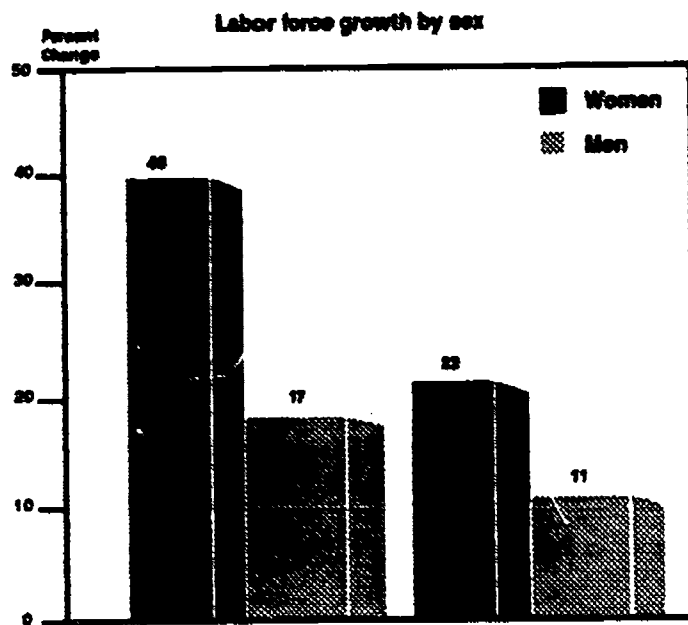
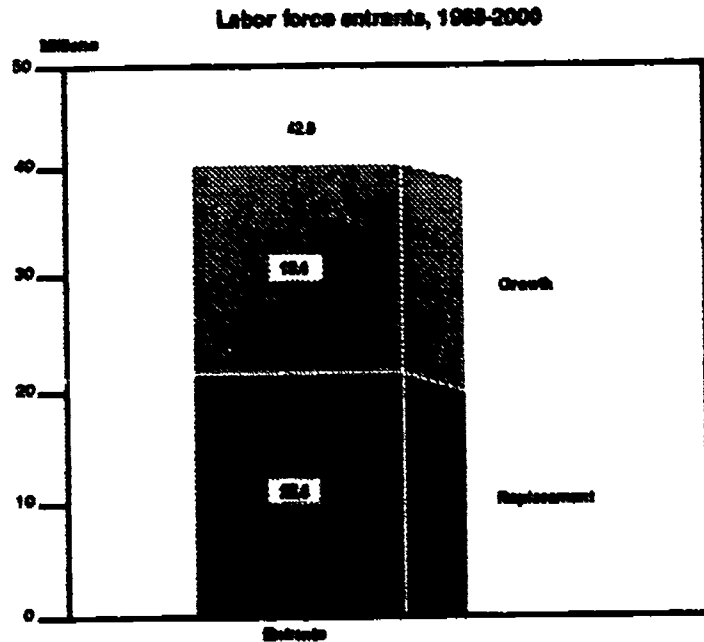
WHAT IS CAREER AND LABOR MARKET INFORMATION?

In a very narrow sense, labor market information refers to data about people, jobs and employers.

What Is Career and Labor Market Information?

In a very narrow sense, when we use the term, "labor market information" (LMI) we refer to data about people, jobs and employers. LMI can also include demographic, economic and educational data. This information also provides us with an understanding of the labor market and our economy. It can tell us how many people over sixteen years of age are available for work, how many workers are employed and unemployed and whether they are engaged in full-time or part-time work. This information also describes the kinds of businesses located in a particular city, county, metropolitan area or state. It explains the growth or decline of employment in particular industries.

Two Examples of Information



SOURCE: Bureau of Labor Statistics

Figure 5.1

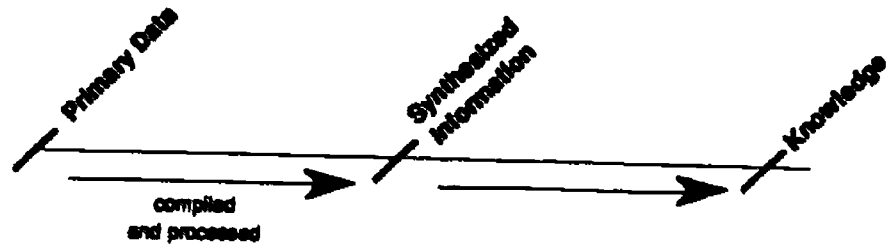
Figure 5.1

Career and occupational information is synthesized labor market information.

Most published sources contain numbers, words, graphs and/or pictures.

Career information and occupational information is synthesized labor market information. It can take the form, for example, of labor market information, educational and training information, financial aid and budget planning guidelines. It also includes information that defines specific tasks to be mastered before entering an occupation, or an explanation of the skills needed to get and keep a job.

Most published sources of career and labor market information can be characterized as containing numbers, words, graphs and/or pictures. The continuum from numbers to words could also be described in terms of the transformation of primary data to synthesized information to knowledge.



A Continuum from Primary Data to Knowledge

Figure 5.2

Figure 5.2

As analysis and synthesis are added to primary data, it becomes easier to understand and integrate into the process of career decision making.

There are many ways to categorize published information. The following system is one way.

Primary sources of career and labor market information report original raw data.

Primary sources of career and labor market information are those that report original raw data. Most are government reports or specific research studies that display data and may or may not include analysis or explanations. Almost all other sources of career and labor market information are based on these primary data. While many of these primary sources are intimidating, they do provide the most comprehensive and detailed data on specific aspects of the labor market. Examples include the area wage surveys and *Employment and Earnings*.

Secondary sources draw on primary data to address a specific purpose.

Secondary sources draw on primary data to address a specific purpose. They may include data from many primary sources and not necessarily the data from any one source. For example, a Career Information Delivery System represents a highly analyzed and synthesized form of primary data into a secondary resource. Other secondary sources include reports of research on particular topics such as the *U. S. Women's Bureau Fact Sheets*, state occupational projections, *American Demographics*, or the local newspaper.

Reference materials help make statistics more intelligible.

Career and labor market information has increased in volume and sophistication.

Congress relies heavily on information to shape, refine or cut back government programs.

The use of LMI is one way to target funds when resources are limited.

These secondary sources not only present analysis and synthesis but they often contain the perspective of the author in the presentation of information. They typically include words, numbers, pictures and graphs to help present the information represented in the text. Secondary sources are created for easier access.

Reference materials are other types of resources that organize career and labor market information. Rather than offer new information, they help labor market statistics become more intelligible.

Career and labor market information has increased in volume and sophistication as our technologies for collecting, storing and communicating information have advanced. Congress has learned to rely heavily on information to shape, refine or cut back government programs. Three federal policy concerns that have been shaped by labor market information are unemployment, poverty and the need for job training.

An example of the federal government's concern for unemployment is illustrated by Title III in the Job Training Partnership Act (JTPA) of 1982. JTPA was crafted not only to prepare people to enter the labor force, but also to meet the needs of dislocated workers, such as automobile plant employees in Michigan. LMI defined how many people were unemployed, identified the industry or industries that were declining, and determined the geographic areas where the unemployment was occurring. To address the needs of workers who had been dislocated, job training programs were developed. Government policy makers used LMI because they were concerned that job training be provided, but only for occupations where a demand was anticipated. It is also important to note that JTPA programs and others are frequently evaluated for their effectiveness by using labor market information to measure their results.

The federal concern for poverty can be seen in the Family Support Act of 1988, otherwise known as welfare reform. A key section of this legislation, the Job Opportunities and Basic Skills (JOBS) Training program, required the states to develop plans for providing education and job training for parents who were receiving welfare funds. LMI was used to determine the number of parents who would be eligible for the program and for which occupation they should be trained.

A piece of federal legislation that illustrates a concern for job training can be found in the 1976 amendments to the Vocational Education Act of 1963. Congress revised federal job training programs by mandating that they must be evaluated according to how the employment obtained by the program participants related to their training. In other words, to receive continued funding, programs that trained individuals to be key punch operators had to show evidence of placing individuals in those jobs.

Legislators in Washington will continue to support programs for unemployed or dislocated workers, the poor and the untrained. To get the most from the limited tax dollar, funding needs to be targeted

HOW CAN CAREER AND LABOR MARKET INFORMATION BE ACCESSED? HOW CAN IT BE USED?

When we talk about "access" we are talking about information delivery systems. When we talk about "using" information, we are referring to the process of integrating information into career decision making.

To be effective, this process must be client centered.

There are three key decision areas that represent ports of entry into a wide variety of information resources.

to those most in need. The use of LMI is one way to effectively direct these funds in a time of limited resources.

How Can Career and Labor Market Information Be Accessed? How Can it Be Used?

Career and labor market information is a large body of data and information. Information is generated on the industrial structure and economic base of each part of the country. Similarly, each business and industry employs a unique occupational distribution of skills. The complex relationship between geographic area, industry, occupations and personal interests also needs to be considered when using information for career decision making.

When we talk about "access" we are talking about information delivery systems. What are they? Where are they? When we talk about "using" information, we are referring to the process of integrating information into career decision making.

To be effective, the career decision making process must be client centered. A client's interest in labor market information frequently begins with personal interests, experience and aptitudes. The goal is to help a student or client achieve a better understanding of his/her abilities, experiences and interests as they relate to occupations. There are many assessment tests and processes available to career development facilitators to achieve this goal. Following a better understanding of self, the client can begin the process of occupational and job exploration. The next step is to explore career options and integrate that information into career decision making.

There are three key decision areas that represent ports of entry into a wide variety of information resources. The decision areas that use information in the career development process are:

1. Choice of an occupation;
2. Choice of a work setting (business or industry); and
3. Choice of a geographic area.

For example, clients may be uncertain about the kind of career they want to pursue, but they may be certain that they want to live in a particular city. In such cases, the industrial and occupational structure of the locale can be accessed and understood by using local career and labor market information. This information can then be used to move the decision making process forward.

Another example might involve a client who knows that he/she wants to work in a particular industry, such as advertising. This decision would start the access of information through the industry of interest. After the information has been accessed, issues related to a career or geographic relocation could be discussed.

DECISION AREA: AN OCCUPATION

Career and labor market information helps people explore a variety of occupational opportunities.

Each system uses a structured methodology to assign a classification code to an occupation.

These systems give order and meaning to occupational information.

Decision Area: An Occupation

Clients and students initially may consider an occupation for many reasons. For example, a student may have always wanted to be a teacher. A laid off worker may want to look at occupations related to his/her experience and training. A student may have helped a parent at work and expresses an interest in entering a similar occupation. An occupation is a convenient port of entry to information. Learning about occupations is relatively easy; there are many resources and classification systems.

Career and labor market information helps people explore the variety of occupational opportunities that comprise the world of work. This information also provides in-depth information about the nature of the occupation's training and qualifications, working hours, earnings and related occupational fields.

The terms "occupational description" and "job description" are frequently used interchangeably even though the term job description technically refers to a narrow scope of tasks or duties. An occupational description typically includes characteristics of several closely related jobs.

Occupational classification systems use a variety of factors such as tasks performed, skill level required, worker interests, training requirements, the industries where work is performed and other characteristics as the basis for the classification system. Examples include the *Dictionary of Occupational Titles (DOT)* and the *Standard Occupational Classification Manual (SOC)*.

All systems use a structured methodology to assign a classification code to an occupation or program. This systematic process is referred to as job analysis, industry analysis, or program analysis, depending upon the type of classification system being developed. These coding characteristics can be used to relate one classification system to another, or to make connections between the characteristics of an individual with an occupation or program. Classification systems make it possible to draw comparisons between individual occupations and groups of occupations. Systems that group occupations according to similar types of work performed are useful in identifying skills that are transferable from one occupation to another.

Other systems, which group occupations by instructional program areas, make it possible to link vocational and educational programs to specific occupational training needs. A system in which interests are the basis for classification can be used by those who express an interest in certain kinds of activities, even though they may have little work experience.

Occupational classification systems are used to:

- analyze the tasks completed by people in the occupation;
- examine projected employment opportunities;
- learn about job openings;

CAREER INFORMATION DELIVERY SYSTEMS (CIDS)

CIDS provides current, accurate and locally relevant occupational and educational information.

- become informed about preparation and training requirements;
- discover advancement opportunities and career ladders;
- determine wage levels within an occupation; and
- find out where and how to locate more information.

Resources for occupational information include:

- Career Information Delivery Systems (CIDS);
- *Occupational Outlook Handbook (OOH)*;
- *Dictionary of Occupational Titles (DOT)*;
- *Guide to Occupational Exploration (GOE)*;
- *Military Career Guide*; and
- *Standard Occupational Classification System (SOC)*.

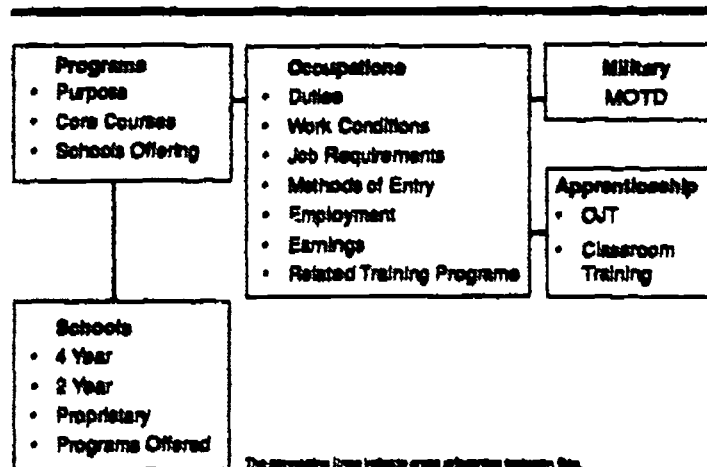
Career Information Delivery Systems (CIDS)

In 1984, Congress reinforced and expanded the NOICC/SOICC role in the development and use of occupational information by involving them in helping to meet the labor market information needs of young people and adults making career decisions. Thus, NOICC and the SOICCs became involved in the development of Career Information Delivery Systems (CIDS).

CIDS are systems that provide individuals with current, accurate and locally relevant occupational and educational information. To do this, CIDS use computer programs, print materials and videos that allow individuals to search for and access information about themselves and career options. CIDS serve as career guidance tools, helping individuals relate personal characteristics such as interests, abilities, experience and educational goals with compatible job, career and training opportunities.

The following chart illustrates the type of information found in CIDS programs.

CIDS Files and File Cross References
(Example)



This chart illustrates the type of information found in CIDS programs.

Figure 5.3

A typical CIDS describes 250 or more occupations. The systems describe occupational duties, working conditions, worker requirements and employment outlook. The CIDS also describe occupational wage and salary levels and educational and training requirements. Many include information on financial aid, major employers in the state, and job openings listed with the state employment security agency. In addition, the systems provide information on postsecondary institutions, such as admissions requirements and programs offered. Most CIDS now include military occupational and training information.



Example from a CIDS Printed Resource

3620.2

Ultrasound Technologists

Work Description

Ultrasound technologists use special kinds of sound waves to help people who are ill. They are also known as diagnostic medical sonographers. They use machines known as ultrasound scanners to find medical problems in patients.

A technologist carefully places a patient against the machine. Only the area of the body that must be tested is put against the machine. A technologist then starts the scanner. This points high frequency sound waves at the correct part of the patient's body. Sound waves go through the outside of the body and bounce off the patient's body organs and tissues. Shadowy pictures, called images, can be recorded on a screen or film. The images show the shape and position of body parts such as the heart, kidneys, or muscle and tissue masses. These images can show places where liquids, called fluids, are building up in the body. They can also show the rate of growth of a baby while it is inside of its mother. Then doctors study these images to find out what kind of treatment the patient needs.

An ultrasound technologist must first study the results of other medical tests, called diagnostic tests, that have been done on the patient. They look for information that will help them choose the right ultrasound equipment. This information also helps them find which area of the patient's body to treat. Technologists explain to patients how each test works and what it is for. They make sure that the images the machine makes can be read and understood clearly. Only then do they record the test results.

Some ultrasound technologists specialize in brain testing, heart testing, eye testing or testing how babies develop in the womb. To become certified to give a special type of test, an individual must pass a national exam in each specialty area.

Working Conditions

Ultrasound technologists generally work 40 hours per week. Some work rotating shifts. Others must be ready to go to work at any time.

Work Places

Ultrasound technologists work in hospitals and clinics. They may also work in some doctor's offices.

Workers' Comments

Ultrasound technologists like working with patients. They like giving ultrasound tests because the tests are painless and do not expose patients or themselves to any harmful effects. Ultrasound tech-

nologists like being members of health care teams. They think doctors respect them and the work that they do.

Getting the Job

Some hospitals have training programs in ultrasound technology. Training programs generally last one year. To get into one of these programs, ultrasound technicians must finish two years of college or a two-year vocational school program in allied health. After finishing the one-year training program, an ultrasound technologist may become certified by taking an exam. The American Registry of Diagnostic Medical Sonographers gives this exam. Technicians may be certified in one or more specialties and are then known as registered diagnostic medical sonographers.

Applicants must have good grades in math, physics, biology, zoology, and English. Some understanding of how to use computers may be valuable in the future.

Pay and Employment

Typical salaries range from about \$19,700 to \$32,900 per year.

Salaries vary a great deal from hospital to hospital. Ultrasound technologists are often paid on the same salary scale as X-ray technicians.

The national outlook for this occupation is good. Job openings may exceed the number of qualified applicants throughout the 1980's.

Moving Up

Ultrasound technologists may be promoted by becoming certified to give more than one kind of ultrasound test. With more work experience, a technologist may be promoted to a supervisor or educational coordinator. Some technologists earn college degrees so they can teach ultrasound technology to others.

Where to Write

You may be able to get more information about this occupation by writing to:

American Soc of Radiologic Technicians
15000 Central Avenue, S.E.
Albuquerque, NM 87123

Figure 5.4

Within each state, SOICCs promote the use of CIDS.

CIDS are designed to digest a multitude of local, state and national career and labor market information. Each state has its own program of collection, analysis, synthesis, organization and linkage of data.

Each state has a process for updating and distributing CIDS.

Within each state, SOICCs promote the use of the systems and information in them. State CIDS are located at some 18,000 sites nationwide, including schools, colleges, libraries, job training centers, corrections facilities, vocational rehabilitation centers, employment security offices and community organizations. It's estimated that they serve over six million people each year. More than half of the 48 state CIDS now in operation were originally developed with NOICC funding. Today NOICC is the federal program with responsibility for assisting statewide CIDS.

Each state has its own history of development and operation. *(Specifics of your state's system should be included here. This would include how and when the system was established, who is currently responsible, how it is funded, make-up of advisory board, staffing, extent of services, i.e., number of sites, number of users, link to national data bases, training provided, and any other details that describe the state system operation. Fees charged, methods of distribution, frequency of update and evaluation procedures or experience also are determined by each state.)*

The CIDS is a primary provider of information necessary for career awareness, exploration, planning and decision making. CIDS are designed to digest a multitude of local, state and national labor market information, education and training information, and employability requirements. The interpretation and synthesis of information is provided through the CIDS. Likewise, the links between occupations and education and training are made within the systems. Each state system has its own program of collection, analysis, synthesis, organization and linkage of data.

Essentially, CIDS processes a large amount of labor market information. The Bureau of Labor Statistics provides the bulk of raw data from wage surveys, wage reporting, employment outlooks, employment trends, current employment numbers, current employment openings and other labor market information. In addition, census data, reports from trade and professional associations, review boards and other groups of government agencies supplement data gathered by the state and national labor department. State educational data and training information come from postsecondary training institutions and agencies, including community and technical colleges, colleges and universities, proprietary and trade schools, apprenticeship programs, Job Training and Partnership Programs (JTPA) and other sources. Most CIDS also have national postsecondary education program information that is gathered by one of several national companies and resold to the states for use in local systems.

Many states collect and organize information on services, agencies and organizations that provide career development, job placement and job training assistance. In addition, financial aid information, including state and national programs of loans, scholarships, grants and eligibility requirements is assembled for use with the CIDS

program. A number of CIDS also provide teaching activities, workbooks and other resources, such as videos, which help individuals learn and understand the information presented in the CIDS. This vast array of data and information from many different sources is analyzed, synthesized and organized into a systematic structure that allows individuals access in a way that is meaningful to them at their level of career development. This is the primary value of a CIDS. It digests an enormous amount of raw information, often in a variety of incompatible formats that are hard to understand, and delivers in a format that is user-friendly.

(Each state system should now explain where they obtain their data, who gathers, analyzes and organizes it. What are the limitations of the data? How is it updated? How is the quality assured? Include information about reading levels of materials and how information is targeted to age levels and to specific populations.)

Contents and Use of CIDS Information

Contents and Use of CIDS Information

The following types of information are included in a CIDS.

- Occupational Descriptions
- Wages, Hours and Fringe Benefits
 - Local
 - State
 - National
- Employment Trends and Outlook
 - Local
 - State
 - National
- Method of Entry, Qualifications
- Advancement Opportunities
- Educational/Training Programs
- Military Training and Employment
- Type of Industry or Business
- Educational Program
- Financial Aid Packages
- Occupational Classification Systems Based on Similarities in Work Performed Interests
- Occupational Characteristics
 - Aptitudes
 - Industry Designation
 - Environmental Conditions
 - General Educational Development (GED)
 - Reasoning
 - Mathematics
 - Language
 - Physical Demands
 - Specific Vocational Preparation (SVP)
 - Temperaments
 - Work Fields (Work Methods)
 - Worker Functions (Data-People-Things)

Occupations frequently represent many specific jobs.

CIDS contains details on a worker's job tasks.

Descriptions help users visualize occupations.

Wages, hours and fringe benefits are an important part of career decision making.

Earning potential offers life style and career choice.

Occupational Descriptions

What are they?

Occupational descriptions are composed of summary statements that reflect the tasks performed in an occupation. What is done and how it is done is clarified. Occupational descriptions usually contain some or all of the following in summary form.

- What the worker does
- How the worker does it
- A description of the physical and mental activities required
- Job duties by industry, type or size of employer, and size of firm
- What the workers produce or accomplish
- The hazards or environmental conditions that are present
- The impact of technology on the work tasks
- The working relationship to other people
- The degree of specialization and responsibility
- The tools, machines and materials used
- The alternate job titles used in some industries

How are they used? Occupational descriptions contain information that allows decision makers to visualize the work situation realistically, thus increasing the chances of a better choice when selecting an occupation.

Occupational descriptions can also help those considering work in a general field to narrow their choice to a more specific area, then choose among jobs within that area.

Wages, Hours and Fringe Benefits

What is it? The terms "wages," "salary," or "earnings" are often used interchangeably in CIDS. They are stated in hourly, daily, weekly, monthly and annual terms. The dollar figure used in stating a wage rate usually does not include fringe benefits, such as medical insurance, sick leave and paid vacations, which, if available, are listed separately. Normal work week hours, usual work schedule (days of the week), shift work and overtime pay also are covered.

Wage information is useful only when the relevant factors associated with a particular wage rate are known. For example, the amount of experience or training needed to qualify for a given salary rate would have to be known for the information to have value.

How are they used? The earning potential for an occupation is a prime consideration for many when choosing an occupation. However, the type of wage data required will vary, depending on the decision being made at the time. For example, a person inquiring about a particular job opening would want accurate information regarding the current wages being paid. On the other hand, someone involved in long-range career planning and the study of several occupations would probably be more interested in the general earnings potential for each occupation, or the comparative levels of earnings between occupations.

Employment trends predict the future of an occupation.

Outlook information is an estimate of future employment.

Method of entry helps define how to get into an occupation.

This information is vital to long-range planning.

Advancement within and across jobs is a consideration in choosing a career.

Dead-end jobs may be stepping stones or may provide transferable skills.

Employment Trends and Outlooks

What are they? Employment trend data indicate past and current increase or decrease in employment in an occupation or industry.

Employment outlook is an estimate of future employment.

Underlying reasons for changes in employment trends and outlook are explained in the outlook sections of a CIDS. Variations in supply and/or demand for an occupation in one or more industries are also included.

How are they used? Current employment trend and outlook data can be important to career decisions. Popular perceptions of the outlook for any given occupation may be outdated. That is, there may have been a surplus of job seekers for a particular occupation at a given time. That may no longer be true, although the general public is unaware of any change in the supply or demand for workers. Investigation of current labor market information would correct misconceptions.

Method of Entry/Qualifications

What are they? This is information regarding employer hiring requirements, as well as the education and training necessary to compete for jobs in an occupation. Specific information consists of items such as experience, education, physical requirements, and state licensing or certification standards. Personal interests and aptitudes important for success on the job are also included. Recommended high school courses, part-time and summer employment, on-the-job training, related military training, union apprenticeship, and hobbies are some of the more important items listed under training and educational requirements.

How are they used? This information is vital in making plans to prepare for employment in an occupation. Long-range planning must take into consideration any lengthy training or educational requirements for a job. Experience, hobbies, interests and aptitudes also can be valuable clues to whether a person has previously acquired skills that can be transferred to an occupation.

Advancement Opportunities

What are they? Advancement and promotional opportunities in a field refers to the kinds of promotions one can expect and the rate of advancement within specific occupations. Opportunities for job improvement without promotion, such as higher pay, a wider span of authority, self-employment, title or rank, professional standing, or relocation for more pay or prestige, are covered. Requirements for promotion, such as a willingness to move, advanced degrees, or years of service, as well as occupations to which workers may transfer, are also discussed in CIDS.

How are they used? A realistic look at promotional opportunities and job improvement potential in an occupation is provided. It can help career planners eliminate misconceptions about jobs. For example, some jobs considered to be "dead-end" jobs can, in fact, be

State and national educational program data provide a basis for career planning.

Many military jobs have civilian counterparts.

Type of business or industry can influence life style, work conditions and status.

Knowing about the work site helps the individual understand an occupation.

stepping stones to better jobs. Skill transferability is also an important concept, both within an occupational area and between occupational areas.

Educational and Training Programs

What are they? This information provides descriptions of programs of study and the locations of institutions that offer them. Some CIDS include a short description of the education/training program including subject matter, length of course, prerequisites, the objectives of the course and a description of the institution.

How are they used? Information about education and training programs tell whether particular courses are offered locally. The length of time required to complete a course also is important. Course prerequisites also should be considered in planning an educational program.

Military Training and Employment

What is it? Military occupational information describes military occupations, the education required when enlisting, the training provided and the branch of the armed services employing workers. Information about military occupations also identifies civilian counterparts. Gender restrictions are indicated for combat-related jobs. Required scores from the Armed Services Vocational Aptitude Battery (ASVAB) are listed for each military occupation.

How is it used? The armed services are a significant trainer and employer of young adults. Thus, civilian labor market information alone does not provide a comprehensive base for making career decisions. It is important to include military training and career information, especially about occupational areas with civilian counterpart jobs.

Type of Industry or Business (Work Site)

What is it? Each type of industry or business has a different working environment, even though they may employ persons in similar occupations. For example, a truck driver who works for a moving and storage company will usually have to load and unload the trucks by hand, whereas an over-the-road driver may not touch the freight. Likewise, the skills and work of a plumber will vary considerably between residential construction and repair work. The type of industry or business is a major influence on the specific job skills that are most frequently used, the environmental working conditions, pay and benefits, and numerous other conditions of employment.

How is it used? Knowing the work site in which an occupation is located provides significant help. With information on the operating conditions within an industry and the products they produce, a CIDS user can make better decisions.

Education and training programs are organized and presented in a CIDS.

Financial Aid Packages help parents and students learn about the availability of assistance to support an education beyond high school.

Occupational characteristics give life to occupations.

Characteristics help to sort or discriminate within or between occupations.

Individuals may compare their personal characteristics to occupational characteristics.

Educational Programs

What are they? Educational programs are organized in a system called the Classification of Instructional Programs. It organizes all instructional programs at the high school and post-high school levels into a common taxonomy that is presented in a CIDS.

How are they used? The Educational Programs section of CIDS is used at state and national levels to collect data on enrollments and graduates at various institutions and levels of education. Data on graduates is useful in career planning since this represents the primary source of labor supply for many occupations. Comparing supply data with demand forecasts will enable a person to predict the likelihood of employment in a specific area of training.

Financial Aid Packages

What are they? Financial Aid Packages are mainly for high school students and their parents, but also can be used by older persons who need financial aid for an education beyond high school. They are included in most CIDS.

How are they used? Financial Aid Workbooks help parents and students learn about the types of financial aid available to support education beyond high school, estimates eligibility levels, and provides directions on how to apply for financial aid.

Occupational Characteristics

What are they? Occupational characteristics are the identifying and descriptive factors that are unique to a given occupation. The *Standard Occupational Classification (SOC)* is used in most CIDS and by the state and federal governments to organize and report employment data.

How are they used? Characteristics are used in the CIDS to describe an occupation in terms that are useful in several ways. Since job characteristics are expressed in common terms, they allow comparisons between occupations. Thus, occupations that share some of the same or similar characteristics can be grouped together to produce lists that are useful in searching for occupations associated with an individual's transferable skills.

Individuals may compare their own skills, knowledge, interests and abilities with those required by occupations they have an interest in, thus improving their chances for a better career choice. For example, the physical demands of an occupation can be an important consideration, not only for persons who have a physical impairment, but also for anyone who is unwilling or unable to engage in certain physical activities, such as lifting heavy objects continuously. Similarly, the length of training time required for an occupation might be a determining factor for someone who needs an immediate income to support a family.

Other Print, Computer and Video Resources

Many CIDS have developed materials to supplement the occupational and educational data files. Some of these include computer programs that deal with scholarships, job seeking skills and resumes. Supplemental print materials include tabloids and student workbooks covering interests, abilities, employability skills, and career exploration activities. Video tapes are available that cover many of these areas, as well as career exploration, subjects such as career planning and decision making.

Information from a CIDS Computer Program

All CIDS have a search and retrieval program designed to sort occupations and educational training programs based on the user's interests, abilities, outlook and many other characteristics. Some of these characteristics may include:

- Interests
- Abilities
- Physical Effort
- Office of Education (OE) Occupational Clusters
- Dictionary of Occupational Titles* (DOT) Occupational Families
 - Data, People, Things, Ideas, Interests
- Standard Occupational Classification* (SOC) Divisions
- Educational Program
- Years of Post-High School Education and Training
- Out-of-School Training
- Other Qualifications Required
- Wages and Salary
- Urban or Rural Job Settings
- Travel
- Working Conditions
- Exposure to Unpleasant Working Conditions
- Guide for Occupational Exploration* (GOE) Work Areas
- School Subjects of Interests
- Field of Work
- Reading, Writing, and Speaking Abilities
- Reading Levels
- Writing Levels

To access data, a search and retrieval schema is available in each CIDS.

Occupational or educational characteristics can be used to search and retrieve data.

CIDS address a significant number of the competencies in the National Career Development Guidelines.

National Career Development Guidelines Linkages

CIDS can be an integral part of the career development process for all individuals, from kindergarten through their adult years. The National Career Development Guidelines provide a framework for the career development process. These guidelines identify the student competencies needed at each level of elementary, middle, high school and adult development to enable individuals to progress along the career development path. These competencies are supplemented with statements of what students will be able to do when they have mastered the competency. These statements are called student indicators. The competencies and indicators are divided into three areas: self-knowledge, educational and occupational exploration and career planning. (See Figure 1.4)

Each state has its own plan for adopting the Guidelines and using the CIDS to interface with the Guidelines.

CIDS data and resources should be integrated into the classroom to teach the competencies.

All users of CIDS need inservice training.

Many states are either adopting the National Career Development Guidelines or have developed their own set, which are typically very similar to the national guidelines. CIDS have, or are in the process of correlating, their system's components and products to the national or state specific guidelines that are being used in the respective states. *(Each state should provide specific examples of what they are doing to interface their CIDS with the career development competencies used in their state. An illustration of how this can be done follows.)*

An Example of a CIDS Interfaced With Career Development Competencies

Many of the national career development competencies are related to what students need to learn. Frequently this can best be accomplished through classroom and small group instruction conducted by counselors and/or teachers. To accomplish this, many CIDS have classroom activities and/or student workbooks that facilitate teaching these competencies.

(Each state should illustrate their own specific teacher/classroom materials at this point and show how these relate to the career development competencies.)

Some materials have been developed for classroom use that are keyed directly to the national guidelines and can be used in any state. Examples are included in Figures 5.5 and 5.6.

Sample Classroom Activities

INTERVIEW A WORKER

<p>OBJECTIVE Students will obtain information about careers they are interested in.</p>	<table border="1" style="margin: auto; border-collapse: collapse;"> <tr> <td colspan="6" style="text-align: center; font-size: small;">Grade</td> </tr> <tr> <td style="width: 15px; text-align: center;">7</td> <td style="width: 15px; text-align: center;">8</td> <td style="width: 15px; text-align: center;">9</td> <td style="width: 15px; text-align: center;">10</td> <td style="width: 15px; text-align: center;">11</td> <td style="width: 15px; text-align: center;">12</td> </tr> </table>	Grade						7	8	9	10	11	12				
Grade																	
7	8	9	10	11	12												
<p>MATERIALS • chalkboard • chalk</p>	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <th colspan="2" style="text-align: center; font-size: small;">Curriculum Area</th> </tr> <tr> <td style="font-size: x-small;">Lang. Arts</td> <td style="text-align: center;">•</td> </tr> <tr> <td style="font-size: x-small;">Math</td> <td style="text-align: center;"> </td> </tr> <tr> <td style="font-size: x-small;">Health/Science</td> <td style="text-align: center;"> </td> </tr> <tr> <td style="font-size: x-small;">Social Studies</td> <td style="text-align: center;">•</td> </tr> <tr> <td style="font-size: x-small;">Family/Cons. Sci.</td> <td style="text-align: center;"> </td> </tr> <tr> <td style="font-size: x-small;">Art/Music</td> <td style="text-align: center;"> </td> </tr> <tr> <td style="font-size: x-small;">Tech/Voc. Education</td> <td style="text-align: center;">•</td> </tr> </table>	Curriculum Area		Lang. Arts	•	Math		Health/Science		Social Studies	•	Family/Cons. Sci.		Art/Music		Tech/Voc. Education	•
Curriculum Area																	
Lang. Arts	•																
Math																	
Health/Science																	
Social Studies	•																
Family/Cons. Sci.																	
Art/Music																	
Tech/Voc. Education	•																
<p>ACTIVITY 1. Ask each student to identify a career that they would like to know more about. Record their answers on the chalkboard. 2. Ask the class if they know anyone who works in any of these careers. 3. Have students interview someone who is in the career that they are interested in. a. What do they do on their job? b. What education/training is needed? c. How did they find this job? d. Other questions suggested by class 4. Have students report the results of their interview back to the class. 5. Discuss with the class, "Are you more or less interested in this career as a result of this interview?"</p>	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <th colspan="2" style="text-align: center; font-size: small;">Self-Knowledge</th> </tr> <tr> <td style="font-size: x-small;">Positive Self-Concept</td> <td style="text-align: center;">•</td> </tr> <tr> <td style="font-size: x-small;">Interaction Skills</td> <td style="text-align: center;">•</td> </tr> <tr> <td style="font-size: x-small;">Growth and Change</td> <td style="text-align: center;"> </td> </tr> </table>	Self-Knowledge		Positive Self-Concept	•	Interaction Skills	•	Growth and Change									
Self-Knowledge																	
Positive Self-Concept	•																
Interaction Skills	•																
Growth and Change																	
<p>COMMENTS This exercise may be repeated a number of times throughout the year.</p>	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <th colspan="2" style="text-align: center; font-size: small;">Exploration</th> </tr> <tr> <td style="font-size: x-small;">Achievement</td> <td style="text-align: center;">•</td> </tr> <tr> <td style="font-size: x-small;">Work and Learning</td> <td style="text-align: center;"> </td> </tr> <tr> <td style="font-size: x-small;">Career Information</td> <td style="text-align: center;">•</td> </tr> <tr> <td style="font-size: x-small;">Job-Seeking Skills</td> <td style="text-align: center;"> </td> </tr> <tr> <td style="font-size: x-small;">Needs of Society</td> <td style="text-align: center;"> </td> </tr> </table>	Exploration		Achievement	•	Work and Learning		Career Information	•	Job-Seeking Skills		Needs of Society					
Exploration																	
Achievement	•																
Work and Learning																	
Career Information	•																
Job-Seeking Skills																	
Needs of Society																	
<p>PERFORMANCE INDICATORS The middle/junior high school student will be able to: 12.4: Describe skills needed in a variety of occupations, including self-employment.</p>	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <th colspan="2" style="text-align: center; font-size: small;">Career Planning</th> </tr> <tr> <td style="font-size: x-small;">Decision Making</td> <td style="text-align: center;"> </td> </tr> <tr> <td style="font-size: x-small;">Life Roles</td> <td style="text-align: center;"> </td> </tr> <tr> <td style="font-size: x-small;">Occupational Roles</td> <td style="text-align: center;"> </td> </tr> <tr> <td style="font-size: x-small;">Career Planning</td> <td style="text-align: center;">•</td> </tr> </table>	Career Planning		Decision Making		Life Roles		Occupational Roles		Career Planning	•						
Career Planning																	
Decision Making																	
Life Roles																	
Occupational Roles																	
Career Planning	•																
<p>EVALUATION Each student has personally interviewed someone engaged in a career of interest to the student.</p>																	
<p>RESOURCES <i>Career Exploration Workbook</i>. (VSC) Schrank, Louise. <i>Lifeplan: A Practical Guide to Successful Career Planning</i>. (Workbook)</p>																	

DG Activity 35

Figure 5.5

Sample Index

NATIONAL CAREER DEVELOPMENT GUIDELINES COMPETENCIES AND STUDENT PERFORMANCE INDICATORS

Each competency is broken down into its corresponding student performance indicators. The number(s) in parentheses following each performance indicator denote the activities in this book (for grades 7-9) that address that specific performance indicator. Note: while each activity addresses several performance indicators only the key indicators are listed on the activity page under "Performance Indicators."

NATIONAL STUDENT PERFORMANCE INDICATORS FOR MIDDLE/JUNIOR HIGH SCHOOL

Self-Knowledge

1. Knowledge of the influence of a positive self-concept.
 - 1.1 Describe personal likes and dislikes.
(5, 6, 8, 15, 16, 17, 18, 22, 30, 34, 35, 44, 45, 53, 54, 58, 60, 66, 69, 70, 71, 72, 79, 83, 86, 87, 90, 93, 95, 100, 108, 109, 114, 115, 117, 120, 121, 132, 134, 137, 139, 141)
 - 1.2 Describe individual skills required to fulfill different life roles.
(6, 13, 19, 22, 27, 30, 38, 54, 56, 58, 60, 61, 62, 64, 65, 66, 67, 68, 69, 71, 75, 82, 83, 85, 86, 91, 93, 94, 97, 100, 103, 105, 106, 109, 110, 114, 115, 116, 117, 118, 120, 121, 123, 124, 125, 126, 127, 128, 129, 130, 134, 135, 138, 140)
 - 1.3 Describe how one's behavior influences the feelings and actions of others.
(9, 23, 24, 50, 54, 55, 61, 62, 79, 80, 84, 85, 86, 87, 89, 90, 91, 94, 97, 98, 101, 103, 105, 108, 111, 114, 115, 116, 117, 120, 122, 124, 126, 128, 129, 130)
 - 1.4 Identify environmental influences on attitudes, behaviors, and aptitudes.
(18, 38, 57, 78, 80, 81, 82, 84, 90, 92, 94, 96, 97, 99, 101, 102, 103, 106, 107, 108, 110, 112, 114, 118, 119, 122, 123, 125, 127, 133, 134)
2. Skills to interact with others.
 - 2.1 Demonstrate respect for the feelings and beliefs of others.
(14, 17, 29, 41, 54, 59, 62, 63, 70, 72, 79, 80, 84, 85, 86, 87, 91, 93, 96, 97, 99, 100, 101, 102, 103, 105, 111, 112, 114, 115, 117, 120, 122, 123, 124, 125, 126, 127, 128, 137, 139)
 - 2.2 Demonstrate an appreciation for the similarities and differences among people.
(17, 23, 24, 54, 61, 62, 63, 71, 79, 86, 87, 88, 93, 95, 97, 99, 100, 101, 103, 109, 110, 112, 113, 114, 117, 121, 123, 127, 139)
 - 2.3 Demonstrate tolerance and flexibility in interpersonal and group situations.
(9, 14, 23, 29, 38, 39, 41, 61, 62, 63, 69, 71, 72, 79, 85, 87, 91, 92, 93, 95, 99, 102, 103, 105, 108, 110, 111, 112, 113, 114, 115, 117, 120, 122, 125, 126, 127, 128, 130, 131, 137, 139)
 - 2.4 Demonstrate skills in responding to criticism.
(69, 80, 84, 91, 100, 103, 111, 122, 131, 134)
 - 2.5 Demonstrate effective group membership skills.
(9, 14, 23, 27, 36, 39, 41, 50, 51, 54, 56, 59, 61, 62, 63, 69, 70, 71, 72, 74, 76, 79, 83, 84, 85, 86, 89, 89, 91, 92, 93, 95, 96, 97, 98, 99, 101, 102, 103, 104, 105, 106, 107, 108, 114, 115, 116, 117, 119, 120, 122, 123, 124, 126, 127, 128, 129, 130, 134, 137, 138, 139, 140)
 - 2.6 Demonstrate effective social skills.
(9, 21, 35, 36, 44, 54, 62, 72, 84, 88, 89, 93, 97, 98, 103, 113, 114, 115, 116, 117, 120, 123, 124, 126, 129, 137, 139)
 - 2.7 Demonstrate understanding of different cultures, lifestyles, attitudes, and abilities.
(2, 18, 38, 39, 54, 70, 72, 74, 79, 86, 93, 95, 100, 103, 109, 110, 112, 115, 119, 123, 127, 132, 133, 139, 141)

Figure 5.6

CIDS applications and uses cover a wide range of applications and practices.

Training and Inservice

Training CIDS users is a major obligation and the purpose of CIDS. Effective use by students and adults can only be accomplished when the local CIDS site coordinators and others responsible for CIDS programs and materials thoroughly understand their purpose, operation and use. Training is carried on through on-site visits by CIDS staff, regional workshops and statewide conferences. In addition, much of the CIDS training is provided through written materials, such as user manuals, professional manuals, system directions, user-friendly computer instructions and student workbooks.

(At this point each state should describe and define training programs available, training materials used and any other inservice capability they have, including graduate level or CEU courses or workshops which are planned.)

CIDS Applications and Exemplary Practices

CIDS applications and uses will vary from state to state. The following are examples of where and how CIDS can be used.

(Each state should provide illustrations of where and how they are using CIDS.)

Elementary Schools

1. Counselor/Career Center

Elementary level CIDS resources such as occupations handbooks, childrens' dictionaries, posters, videotapes and computer software are used at this level for both student access and counselor/teacher information.

2. Classroom

Teachers can include career classroom activities into their teaching plans. These activities may involve the use of a variety of resources available in the classroom and/or in the Counselor/Career Center. These would include videos, student activity books, children's dictionaries, awareness activities, computer software, bulletin board materials, learning activities and presentations by community and business people.

3. Library

The library can have resource materials, reading materials, software and other career resources that children can check out and use during library time.

Middle Schools

1. Counselor/Career Center

A complete CIDS may be operational in the counseling/career center. Computer, print and video

services will be available for student exploration. A career planning record system will be used to help students organize their career and self-exploration activities into a guide for career and high school planning. These resources will be used by teachers and counselors for information and teaching projects. Every student should have a career plan by the end of the eighth grade.

2. Classroom

All classrooms should relate subject matter to careers. For example, Language Arts classes will have students research and write about careers of interest. Math classes will have a unit on math applications in various careers. Career classroom activities will help teachers adapt appropriate teaching units to their classes. Students will be assigned homework to use computers and/or print data to find career information and write reports.

3. Library

The library can have resource materials, reading materials, software and other career resources that students can check out and use during library time.

High Schools

1. Counselor/Career Center

Complete CIDS software and data should be available allowing students access at any time. Posters, self-instructional materials, books, worksheets etc. should be included in the Career Center along with employability skills and career information databases for student and staff use.

2. Classroom

All classrooms should relate subject matter to careers. For example, Language Arts classes will have students research and write about careers of interest. Math classes will have a unit on math applications in various careers. Career classroom activities will help teachers adapt appropriate teaching units to their classes. Students will be assigned homework to use computers and/or print data to find career information and write reports.

3. Library

The library should have resource materials, reading materials, software and other career resources that students can check out and use during library time.

4. Vocational Classrooms/Shops

Print, computer and video resources related to specific occupations and education and training programs can be available for student use.

5. Special Needs Classroom

All classrooms should relate subject matter to careers. For example, Language Arts classes will have students research and write about careers of interest. Math classes will have a unit on math applications in various careers. Career classroom activities will help teachers adapt appropriate teaching units to their classes. Students will be assigned homework to use computers and/or print data to find career information and write reports.

6. Networks/Labs of Computers

All computer software should be available in networks or labs for large groups. The setting can be used to teach an entire group a single program, such as a career search, or the lab can be used for an individual to independently search and gather information for their career plan or classroom assignments.

Community Colleges, Technical Colleges, Universities, and Proprietary Schools

1. Career Advising Centers
2. Admissions Offices
3. "Help" Lines
4. Schools or Division Offices
5. Libraries
6. Remedial Classrooms
7. Outreach Sites in Community
8. Financial Aids Offices
9. Teacher Ed/Counselor Ed/Departments and Classrooms

Other Agencies and Community Organizations

(Each state should describe how the following are using the CIDS.)

1. Job Service Offices
2. DVR Offices
3. JTPA/PIC Offices
4. Correction Facilities
5. Foster Care Offices
6. Youth Homes/Facilities
7. Job Centers
8. Private Counseling and Rehabilitation Offices
9. Public Libraries
10. Military Installation
11. Community Based Organizations
12. Business and Industry

Demonstration of State CIDS and Resources

(At this time, each state will provide examples of selected computer, print and video products appropriate to the audience. The demonstration should include the computer programs using a data display system. Print materials should be displayed and/or circulated as well as overhead transparencies made of selected key pages for illustration. Videos can be shown in entirety or samples from each can be shown to help people understand the range of information available. For some groups it may be advisable to actually do a hands-on exercise from some portions of a workbook, worksheet or other student activity materials. Every demonstration of a state CIDS should include illustrations of how the CIDS products or components address the national and/or state career development competencies.)

Other sources of occupational information will now be described.

The Occupational Outlook Handbook (OOH) is an affordable reference on current and future occupational prospects.

Occupational Outlook Handbook

What is it? The *Occupational Outlook Handbook* (OOH) provides detailed national information for approximately 250 occupations and was recently organized according to SOC codes. It is an affordable reference on current and future occupational prospects. It gives greatest attention to those occupations that are projected to grow the most rapidly or require lengthy training and/or education. In addition, a major section discusses employment trends and projections. The remainder of the book describes the nature of work; working conditions; employment, training, and advancement opportunities; job outlook; earnings; and sources of additional information. The information is nontechnical and easily accessed.

The OOH answers many general questions about occupations.

How is it used? This reference will answer many general questions about occupations. It describes what workers do, the training and education they need, earnings, working conditions and expected job prospects.

Example from the OOH

Teacher Aides

(D O T 099.327-010; 219.467-010; and 249.367-074, and -086)

Nature of the Work

Teacher aides help classroom teachers in a variety of ways to give them more time for teaching. They help and supervise students in the classroom, cafeteria, school yard, or on field trips. They record grades, set up equipment, or help prepare materials for instruction. They may also tutor and assist children in learning class material.

Aides' responsibilities vary greatly by school district. In some districts, teacher aides just handle routine non-teaching and clerical tasks. They grade tests and papers, check homework, keep health and attendance records, type, file, and duplicate materials. They may also stock supplies, operate audiovisual equipment, and keep classroom equipment in order. In other districts, aides also help instruct children, under the supervision and guidance of teachers. They work with students individually or in small groups—listening while students read, reviewing class work, or helping them find information for reports. Sometimes, aides take charge of special projects and prepare equipment or exhibits—for a science demonstration, for example.

Working Conditions

About half of all teacher aides work part time during the school year. Most work the traditional 9- to 10-month school year. They may work



Teacher aides help children review and understand their lessons.

outdoors supervising recess when weather allows and spend much of their time standing, walking, or kneeling. Working closely with the students can be both physically and emotionally tiring.

Employment

Teacher aides held about 682,000 jobs in 1988. About 8 out of 10 worked in elementary and secondary schools, with many concentrated in the lower grades. Some assisted special education teachers with physically, mentally, or emotionally handicapped children. Most of the others worked in child daycare centers. Employment was distributed geographically much the same as the population.

Training, Other Qualifications, and Advancement

Educational requirements for teacher aides range from less than a high school diploma to some college training. Districts that give aides some teaching responsibilities usually require more training than those that don't assign teaching tasks.

A number of 2-year and community colleges offer associate degree programs that prepare graduates to work as teacher aides. However, most teacher aides receive on-the-job training. Aides are taught how to operate audiovisual equipment, keep records, and prepare instructional materials. In addition, they are made familiar with the organization and operation of a school and with teaching methods.

Teacher aides should enjoy working with children and be able to handle classroom situations with fairness and patience. Preference in hiring may be given to those with previous experience in working with children. Aides also must demonstrate initiative and a willingness to follow a teacher's directions. They must have good oral and writing skills and be able to communicate effectively with students and teachers. Clerical skills may also be necessary.

Some States have voluntary certification for general teacher aides. To qualify, an individual may need a high school diploma or general equivalency degree (G.E.D.), or even some college training. Kansas, Louisiana, Texas, and Wisconsin grant permits for paraprofessionals, as some aides are called, in special education.

Advancement for teacher aides, usually in the form of higher earnings or increased responsibility, comes primarily with experience or additional education. Some school districts provide release time so that aides may take college courses. Aides who earn bachelor's degrees may become certified teachers.

Job Outlook

Employment of teacher aides is expected to increase faster than the average for all occupations through the year 2000, primarily reflecting rising enrollments and increases in the ratio of teacher aides to teachers. Enrollment growth will not occur at the same rate in all parts of the country. Largely because of migration to the South and West, enrollment increases are expected to be greater in those regions than in the Northeast and Midwest.

Teacher aide employment is sensitive to changes in State and local expenditures for education. Pressures on education budgets are greater in some States and localities than in others. A number of teacher aide positions are financed through Federal programs. For example, a 1986 law requires that public schools provide special education services to all children between the ages of 3 and 6 who need it. This will stimulate the demand for teacher aides who work with special education teachers.

Because of a relatively high turnover in the occupation, most openings for teacher aides are expected to occur as a result of the need to replace workers who transfer to other occupations or who leave the labor force to assume full-time housekeeping responsibilities, return to school, or for other reasons.

Earnings

In 1988-89, aides involved in teaching activities earned an average of \$7.05 an hour; those performing only non-teaching activities averaged \$6.14 an hour. Earnings varied by region and also by work experience and academic qualifications. Many aides are covered by collective bargaining agreements and have health and pension benefits similar to those of the teachers in their schools.

Related Occupations

The educational support activities that teacher aides perform demand organizational skills, cooperativeness, recordkeeping ability, and a talent for getting along with people. Other occupations requiring some or all of these skills include childcare workers, career guidance technicians, home health aides, library attendants, medical record technicians, nursing aides, receptionists, and retail sales clerks.

Sources of Additional Information

Information on teacher aides as well as on a wide range of education-related subjects, including teacher aide unionization, can be obtained from:

American Federation of Teachers, 555 New Jersey Ave. NW., Washington, DC 20001.

School superintendents and State departments of education can provide details about employment requirements.

Figure 5.7

The Dictionary of Occupational Titles (DOT) provides information on the structure of work, particularly the data-people-things functions of an occupation, the relationships among occupations and a summary of what a particular worker does.

The Dictionary of Occupational Titles

What is it? The *Dictionary of Occupational Titles (DOT)* is the most comprehensive document containing occupational information. It not only contains descriptions of over 20,000 occupations, but also has a unique coding number that is indexed, or cross classified, with many other frequently used sources, such as the *Standard Occupational Classification*, the *Guide for Occupational Exploration (GOE)* and the *Military Career Guide*.

526.685-014

526.685-014 COOK, FRY, DEEP FAT (can. & preserv.; hotel & rest.)

Tends deep-fat cookers to fry meats, vegetables, or fish in cooking oil. Empties containers or opens valves to fill cookers with oil. Sets thermostat to heat oil to specified temperature. Empties containers of meat, vegetable, or fish into metal basket and immerses basket into vat manually or by hoist. Sets timer. Observes color at end of frying time to determine conformity to standards and extends frying time accordingly. Removes basket from cooker, drains it, and dumps contents onto tray. May dip foods into batter or dye before frying. May specialize in a particular food product for canning or freezing or may fry variety of foods for immediate consumption.

526.685-018 COOK, VACUUM KETTLE (can. & preserv.)

Tends vacuum cooker and open kettle to cook fruit and berries preparatory to making jams and jellies. Observes thermometer, turns rheostat and steam valve, or pushes switch or lights burner to heat vacuum cooker and open kettle to specified temperature. Turns valve to transfer contents of kettle into vacuum cooker. Observes refractometer on vacuum cooker to determine sugar content and adds ingredients according to formula. Places container under discharge outlet of distillation jacket of cooker to reclaim esters. Opens valve or starts pump to transfer contents of vacuum cooker to holding tank or filling machine.

526.685-022 COOKER (cereal)

Tends steam-heated pressure cookers to cook cracked and tempered grain for further processing into cereal products. Presses button to load first cooker with measured amount of grain and liquid flavor. Clamps lid of cooker in place, using wrench. Moves dials and turns valves to attain specified temperature and pressure in cooker. Removes lid of cooker and dumps cooked grain onto conveyor after determining that grain has reached specified color and consistency. Records cooking time and number of batches prepared. May start automatic equipment that admits steam, rotates cooker, and stops cooker after specified time.

Figure 5.8

Some find this publication overwhelming and difficult to manage.

The DOT provides information on the structure of work, particularly the data-people-things functions of an occupation. It describes the relationships among occupations and a gives summary of what particular workers do. A companion publication, *Selective Characteristics of Occupations Defined in the Dictionary of Occupational Titles*, provides detailed supplementary information about occupations in the DOT. It describes physical demands, environmental working conditions, and the amount of training time required. Many find the DOT overwhelming and difficult to manage.

Because of the technical style used to describe occupations, the voluminous amounts of information, and the complexity of accessing the information, the DOT is not used as frequently as the OOH.

The DOT can be used to collect information that answers key questions about occupations.

How is it used? The DOT enables the user to learn facts about occupations to incorporate into the decision making process. It can be used most effectively to determine the following:

- specific tasks and skills required of occupations;
- purpose of the occupation;
- the machine, tools, equipment or work aids used;
- service, products, materials and academic subject matter included;
- industries with which the occupation is typically identified;
- worker/function requirements; and
- location of work for each occupation.

The following are examples of key questions about the occupation, Recording Engineer.

Question	Answer
What are the typical work activities performed?	Operates recording machine Listens for imperfections Keeps record of recordings Services and repairs machines
What skills are needed to perform the required work?	Listening, recording, observing, manipulating equipment, repairing and servicing
What is the typical industry where the job is performed?	Radio and TV Broadcast
What are the work aids typically used?	Recording machines, microphones, earphone machines to adjust volume, log book

The Guide for Occupational Exploration assists job seekers in finding occupations that are in accord with their interests, skills, values and abilities.

The Guide for Occupational Exploration

What is it? The *Guide for Occupational Exploration* (GOE) is designed to assist job seekers find occupations that are in accord with their interests, skills, values and abilities. Information is presented to assist users in evaluating their own interests and potential.

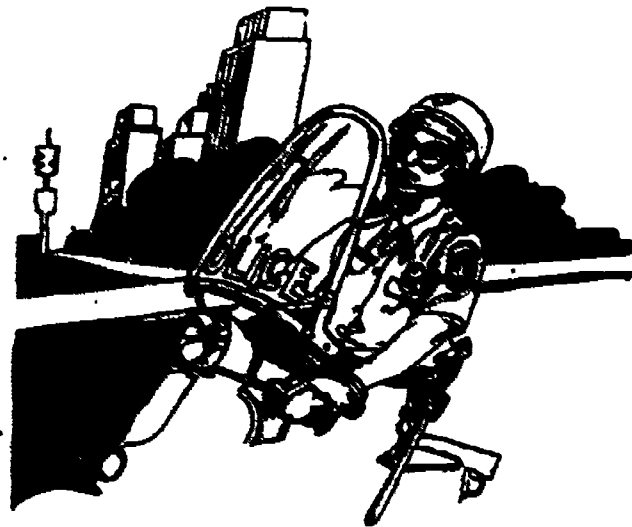
04.01 Safety and Law Enforcement

Workers in this group are in charge of enforcing laws and regulations. Some investigate crimes, while others supervise workers who stop or arrest lawbreakers. Others make inspections to be sure that the laws are not broken. Most jobs are found in the Federal, State, or local governments, such as the Police and Fire Departments. Some are found in private businesses, such as factories, stores, and similar places.

What kind of work would you do?

Your work activities would depend upon your specific job. For example, you might

- set procedures, prepare work schedules, and assign duties for jailers.
- direct and coordinate daily activities of a police force.
- direct and coordinate activities of a fire department.
- hire, assign, and supervise store detectives.
- investigate and arrest persons suspected of the illegal sale or use of drugs.
- patrol an assigned area in a vehicle or on foot and issue tickets, investigate disturbances, render first aid, and arrest suspects.
- patrol an assigned area to observe hunting and fishing activities and warn or arrest persons violating fish and game laws.



What skills and abilities do you need for this kind of work?

To do this kind of work you must be able to:

- work with laws and regulations, sometimes written in legal language.
- use practical thinking to conduct or supervise investigations.
- supervise other workers.
- plan the work of a department or activity.
- deal with various kinds of people.
- work under pressure or in the face of danger.
- patrol an assigned area to observe hunting and fishing activities and warn or arrest persons violating fish and game laws.
- keep physically fit.
- use guns, fire-fighting equipment, and other safety devices.

How do you know if you would like or could learn to do this kind of work?

The following questions may give you clues about yourself as you consider this group of jobs.

- Have you had courses in government, civics, or criminology? Did you find these subjects interesting?
- Have you been a member of a volunteer fire department or emergency rescue squad? Were you given training for this work?

- Have you watched detective television shows? Do you read detective stories? Do you try to solve mysteries?
- Have you been an officer of a school safety patrol? Do you like being responsible for the work of others?
- Have you used a gun for hunting or in target practice? Are you a good shot?
- Have you spoken at a civic or community organization? Do you like work that requires frequent public speaking?
- Have you been a military officer?

How can you prepare for and enter this kind of work?

Occupations in this group usually require education and/or training extending from one to over ten years, depending upon the specific kind of work. Local civil service regulations usually control the selection of police officers. People who want to do this kind of work must meet certain requirements. They must be U. S. citizens and be within certain height and weight ranges. In addition, they may be required to take written, oral, and physical examinations. The physical examinations often include tests of physical strength and the ability to move quickly and easily. To work in these jobs, persons should

Figure 5.9

Example from the GOE continued

04.01

have the physical condition to use firearms or work on dangerous missions. Personal investigations are made of all applicants.

Most police departments prefer to hire people who have a high school education or its equal. However, some departments hire people if they have worked in related activities, such as guarding or volunteer police work.

Jobs with federal law enforcement agencies usually require a college degree. For example, to be hired as customs enforcement officer, a degree or three years of related work experience is required. FBI Special Agents are required to have a degree in law or accounting. Accounting degrees should be coupled with at least one year of related work experience.

Most management or supervisory jobs in this group are filled from within the ranks. Promotions are usually based on written examinations and job performance and are usually subject to civil service laws.

What else should you consider about these jobs?

Most workers in these jobs are on call any time their services are needed. They may work overtime during emergencies. Many of these jobs expose workers to great physical danger.

If you think you would like to do this kind of work, look at the job titles listed on the following pages. Select those that interest you and read their definitions in the Dictionary of Occupational Titles.

Safety and Law Enforcement

04.01.01 Managing

Fire Marshal (any ind.) 373.167-018

Guard, Chief (any ind.) 372.167-014

Manager, Internal Security (bus. ser.) 376.137-010

Battalion Chief (gov. ser.) 373.167-010

Captain, Fire-Prevention Bureau (gov. ser.) 373.167-014

Commanding Officer, Homicide Squad (gov. ser.) 373.167-010

Commanding Officer, Investigation Division (gov. ser.) 375.167-014

Commanding Officer, Motorized Squad (gov. ser.) 375.163-010

Correction Officer, Head (gov. ser.) 372.137-010

Deputy, Court (gov. ser.) 377.137-018

Deputy Sheriff, Chief (gov. ser.) 377.167-010

Deputy Sheriff, Commander, Civil Division (gov. ser.) 377.137-010

Deputy Sheriff, Commander, Criminal and Patrol Division (gov. ser.) 377.137-014

Desk Officer (gov. ser.) 375.137-014

Detective Chief (gov. ser.) 375.167-022

Fire Assistant (gov. ser.) 169.167-022

Fire Captain (gov. ser.) 373.134-010

Fire Chief (gov. ser.) 373.117-010

Harbor Master (gov. ser.) 375.167-026

Jailer, Chief (gov. ser.) 372.167-018

Launch Commander, Harbor Police (gov. ser.) 375.167-030

Park Superintendent (gov. ser.) 188.167-062

Police-Academy Instructor (gov. ser.) 375.227-010

Police Captain, Precinct (gov. ser.) 375.167-034

Police Chief (gov. ser.) 375.117-010

Police Commissioner (gov. ser.) 1 188.117-118

Police Inspector (gov. ser.) 1 375.267-026

Police Lieutenant, Patrol (gov. ser.) 375.167-038

Police Sergeant, Precinct (gov. ser.) 1 375.133-010

Sheriff, Deputy, Chief (gov. ser.) 377.117-010

Traffic Lieutenant (gov. ser.) 375.167-046

Traffic Sergeant (gov. ser.) 375.137-026

Special Agent-in-Charge (r.r. trans.) 376.167-010

04.01.02 Investigating

Investigator, Private (bus. ser.) 376.2 7-018

Fire Warden (forestry) 4:2.167-010

Accident-Prevention-Squad Police Officer (gov. ser.) 375.263-010

Customs Patrol Officer (gov. ser.) 168.167-010

Deputy Sheriff, Civil Division (gov. ser.) 377.667-018

Detective (gov. ser.) 375.267-010

Detective, Narcotics and Vice (gov. ser.) 375.267-014

Fire Marshal (gov. ser.) 373.267-014

Fish and Game Warden (gov. ser.) 379.167-010

Investigator, Narcotics (gov. ser.) 375.267-018

Investigator, Vice (gov. ser.) 375.267-022

Pilot, Highway Patrol (gov. ser.) 375.163-014

Police Inspector (gov. ser.) II 375.267-030

Police Officer (gov. ser.) I 375.263-014

Sheriff, Deputy (gov. ser.) 377.263-010

Special Agent (gov. ser.) 375.167-042

Special Agent, Customs (gov. ser.) 188.167-090

State-Highway Police Officer (gov. ser.) 375.263-018

Wildlife Agent, Regional (gov. ser.) 379.137-018

Investigator (light, heat, & power) 376.367-022

Figure 5.9 continued

How is it used? The GOE is a rich source of material for career exploration and decision making. The authors identify a five step process for using the GOE. The first step directs the individual to relate their interests to job titles. In the second step, one or more work groups are chosen to explore and investigate. Step three focuses attention and information on the most interesting work group. Step four involves exploring subgroups in specific occupations. Step five involves the process of integrating the information into the decision making process. Details on the most effective way of using the GOE are included in the preface of the book.

The *Military Career Guide* provides descriptive information on various military jobs.

The Military Career Guide

What is it? *The Military Career Guide* provides descriptive information on various military jobs. It is a compendium of military occupational and training information. It is a single reference source for the diverse employment and training opportunities in the Army, Navy, Air Force, Marine Corps and Coast Guard. It contains descriptions of 134 enlisted and officer military occupations arranged in 12 broad career groups.



RESPIRATORY THERAPISTS

Army
Navy
Air Force

Asthma and emphysema (lung disease) patients suffer from breathing difficulties. Victims of heart failure, stroke, or near drowning may also have long-term breathing problems. Respiratory therapy is provided to patients with breathing problems. Respiratory therapists help patients regain breathing functions through therapy, exercise, and medication.

What They Do

Respiratory therapists in the military perform some or all of the following duties:

- Assist in reviving patients who are no longer breathing or whose hearts have stopped
- Operate and monitor respiratory therapy equipment during treatment
- Observe and record patient response to respiratory therapy
- Clean, sterilize, and maintain respiratory therapy equipment
- Instruct patients in breathing exercises to help clear lungs of fluids
- Instruct patients on how to operate home respiratory therapy equipment

Physical Demands

Respiratory therapists may have to lift and position patients for treatment

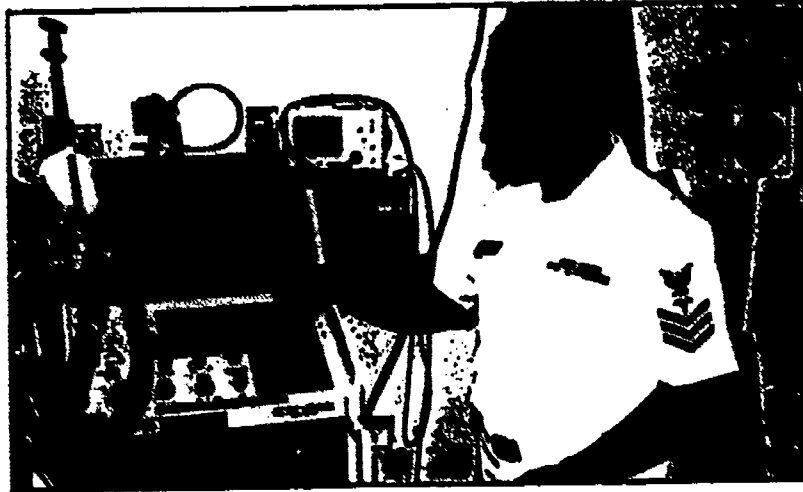
Helpful Attributes

Helpful school subjects include general science, chemistry, and biology. Helpful attributes include:

- Ability to deal with stressful situations
- Ability to respond quickly to emergencies
- Interest in helping others

Work Environment

Respiratory therapists usually work in hospitals or clinics. In combat situations, they may work in mobile field hospitals.



Training Provided

Job training consists of between 32 and 41 weeks of classroom instruction, including practice in providing respiratory therapy. Course content typically includes:

- Procedures for operating respiratory therapy equipment
- Methods for providing emergency care
- Techniques of respiratory therapy

Further training occurs on the job and through advanced courses.

Civilian Counterparts

Civilian respiratory therapists work in hospitals and clinics and for ambulance services. Their duties are similar to those of military respiratory therapists. Civilian respiratory therapists may be called inhalation therapists or pulmonary therapists.

Opportunities

The military has about 310 respiratory therapists. On average, the services need about 30 new therapists each year. After job training, therapists provide treatment under the direction of a supervisor. With experience, they advance from caring for patients with minor respiratory problems to caring for patients with more serious problems. They may also supervise and direct the work of other respiratory therapists.

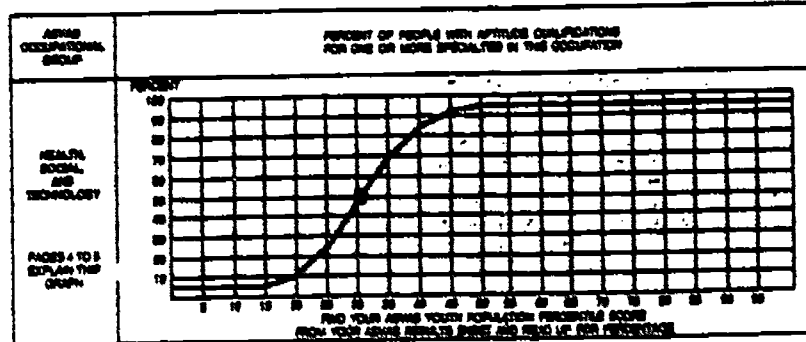


Figure 5.10

The Standard Occupational Classification (SOC) is a classification system that groups occupations on the basis of the type of work performed.

How is it used? This resource cross references occupations with DOT codes so information on related civilian occupations in the DOT can be accessed. Also if a student has taken the Armed Services Vocational Aptitude Battery (ASVAB), they can identify military careers related to the highest composite scores.

Standard Occupational Classification

What is it? Since 1982, many federal government occupational publications have been organized and cross referenced by the *Standard Occupational Classification (SOC)* codes. Aside from the SOC's value as a classification system, the SOC groups occupations on the basis of the type of work performed. Therefore, it is a valuable reference for identifying occupations related to each other.

STANDARD OCCUPATIONAL CLASSIFICATION MANUAL

5233 Health Aides, Except Nursing

This unit group includes occupations involving performing various duties under the direction of trained medical practitioners, such as mixing pharmaceutical preparations, issuing medicines, labeling and storing supplies; assisting during physical examination of patients, giving specified office treatments, and keeping patients' records; preparing treatment room, inventory of supplies and instruments; preparing, bottling and sterilizing infant formulas. May also assist in physical and other therapy treatment.

Pharmacy helper.....	573.....074387010
Physical therapist assistant.....	573.....076224010
Occupational therapy assistant.....	573.....076364010
Laboratory assistant, blood and plasma.....	323-573.....078687010
Chiropractor assistant.....	573.....079364010
Medical assistant.....	573.....079367010
Podiatric assistant.....	573.....079274018
Physical therapy aide.....	573.....355354010
Ambulance attendant.....	573.....355374010
Occupational therapy aide.....	573.....355377010
Morgue attendant.....	573.....359667010
Graves registration specialist.....	574.....359687014
Formula-room worker.....	313-573.....520487014
Ambulance driver.....	573.....913683010

Figure 5.11

The SOC is useful for research and classification purposes but its value in practical applications is unclear.

How is it used? If a client is interested in a particular occupation, but finds the industry or work setting in that locale is undesirable, he or she can identify occupations that are similar in nature, but may cross into other industry settings through the SOC. The SOC has been particularly useful for research and classification purposes but its value in practical applications is unclear.

Local Sources of Occupational Information

(At this time the trainer should discuss local sources of occupational information.)

(See Appendix L for a more detailed description of occupational resources.)

DECISION AREA: A WORK SETTING (Business or Industry)

Information about a work setting is commonly referred to as information about an industry. It is another dimension of career decision making.

Once the industry is identified, occupational staffing patterns will reveal the types of occupations employed in that industry.

Decision Area: A Work Setting (Business or Industry)

Information about a work setting is commonly referred to as information about an industry. It is another dimension of career decision making. Clients and students need some understanding of the environment in which occupations exist. As mentioned earlier, each type of industry or business has a different working environment even though they may employ persons in similar occupations. For example, a truck driver who worked for a moving and storage company will usually have to load and unload the trucks by hand whereas an over-the-road driver may not touch the freight. Likewise, the skills and work of a plumber will vary considerably between residential and industrial work settings. The type of industry or business is a major influence on the specific job conditions, pay, benefits and numerous other conditions of employment.

Adults who have been laid off may have worked in a particular industry and would like to find another job in a similar industry. Students who have not seriously considered a specific occupational area may be more interested in certain industrial sectors of the local or national economy. They may be interested in a particular local firm, such as a health care facility, a bank or a local food processing plant.

To assist the student or client in such a situation, the career development facilitator needs to identify the industry and help research its occupational staffing pattern. This process will reveal the types of occupations employed in that industry, giving the client a choice of occupations to investigate.

All students and clients can use industry information during the career decision making process. Few occupations are industry specific; most occupations are employed in all types of industries. For example, welders can be found working in industries ranging from agricultural services to paper processing to government.

To begin gathering information about the work setting, the following should be completed:

- Find the industries that employ a given occupation;
- identify a specific industry of interest;
- determine the projections for this particular industry; and
- identify the occupations employed in the industry (staffing pattern)

Two references can be used to collect this information: the *Standard Industrial Classification (SIC) Manual* and an *Occupational Information System (OIS)*. The SIC can help identify industries and places of employment. The OIS can help identify the industries that employ a given occupation and will identify the occupations employed within a given industry (the staffing patterns), and their demand/supply outlook.

The Standard Industrial Classification is a system by which similar industries, or work settings, are classified.

Standard Industrial Classification

What is it? The SIC is a system by which an industry, or work setting, is classified. It gives a detailed description of the industrial division and major groups classified within each industrial division.



Example from the SIC

Major Group 54.—FOOD STORES

The Major Group as a Whole

This major group includes retail stores primarily engaged in selling food for home preparation and consumption. Establishments primarily engaged in selling prepared foods and drinks for consumption on the premises are classified in Major Group 58, and stores primarily engaged in selling packaged beers and liquors are classified in Industry 5921.

Industry Group No.	Industry No.			
541	GROCERY STORES			
	5411	Grocery Stores		
		Stores, commonly known as supermarkets, food stores, and grocery stores, primarily engaged in the retail sale of all sorts of canned foods and dry goods, such as tea, coffee, spices, sugar, and flour; fresh fruits and vegetables; and fresh and prepared meats, fish, and poultry.		
		<table border="0" style="width: 100%;"> <tr> <td style="width: 50%;"> Convenience food stores—retail Food markets—retail Frozen food and freezer plants, except meat—retail </td> <td style="width: 50%;"> Grocery stores, with or without fresh meat—retail Supermarkets, grocery—retail </td> </tr> </table>	Convenience food stores—retail Food markets—retail Frozen food and freezer plants, except meat—retail	Grocery stores, with or without fresh meat—retail Supermarkets, grocery—retail
Convenience food stores—retail Food markets—retail Frozen food and freezer plants, except meat—retail	Grocery stores, with or without fresh meat—retail Supermarkets, grocery—retail			
542	MEAT AND FISH (SEAFOOD) MARKETS, INCLUDING FREEZER PROVISIONERS			
	5421	Meat and Fish (Seafood) Markets, Including Freezer Provisioners		
		Establishments primarily engaged in the retail sale of fresh, frozen, or cured meats, fish, shellfish, and other seafoods. This industry includes establishments primarily engaged in the retail sale, on a bulk basis, of meat for freezer storage and in providing home freezer plans. Meat markets may butcher animals on their own account, or they may buy from others. Food locker plants primarily engaged in renting locker space for the storage of food products for individual households are classified in Industry 4222. Establishments primarily engaged in the retail sale of poultry are classified in Industry 5499.		
		<table border="0" style="width: 100%;"> <tr> <td style="width: 50%;"> Fish markets—retail Freezer food plans, meat—retail Freezer provisioners, meat—retail Frozen food and freezer plans, meat—retail </td> <td style="width: 50%;"> Meat markets—retail Seafood markets—retail </td> </tr> </table>	Fish markets—retail Freezer food plans, meat—retail Freezer provisioners, meat—retail Frozen food and freezer plans, meat—retail	Meat markets—retail Seafood markets—retail
Fish markets—retail Freezer food plans, meat—retail Freezer provisioners, meat—retail Frozen food and freezer plans, meat—retail	Meat markets—retail Seafood markets—retail			
543	FRUIT AND VEGETABLE MARKETS			
	5431	Fruit and Vegetable Markets		
		Establishments primarily engaged in the retail sale of fresh fruits and vegetables. They are frequently found in public or municipal markets or as roadside stands. However, establishments which grow fruits and vegetables and sell them at roadside stands are classified in Agriculture, Major Group 01.		
		<table border="0" style="width: 100%;"> <tr> <td style="width: 50%;"> Fruit markets and stands—retail Produce markets and stands—retail </td> <td style="width: 50%;"> Vegetable markets and stands—retail </td> </tr> </table>	Fruit markets and stands—retail Produce markets and stands—retail	Vegetable markets and stands—retail
Fruit markets and stands—retail Produce markets and stands—retail	Vegetable markets and stands—retail			

Figure 5.12

How is it used? The manual does not list specific companies by name but it is an excellent resource for understanding the industrial makeup of a city, community or state. Similar industries are listed together, which makes it helpful when determining which firms might employ people with skills or work experiences obtained from a similar industry.

Occupational Information Systems provide information on the industries that employ a specified occupation as well as the occupations employed by a specific industry.

Occupational Information Systems

What is it? Some State Occupation Information Coordinating Committees (SOICCs) have created computerized Occupational Information Systems (OIS) programs which use data from the Occupational Employment Statistics Program (OES). These data bases may provide information on the industries that employ a specified occupation, as well as the occupations employed by a specific industry.



INDUSTRY/OCCUPATIONAL RELATIONSHIPS ROUTE
<Chart 3>

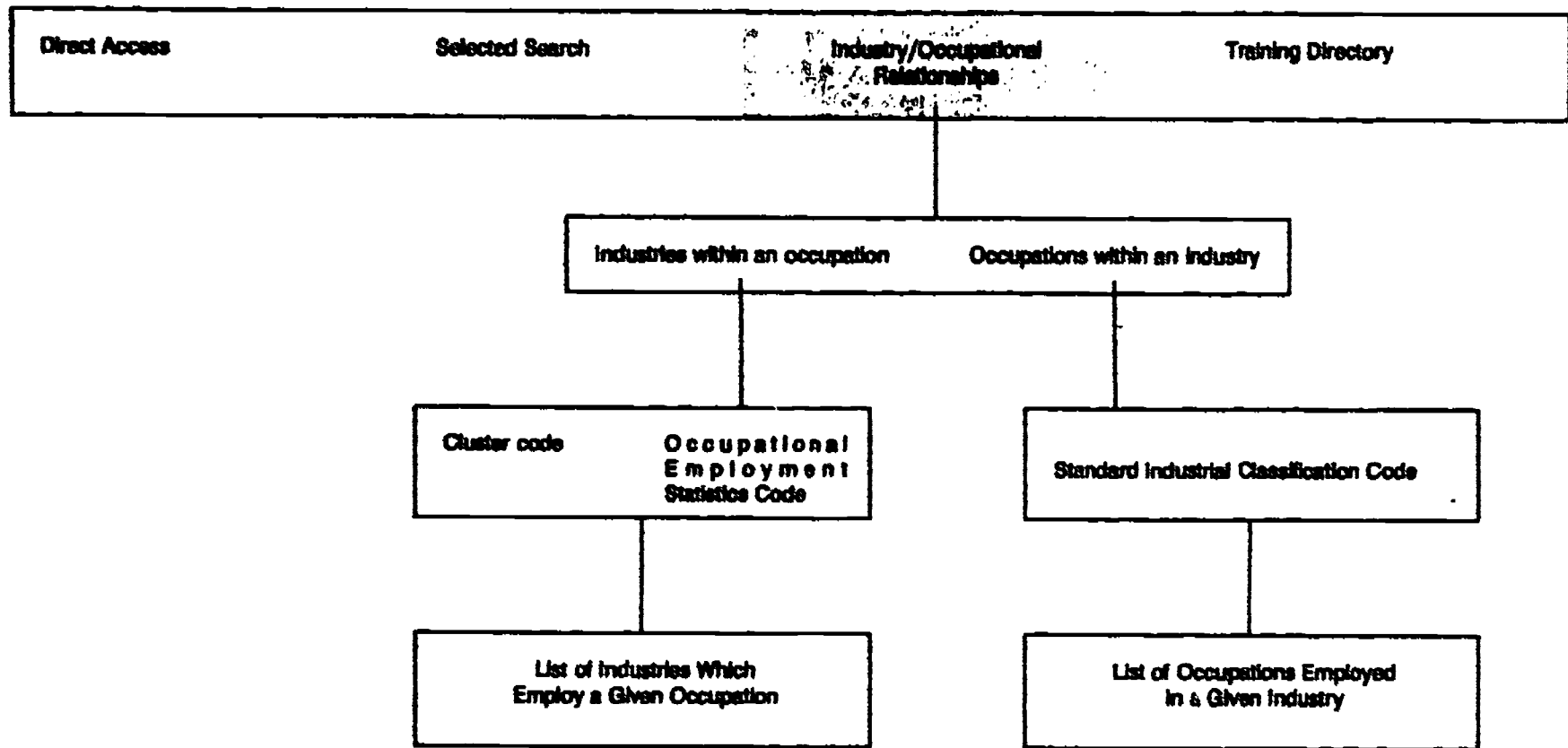


Figure 5.13

For example, Figure 5.14 illustrates where the occupation Bookkeeping and Accounting Clerks are employed in North Dakota industries.

Press Return

NORTH DAKOTA OCCUPATIONAL INFORMATION SYSTEM
MATRIX REPORT

NORTH DAKOTA
CLUSTER TITLE: BOOKKEEPING & ACCOUNTING CLERKS NORTH DAKOTA CLUSTER # 9850

))) OES OCCUPATION: [33388395] -- BOOKKEEPING & ACCOUNTING CLERKS
(Employment Level) = 6111

SIC - CODE	STANDARD INDUSTRIAL CLASSIFICATION (SIC) TITLE	PERCENT OF OES EMPLOYMENT
581	EATING AND DRINKING PLACES, TOTAL	2.89 %
517	PETROLEUM AND PETROLEUM PRODUCTS	3.89 %
588	MERCHANTS, EQUIPMENT, AND SUPPLIES	3.06 %
515	FARM PRODUCT RAW MATERIALS	4.37 %
880	LOCAL GOVERNMENT, EXC. EDUCATION	4.57 %
602	COMMERCIAL AND STOCK SAVINGS BANKS	4.89 %
882	SELF EMPLOYED AND UNPAID FAMILY WORKERS	8.99 %

(FIGURE 27) INDUSTRIES WITHIN AN OCCUPATION REPORT (sample)

Figure 5.14

The codes and titles on the left are *Standard Industrial Codes (SIC)* and select groupings of businesses by common activity or product. The percent of employment shown in the right column is a percent of the total employment, which is listed in the heading of the report, "Employment Level." To determine the number of Accounting and Bookkeeping Clerks within a given industry, multiply the percent times the Employment Level. For example, Eating and Drinking places employ 177 (2.8% of 6111) bookkeeping and accounting clerks in North Dakota. Farm Products and Raw Materials employ 267 Accounting and Bookkeeping Clerks (4.37% of 6111).

(At this time, the trainer should present local sources of Industry information.)

DECISION AREA: GEOGRAPHIC REGION

Where one lives has considerable bearing on the options that are available.

Decision Area: Geographic Region

This decision area allows the student or client to explore career options based on a preference for a particular geographic area. For students or adults who are undecided or unenthusiastic about any particular occupational or industrial sector, the most important starting point may be geography. Where would the person prefer to live? Sometimes people begin to explore options by considering family ties, or the weather, and maybe the unemployment rate. Sometimes a particular industry in one part of the country is attractive. In other cases, the attraction may be family or friends.

Whatever the reason for considering geography first, there are basic factors to consider. The decision of where one lives has considerable bearing on the occupational or career options available. Each labor market has its own industrial structure that defines the job

opportunities. The interaction between geography and industries can appear in several forms. If a person is interested in volcanoes, a job search may begin on the West coast or in Hawaii. If a client is interested in living in northern Wisconsin, career exploration might include self-employment in the hospitality industries. State capitols usually offer the variety of occupations needed to conduct the business of government.

To illustrate the importance of geographic location, consider the following. McKee and Froeschle (1985) found that two metropolitan areas of roughly the same population, Pittsburgh and Dallas-Fort Worth, differed significantly in their opportunities for clerical workers. Pittsburgh anticipated that 195,303 clerical workers would be employed in 1985, while Dallas-Fort Worth anticipated 362,100. This discrepancy was accounted for by the industrial structure of the areas. Dallas-Fort Worth is a regional service center and financial hub. Therefore, it has a greater need for clerical support positions. Conversely, Pittsburgh has more of a manufacturing economy and has a lower demand for clerical positions.

It is also useful to understand the supply and demand of a local labor market.

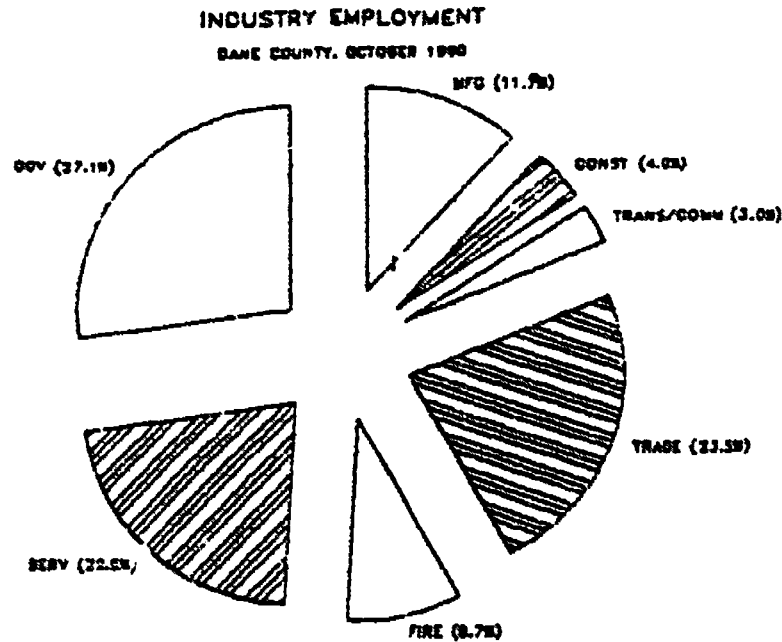
Locally developed publications can tell detailed information about a community of interest.

In addition to understanding the industrial structure in a particular location, it is also good to know about the people in the labor market. Several years ago it appeared that Alaska was an opportune place to find employment because of the activities of the oil companies. However, a person would have also found that the cost of living was high and that there was already a surplus of interested job seekers.

When looking for information by geographic area, many have noted that in contrast to the abundance of national and state information, local information is often the most difficult to find. There are several sources that provide details on the local economy and industrial structure. Two of these sources, CIDS and OIS, provide local data that is easily accessed. *County Business Patterns* is another example that identifies the number of business establishments in each industry and the distribution of business establishments by employee size.

Example of Local Information

DANE COUNTY AREA INDUSTRY EMPLOYMENT



Preliminary figures indicate GOVERNMENT (Gov). Dane County's largest employing sector, increased 400 in October for a total of 60,700. State government increased by 100 to 41,900, and local government increased by 300 for a total of 15,500. Federal government lost 100 positions for a total of 3,300. There were 1,500 more public sector jobs this October than last year.

TRADE (Trade) increased by 800 to 52,700 positions in October. Wholesale trade remained the same at 9,000, but retail trade increased by 800, for a total of 43,700. Area retail locations are adding new positions for the holiday trade. This is the second month in a row that retail trade has added 800 positions.

SERVICES (Serv) increased by 200 from 49,000 in September to 49,200 in October, 1990. There were 1,000 more jobs in the service sector this October than last.

MANUFACTURING (Mfg) decreased 300, for a preliminary October total of 26,300. Durable goods remained the same at 13,800, while nondurables fell by 300 to a preliminary 12,400. There were 1,300 more manufacturing jobs this October than in October of last year.

FINANCE, INSURANCE & REAL ESTATE (FIRE) reported in with 19,400 jobs. This was the same as last month, September. However, there were still 500 more FIRE industry positions this October than last year.

TRANSPORTATION, COMMUNICATION & UTILITIES (Trans/Comm) also remained unchanged at 8,700, but was down 100 from last year.

CONSTRUCTION (Const) was down by 100 from September to October at 8,900. Employment in this sector was up 800 from last year.

Figure 5.15

USING CROSSWALKS TO EASE THE PROCESS

Crosswalking enables the user to move back and forth across various classification systems.

LABOR FORCE, INDUSTRY AND OCCUPATIONAL PROJECTIONS

The State Employment Security Agency (SESA) also publishes industrial employment data for individual counties.

Another source, often overlooked, is the Yellow Pages in the local telephone directory. With this resource, one can determine the number of industries in the local area and can easily find employer names, addresses and telephone numbers.

(At this time the trainer should present local sources of all career and labor market information.)

Using Crosswalks to Ease the Process

Accessing the most useful information can be complicated for the novice because there are many data collection programs that provide career and labor market information. In addition, there are many different ways to classify and organize that information.

Within the descriptions of various resources, it was pointed out that one could move from one system to another, such as from the *Military Career Guide* to the DOT. This movement is called "crosswalking." It enables the user to move back and forth across the various classification systems in order to analyze and compare occupations. To maximize our use of information, these bridges, or crosswalks, between the various information systems are actually conversion tables between the different systems. Crosswalks are similar to a dictionary, which moves us from an English word to its Spanish equivalent; they allow the user to translate one information system to another. An example of a crosswalk can be found in a CIDS. The system links occupational information with related educational and training requirements behind the scenes. These two pieces of information are linked in the system and presented in a single profile so the user has a more complete picture of the occupation.

For more information on crosswalks, contact the National Crosswalk Service Center at the Iowa SOICC office (515/242-4890).

Labor Force, Industry and Occupational Projections

The following is an example of career and labor market information that can be used to enhance career decision making. These labor force, industry and occupational projections can provide insight into how the nation's work force and economy are likely to grow, e.g., which occupations will grow the fastest, which will decline, which will provide the greatest number of new jobs, and which occupations have the highest and lowest turnover rates.

(To the Trainer: Many of the terms and concepts contained in this section of Module 5 are defined in Module 2.)

Introduction

We operate with imperfect knowledge in an imperfect world. In order to answer the often asked question, "Where can I find a job in the future?" we must put our imperfect knowledge into context and understand its strengths and limitations. We know with certainty that the labor force of the year 2000 is already born. This makes it

The goal is to discuss trends that will impact on the effectiveness of career decision making.

easy to describe the demographics of the labor supply, but not necessarily the skill levels of the labor supply. Projecting which way the economy will go and which industries and occupations will grow and decline is not as predictable. A combination of statistical techniques and human judgment is required.

The major goal of this section in Module 5 is to present information that describes and analyzes significant trends in the labor force, economy, industries and occupations that will have an impact on the effectiveness of career decision making. In addition, the methodology and assumptions used to project trends are included. The results of the Bureau of Labor Statistics (BLS) projections from 1990-2005 are included. (Much of the information in this section is available at the state and local levels through offices of labor market information and SOICCs.)

Several trends need to be noted as the projections are discussed:

- **the rate of economic growth will be much slower through 2005 than during the 1970's and mid-1980's;**
- **women's share of the labor force will continue to increase;**
- **the work force will age;**
- **employment will be concentrated in a few industries, namely the services and retail trade industries;**
- **workers with the most education and training will have the best opportunities; and**
- **technology will continue to change the structure of employment and how work is done.**

Throughout the projections section please note several trends:

- **the rate of economic growth will be much slower through 2005 than during the 1970's and mid-1980's;**
- **women's share of the labor force will continue to increase, but more slowly than the past 20 years;**
- **the work force will age;**
- **employment will be concentrated in a few industries, namely the services and retail trade industries;**
- **workers with the most education and training will have the best opportunities; and**
- **technology will continue to change the structure of employment and how work is done.**

These trends have far reaching implications for how we direct our clients and students to make educational and career choices.

It is important to keep in mind that in addition to the national projections, each state goes through a process to determine statewide and local area projections for the labor force, industries and occupations. States vary in the amount of detail included in their economic forecasting. Many states use the micro-matrix program from Utah as the basis for their own projections of industry and occupational growth. Labor force projections are derived independently by the state. National labor force participation rates are adjusted based on differences in the decennial census for the state, or other survey source.

SOICCs or state labor market statistics units publish projections data in various forms, and for various time periods. These may not coincide with the national projections cycle. All states have printed projections. Some states also make the projections available through mainframe or micro computers. If the state has a career information delivery system (CIDS), the occupational projections data will be included for the state and the local areas. Projections may also be available through Occupational Information Systems at many state SOICC offices.

These projections were made given the following assumptions about general economic or social conditions:

- **Work patterns will not change significantly.**
- **Broad social and educational trends will continue.**
- **There will be no major war.**
- **There will not be a significant change in the Armed Forces.**
- **Fluctuations in economic activity will continue to occur.**

Assumptions

All projections are made with certain assumptions. The projections contained in this module were made given the following assumptions about general economic or social conditions:

- **Work patterns will not change significantly over the projections period, meaning that the average workweek will not change markedly.**
- **Broad social and educational trends will continue. For example, women will continue to be a large portion of the labor force.**
- **There will be no major war.**
- **There will be no significant change in the size of the Armed Forces.**
- **Fluctuations in economic activity due to the business cycle will continue to occur.**

BLS analysts also look at factors that previously have exerted a strong influence on projection results, and will determine whether these factors will continue to influence results into the projected period. An example is the continued participation of women in the labor force.

(Specific industry and occupational assumptions can be found in the November 1991 issue of the *Monthly Labor Review*, or in *Outlook 1990-2005*, published by the U.S. Bureau of Labor Statistics.)

OUTLOOK 1990 - 2005

Bureau of Labor Statistics Office of Employment Projections

- **The BLS projections program is carried out in the Office of Employment Projections.**
- **The program began with the development of career guidance information to assist returning veterans from World War II.**
- **Projections for a 10- to 15-year period have been developed every other year since the mid-1960's.**
- **The latest set of projections, which covers the 1990 - 2005 period, is the subject of this slide presentation.**

Figure 5.10

The Bureau of Labor Statistics (BLS) is responsible for making projections of the labor force, economic outlook, industrial employment and occupational employment.

These projections cover the period of 1990-2005.

A four step analysis leads to the projections. Components analyzed are:

- Labor Force
- Economy
- Industry
- Occupations

History of Projections

The Bureau of Labor Statistics is the agency responsible for making projections of the labor force, economic outlook, industrial employment and occupational employment. The BLS projections program is carried out in the Office of Employment Projections. The program began when the BLS was asked to generate career guidance information to assist returning veterans from World War II. Since the mid 1960s, projections have been developed every two years, covering a ten to fifteen year time span. The projections discussed here cover the period 1990 - 2005. Ordinarily three scenarios are prepared, a high, moderate and low growth view. The following comments are taken from the moderate growth scenario. (Much of the analysis is taken from the *Occupational Outlook Quarterly*, Fall 1991, U.S. Bureau of Labor Statistics. The Office of Employment Projections in the Bureau of Labor Statistics has prepared a slide series entitled "Outlook 1990-2005" which accompany this portion of Module 5.)

Sequence of Projection Procedures

There are four components that effect the status of a particular occupation. They are:

- Who is in the labor force?
- What is the level of activity in the economy?
- Which industries are strong and which are weak?
- What is the status of occupations within these industries?

A flowchart of the steps in the projection process is illustrated in the Sequence of Projection Procedures to Determine Occupational Demand.

Figure 5.17

Sequence of Projection Procedures to Determine Occupational Demand

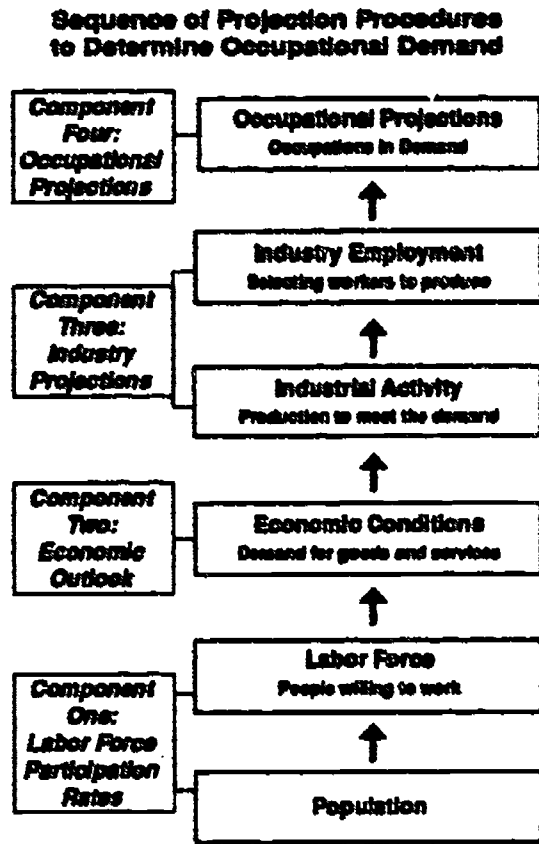


Figure 5.17

Methodology:
There is a formula for calculating the anticipated labor force.

Component One: Labor Force Participation Rates Methodology The first component in the projections describes the labor force. This includes people who are working or who are looking for work.

OUTLOOK: 1990-2005

- *Labor force*
- Economic outlook
- Industry employment
- Occupational employment

Figure 5.18

The size of the anticipated labor force is calculated by multiplying the labor force participation rates by the population projections (births, deaths and migration) for 100 different age, sex, race, and Hispanic origin groups.

Projection:
The labor force is expected to expand but at a slower pace than in 1975-90.

Projection The labor force is expected to expand but at a much slower pace than in 1975-90. Fast growing segments include blacks, Hispanics, Asians and other groups, although the vast majority of workers will be white non-Hispanics.



SOURCE: Bureau of Labor Statistics

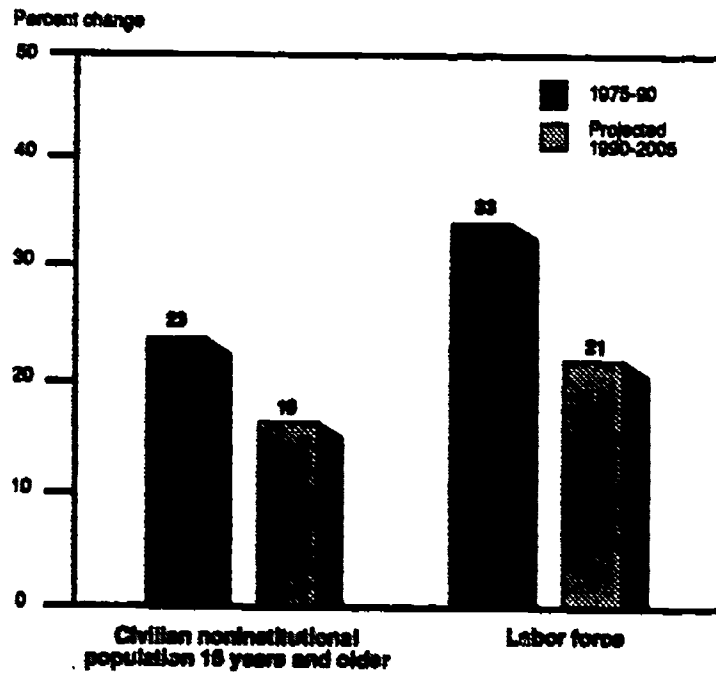
Figure 5.19

The declining birthrate and the slower increase in the participation rate will contribute to this slowing of the growth rate.

The rate of growth, 21 percent, will be slower than during the past 15 years. Labor force growth will slow for two reasons:

- Growth of new entrants to the labor force will slow, reflecting the lower birth rates in the 1970's and 1980's compared to the 1950's and 1960's.
- The proportion of the population participating in the labor force will increase at a slower rate than over the 1975-90 period.

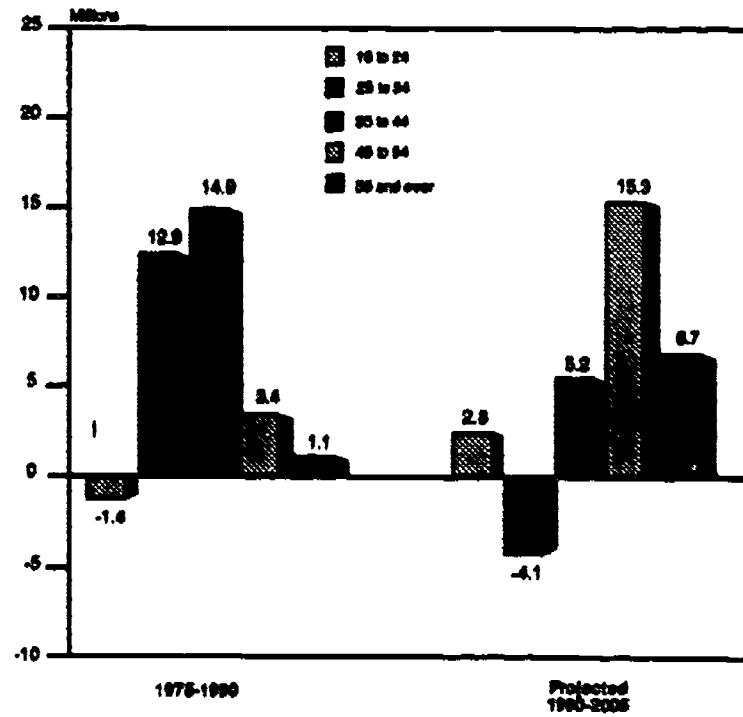
Labor force grows faster than population



SOURCE: Bureau of Labor Statistics

Figure 3.20

Labor force growth by age



SOURCE: Bureau of Labor Statistics

Figure 3.21

The baby boom, declining birth rates in the 1960s, and children of the baby boom cohort will continue to have an impact on the labor force.

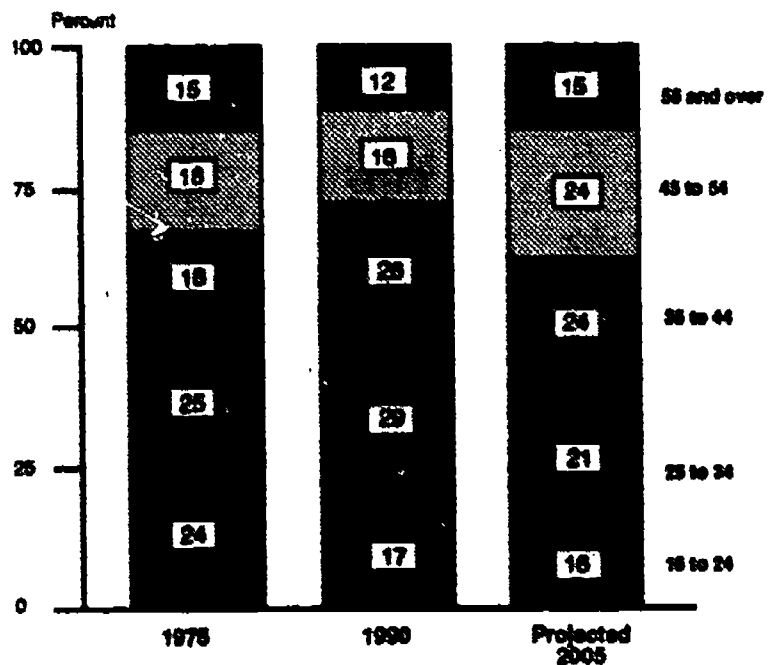
The changing age of the baby boom generation has had, and will continue to have, a major impact on the age distribution of the labor force. In 1975, the baby boomers, people born between 1946 and 1964, were concentrated in age groups 16-24 and 25-34. In 1990, most were in age groups 25-34 and 35-44.

By 2005, the baby boomers will be concentrated in the 45-54 age group which will increase by 15 million from its level in 1990. The over 55 group will also show significant increases.

The decline in the birthrate in the 1960's will result in a decline in the 25-34 age group between 1990 and 2005.

The children of the baby boom generation will be entering the labor force from 1990-2005. As a result, beginning in the mid-1990's, there will be an increase in the 16-24 age group.

Age distribution of labor force is changing



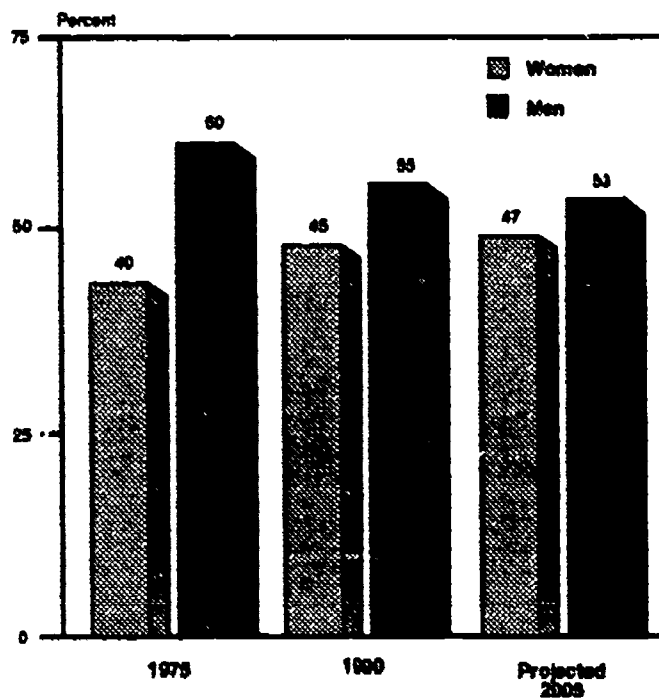
SOURCE: Bureau of Labor Statistics

Figure 5.22

Although rates of labor force growth are projected to drop for both men and women, labor force growth for women will be greater, reflecting their increasing labor force participation.

Women will continue to increase their share of the labor force through 2005, especially in the 35-44 year age group.

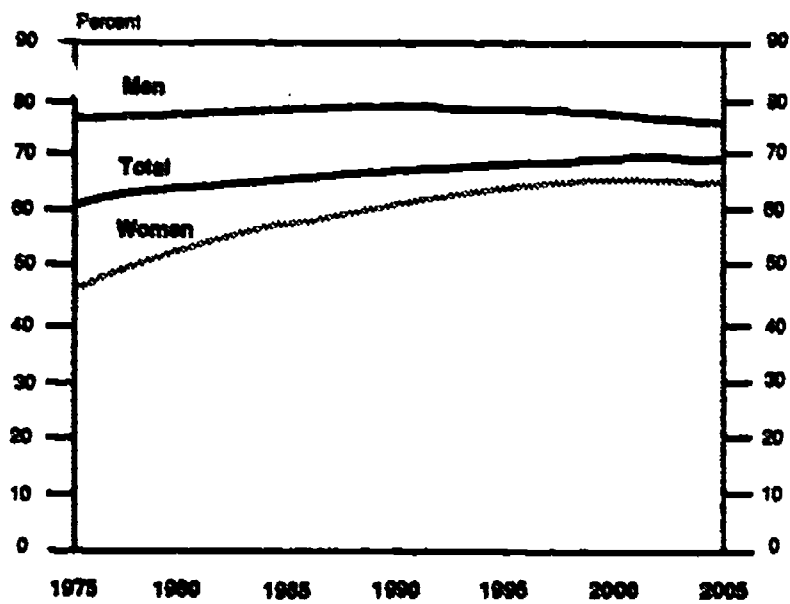
Women's share of labor force is growing



SOURCE: Bureau of Labor Statistics

Figure 5.23

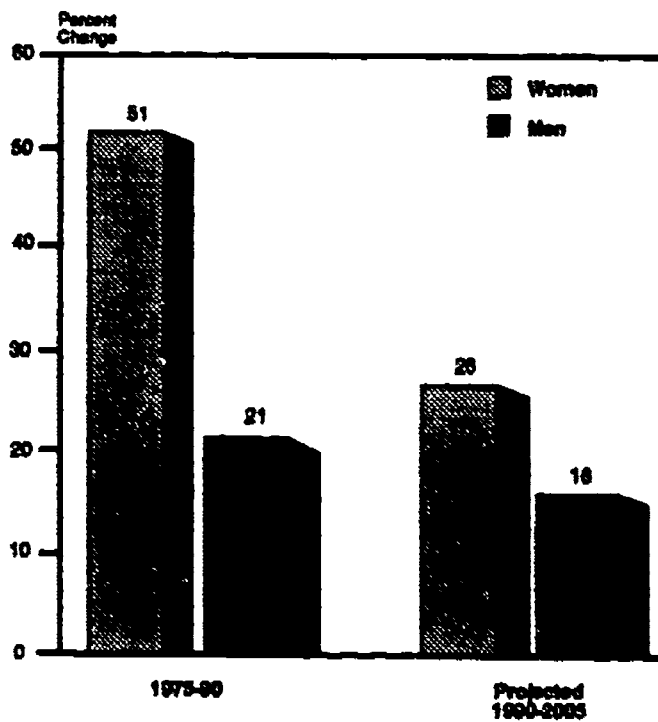
Labor force participation rate trends differ for men and women



SOURCE: Bureau of Labor Statistics

Figure 5.24

Labor force growth slows more for women than men

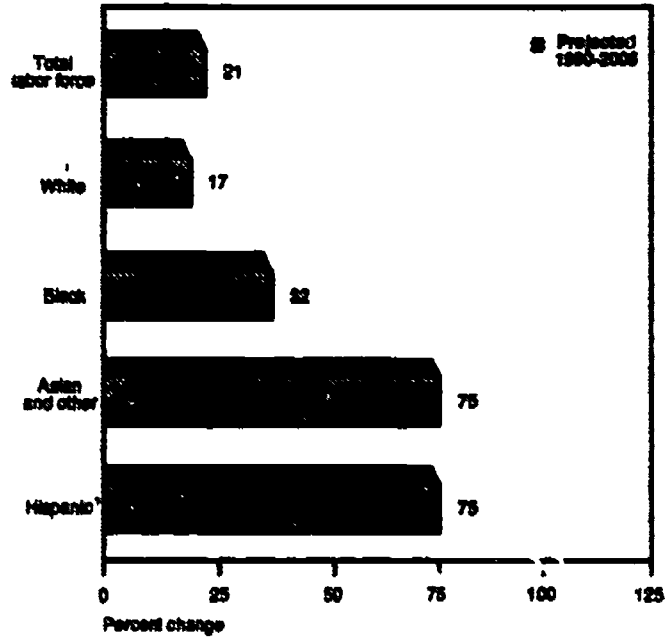


SOURCE: Bureau of Labor Statistics

Figure 5.25

The rate of increase however, will be slower over the 1990-2005 period during the past 15 years as the rates for women approach those of men. Historically, the labor force participation rate of women rose steeply during the 1960's and 1970's. The rate will continue to rise but more slowly.

Labor force growth by race and Hispanic origin



SOURCE: Bureau of Labor Statistics

Figure 6.28

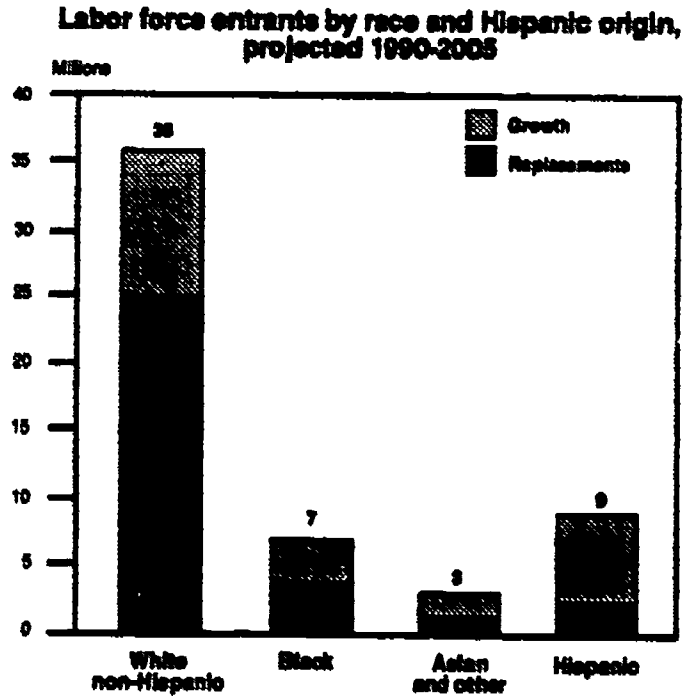
1 Persons of Hispanic origin may be of any race

Minorities' share of the labor force will continue to grow.

Minorities' share of the labor force will grow. Blacks, Hispanics, and Asians and others will continue to increase in numbers faster than the average growth of the labor force as a whole.

Hispanics, Asians and other races will grow faster than other groups. For Asians and others, this is primarily due to immigration. The number of Hispanics will increase because of immigration and a higher birthrate.

Labor force participation of blacks will grow faster than whites because the birthrate for blacks did not decline as much as the white birth rate during the 1970's.



SOURCE: Bureau of Labor Statistics

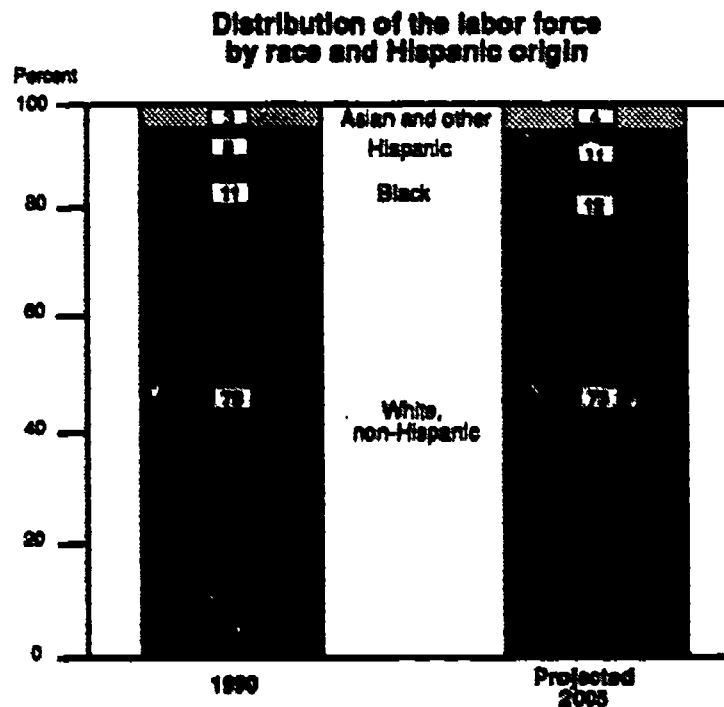
Page 9.27

Some of the entrants into the labor market will be needed to replace those leaving the labor force. The others represent a net growth of 26 million workers.

The majority of the entrants will continue to be white, non-Hispanic, men and women.

Of the projected 151 million workers who will be in the labor force in 2005, 56 million will enter during the 1990 to 2005 period. Of these entrants, 30 million will replace workers who will leave the labor force between 1990 and 2005.

White, non-Hispanic, men and women will account for the majority of entrants to the labor force. Hispanic entrants will account for 15.7 percent of all entrants. Asians will only account for 6 percent of all entrants. Blacks will account for 13 percent of its new entrants.



SOURCE: Bureau of Labor Statistics

Figure 5.28

OUTLOOK: 1990-2005

- Labor force
- *Economic outlook*
- Industry employment
- Occupational employment

Figure 5.29

Methodology:

The next step is to determine the sum total of all economic activity in the country.

Macroeconomic models are used to determine the relative wealth of the country.

Estimates of demand are then made by industry, both public and private.

The Input-Output stage of the projections estimates the goods and services needed to produce the projected GNP.

Component Two: Economic Outlook

Methodology After labor force participation rates are projected, the second stage is to determine the sum total of all economic activity in the United States, also known as the aggregate economic activity. This includes real gross national product (GNP), and the distribution of GNP across five major demand and income categories:

1. personal consumption expenditures (buying a car);
2. gross private domestic investment (business investment in equipment);
3. exports (e.g., selling wheat to Russia);
4. imports (buying oil from OPEC); and
5. government (spending on Medicaid).

This is accomplished using a macroeconomic model that correlates various aspects of the economy. In some cases the model can include over 200 variables covering such items as population projections, household formation, defense and non-defense purchases, grants-in-aid to State and local governments, federal transfer payments to individuals, taxes, etc. Through this analysis, the relative wealth of the nation is determined.

Aggregate estimates are then made by industry. The economy is disaggregated into 226 producing sectors covering both private and public industries. The Input-Output model provides the major framework, data is provided by the Bureau of Economic Analysis, U.S. Department of Commerce.

This stage of the projections process estimates the flow of goods and services needed to produce the projected GNP. A mathematical model is used to estimate all intermediate inputs given relationships among industry inputs and final demand for products and services.

Projection:

The components of GNP will grow but at a slower rate than over the past 15 years.

Over the 1990 to 2005 period the components of GNP, the types of goods and services in demand, will grow at different rates, but most will grow slower than over the past 15 years. It is this growth and demand that determines employment growth in the industries that produce these goods and services. Changes in the demand for goods and services also change employment demand for workers by occupation.

Consumption - Goods and services purchased by individuals will grow at about the same rate as total GNP and will continue to be the largest component of demand.

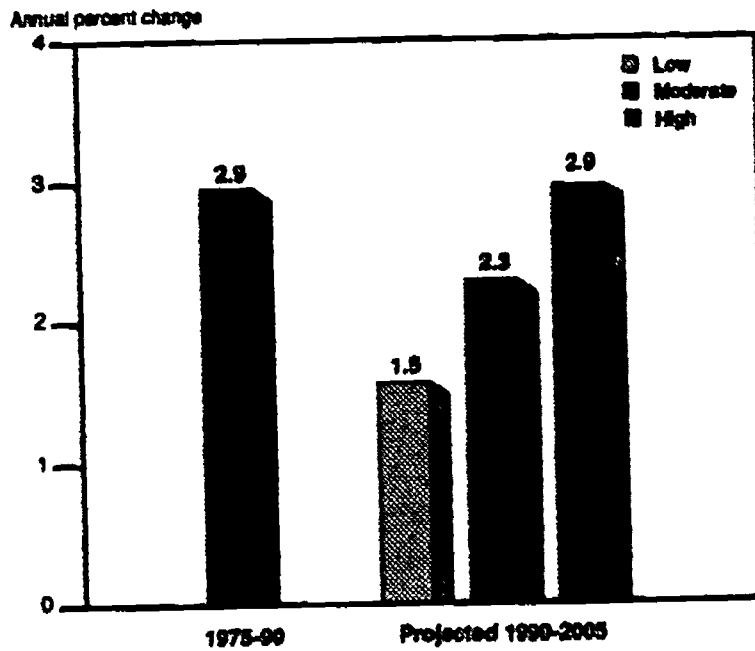
Investment - This component will continue to grow faster than total GNP, but growth will slow significantly compared to the past 15 years, in particular for residential construction.

Exports and Imports - Exports will grow faster than imports but both will continue to be the fastest growing categories of GNP over the 1990 to 2005 period.

Federal Government - These expenditures will continue to decline due to cuts in defense expenditures. This is a major change from the 1975-1990 period when defense expenditure increased faster than the total GNP.

State and Local Government - These expenditures are the only major category that will increase faster over the 1990 to 2005 period than it did from 1975 to 1990.

GNP growth and projected alternatives



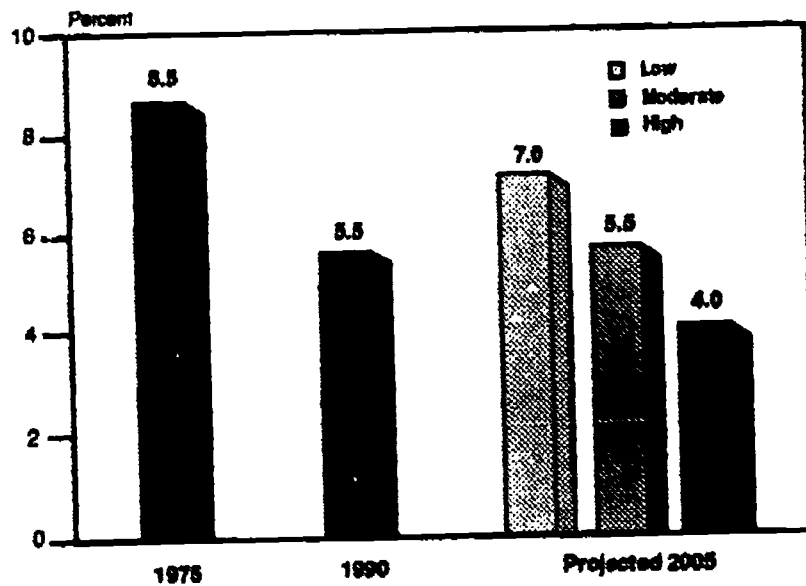
SOURCE: Bureau of Labor Statistics

Figure 5.30

The unemployment rate is assumed to remain unchanged in the moderate growth scenario.

From 1990 to 2005, the unemployment rate is assumed to increase in the low-growth alternative to 7%, to remain unchanged in the moderate growth scenario at 5.5%, and to decline in the high growth scenario to 4%. None of these scenarios takes into consideration the possibility of war or natural disasters.

Unemployment rates and projected alternatives



SOURCE: Bureau of Labor Statistics

Figure 5.31

This component, Industry Projections, analyzes the trends in employment by industry.

Component Three: Industry Projections Methodology The next step in the projections process uses estimates of the change in output, labor productivity and hours of work to quantify overall productivity changes.

OUTLOOK: 1990-2005

- ❖ Labor force
- ❖ Economic outlook
- **Industry employment**
- ❖ Occupational employment

Figure 5.32

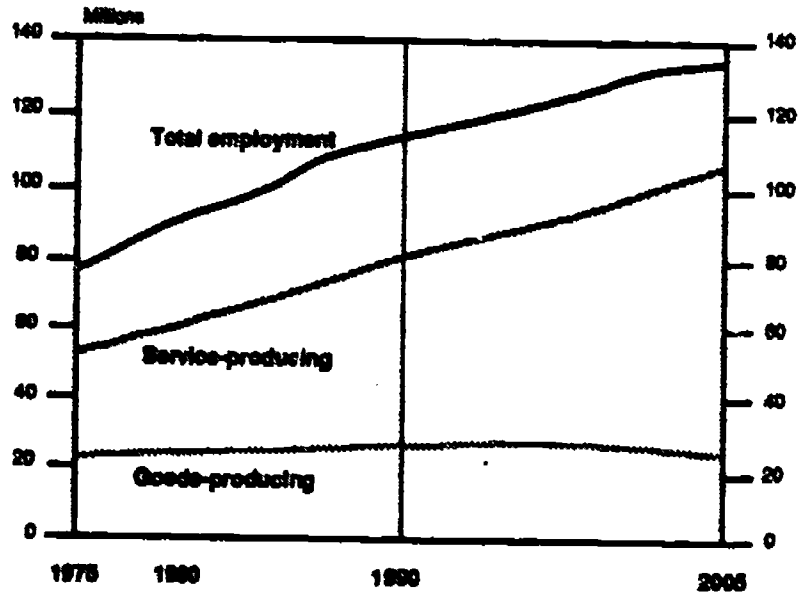
This step of the projection process analyzes the trends in employment by industry. The number of jobs, the average workweek, and the number of employee hours are projected for each of the 226 industries. Computations are based on the projected changes in output and other factors. For each industry, an equation is estimated that relates the demand for labor in that industry to the output of the industry and to certain other economic variables.

Employment growth will vary significantly among industries, reflecting changes in the demand for goods and services. Industries employ workers in different types of occupations. Therefore, the changing industrial structure has an affect on occupational employment trends.

Projection:
Of the 26 million new jobs by the year 2005, the service-producing sector will dominate and the goods-producing sector will remain stable.

Projection Of the 26 million new jobs expected by 2005, the service-producing sector will dominate, with about half added to retail trade, health services and business services. The goods-producing sector will remain stable.

Employment growth by major economic sectors, 1975-2005



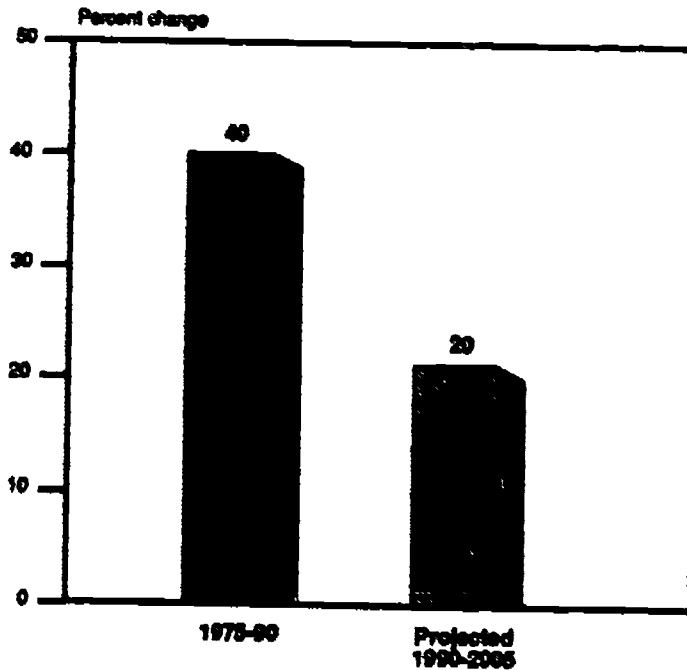
SOURCE: Bureau of Labor Statistics

Figure 5.33

Total employment is projected to increase but at a slower rate. This slowdown reflects the slower growth of the labor force.

Total employment (includes wage and salary workers, self-employed workers, and unpaid family workers) will increase by 24 million from 1990 to 2005, much less than the 35 million increase from 1975 to 1990. The rate of employment growth will be half the rate of growth during the previous 15 years.

Employment growth, 1975-90 and projected 1990-2005

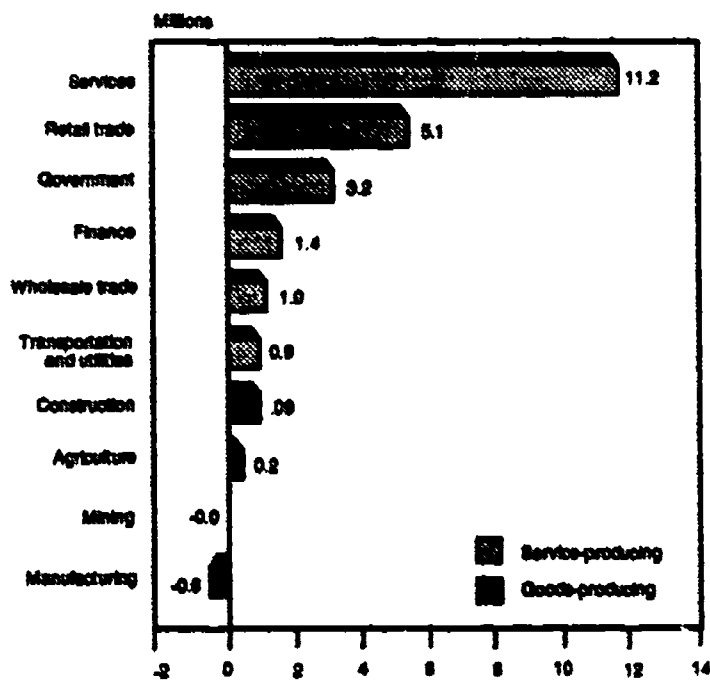


SOURCE: Bureau of Labor Statistics

Figure 5.34

Again, employment gains will continue to be in service producing industries.

Job growth in services outpaces other industry divisions, 1990-2005



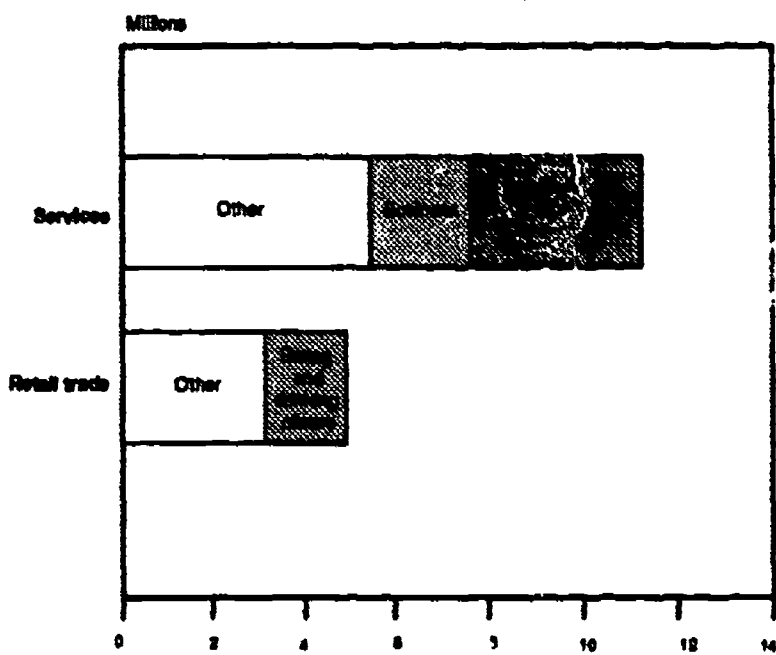
SOURCE: Bureau of Labor Statistics

Figure 5.25

The rapidly growing services division will add 13 million jobs over the 1990 to 2005 period. Services is the only industry division projected to grow significantly faster than the average growth of 20 percent.

Health, business, education, and engineering and management services will account for about two-thirds of the growth in the services industry division.

Employment growth within services and retail trade will be concentrated, 1990-2005



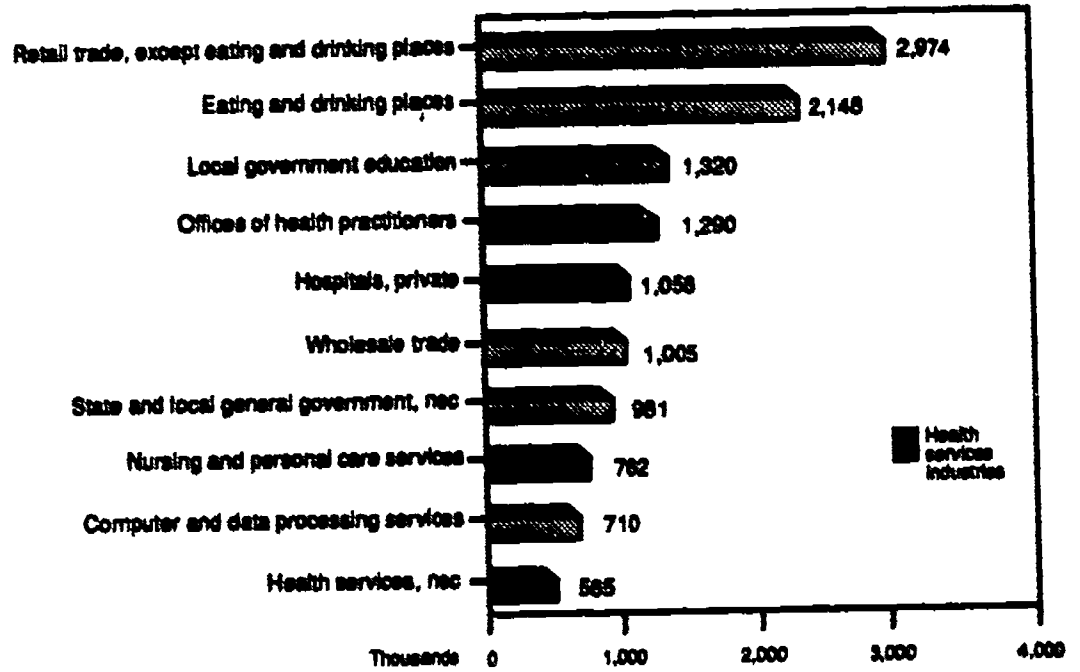
SOURCE: Bureau of Labor Statistics

Figure 5.28

Occupations in the health services industry will be among the most rapidly growing occupations.

Occupations concentrated in the health services industry will be among the most rapidly growing occupations. They have very favorable employment prospects. Employment in the health services industry will grow by 3.9 million.

Industries adding the most jobs, 1990-2003

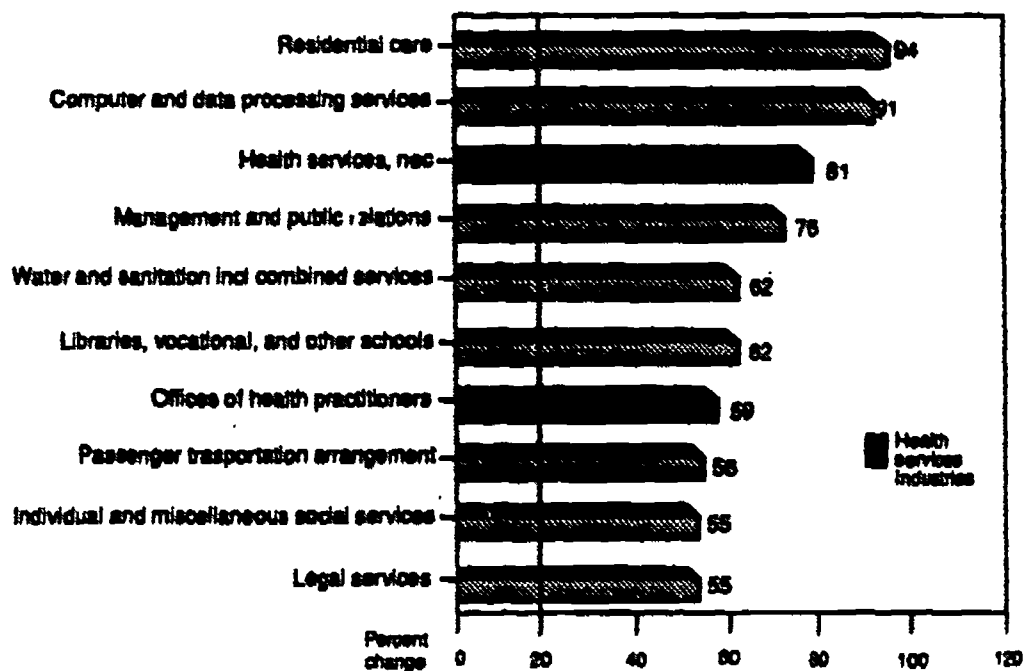


SOURCE: Bureau of Labor Statistics

Figure 8.37

Industries projected to add the most jobs during 1990-2005 include eating and drinking places, local government education, offices of health practitioners, hospitals, wholesale trade, state and local government, nursing and personal care services, computer and data processing, and other health services. Although eating and drinking places will add the most jobs, the projected gain is much less than the growth over the period 1976 to 1988 (2.6 million jobs). The increase in state and local education reflects an increase in the school-age population (the children of baby boomers). Although goods producing industries are not represented on the charts, their employment is projected to remain stable.

Industries with the fastest job growth, 1990-2005



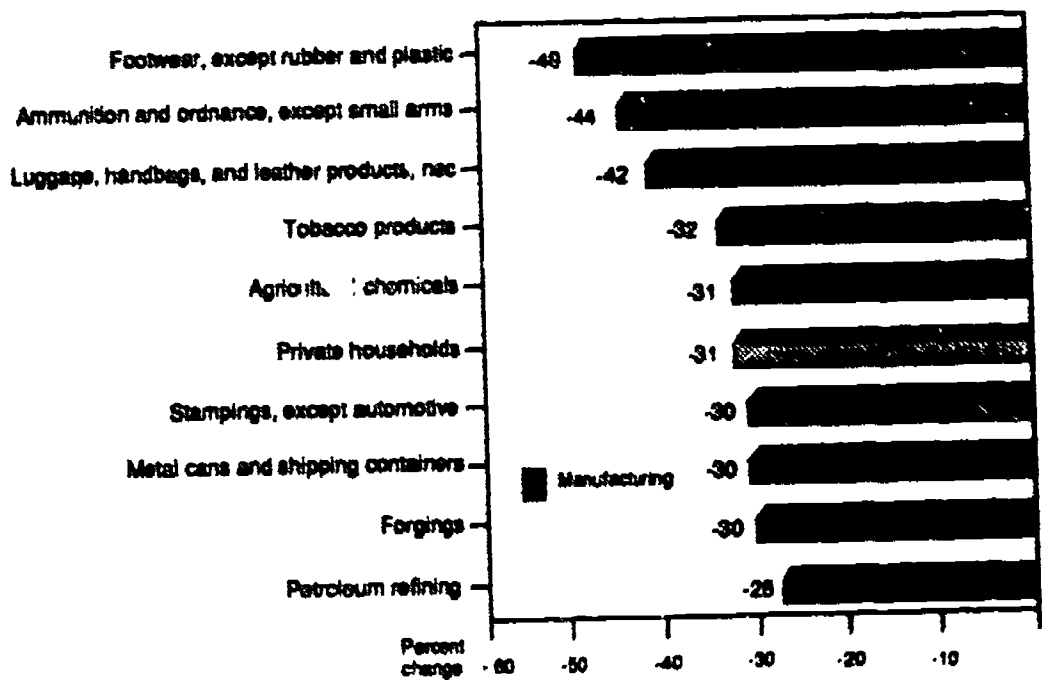
SOURCE: Bureau of Labor Statistics

Figure 5.28

Industries which reflect the largest percentage of change are again concentrated in the health services industries.

"Industries with the fastest job growth" means that these industries reflect the largest percentage of change for a given period. For example, between 1990 and 2005, industries with the fastest job growth are concentrated in the health care or business services. The fastest growing health services industry will be residential care. Computer and data processing services continue to add a large number of jobs.

Industries with the most rapid job declines, 1990-2005



SOURCE: Bureau of Labor Statistics

Page 5 28

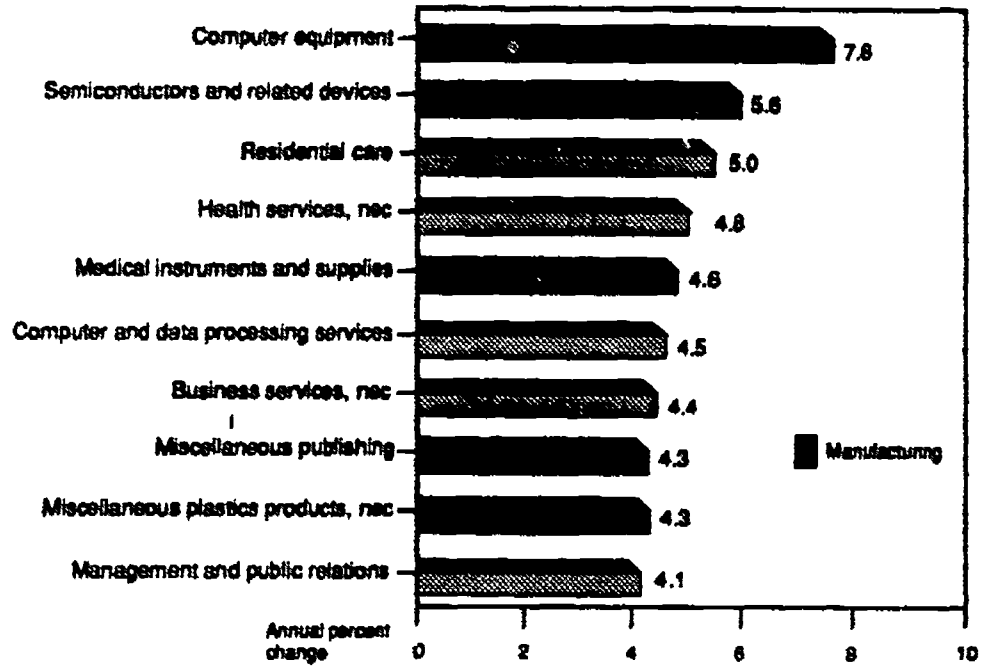
The majority of the most rapidly declining industries will be in manufacturing.

The majority of the rapidly declining industries in terms of employment, between 1990 to 2005, are in manufacturing.

Another way to talk about industries is to look at their output. High technology manufacturing industries will be among the fastest growing in terms of output.

Another way to look at industries is by their output. Some high technology manufacturing industries will be among the fastest growing in terms of output. These include computer equipment, semiconductors, and medical instruments.

Industries with the fastest growing output, 1990-2005



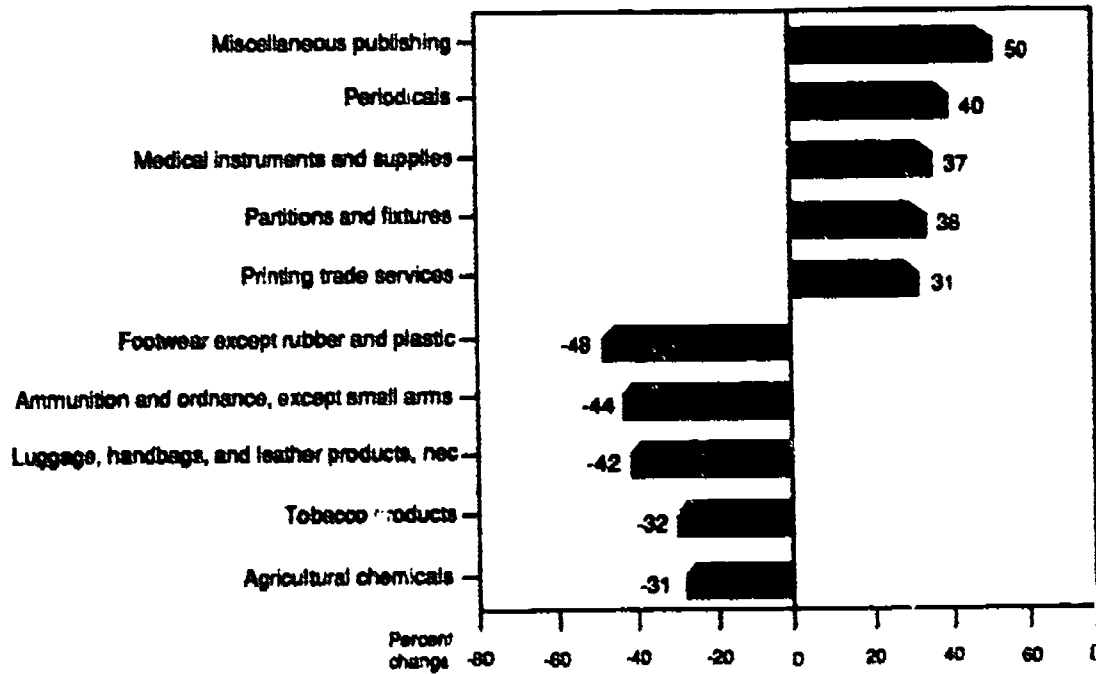
SOURCE Bureau of Labor Statistics

Figure 3.40

Some manufacturing industries will increase.

Even though total manufacturing employment will decline slightly, a handful of manufacturing industries are projected to experience some employment growth. Over half of these industries are associated with printing or furniture and fixtures. Those industries that are projected to decline will do so either because they face shrinking markets, such as the tobacco industry, or will be able to meet rising demand with fewer workers because of expected productivity increases.

Fastest growing and declining manufacturing industries, 1990-2005



SOURCE: Bureau of Labor Statistics

Figure 5.41

Component Four: Occupational Projections

OUTLOOK: 1990-2005

- Labor force
- Economic outlook
- Industry employment
- ***Occupational employment***

Figure 5.42

Methodology:

An industry-occupation matrix is used to project employment in approximately 500 occupations.

Projection:

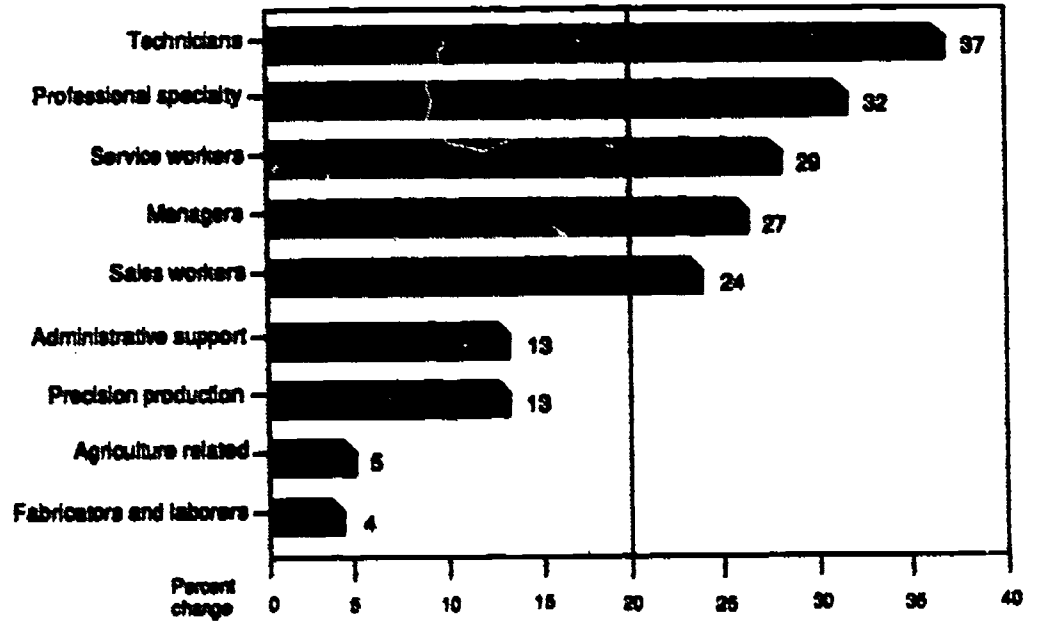
Jobs will be available for workers at all educational levels, but those with the most education and training will enjoy the best opportunities.

Methodology The fourth major phase of the projections process is to develop employment projections for approximately 500 occupations. These 500, or so, occupations cover 100% of the working population. An industry-occupation matrix is used to project employment in approximately 500 occupations for over 200 industries.

Occupational staffing patterns for the industries are based on data collected by State Employment Security Agencies (SESAs) and analyzed by BLS. The projected industry employment data are applied to the projected industry occupational staffing patterns, yielding employment by occupation for each industry. The staffing patterns are aggregated across all industries to yield total occupational employment for the projected year.

Projection The future occupational structure is projected to provide jobs for workers at all educational levels, but those with the most education and training will enjoy the best job opportunities.

Employment growth by major occupational group, 1990-2005



SOURCE: Bureau of Labor Statistics

Figure 5.43

The occupational groups which employ workers with the highest levels of educational attainment will experience faster than average growth.

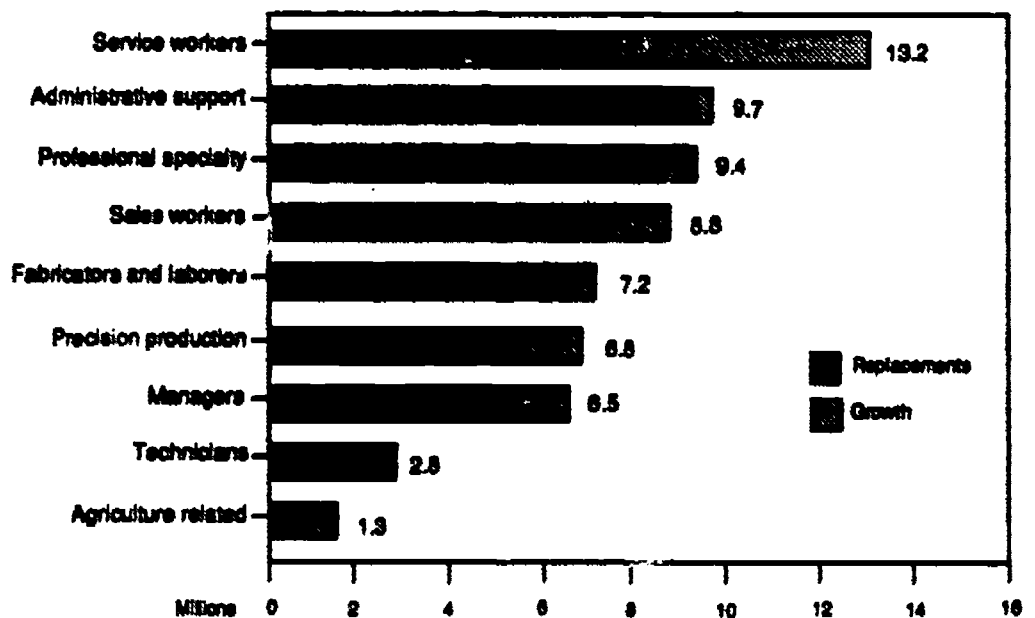
The occupational groups with the highest levels of educational attainment will experience faster than average growth. They are:

- technicians,
- professional specialty occupations, and
- managers.

Of the other major groups, only service workers and sales workers are projected to have faster than average growth.

In contrast, precision production, operators, and agriculture related occupations have the lowest proportion of workers with college training and these occupations are projected to have the slowest employment growth.

Job openings for replacement and growth, 1990-2005



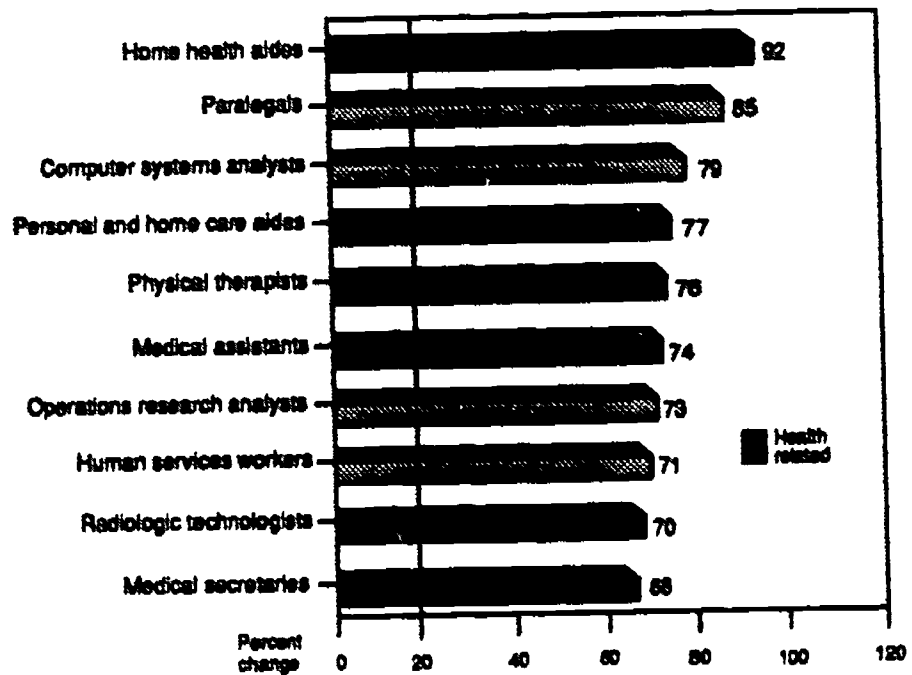
SOURCE: Bureau of Labor Statistics

Figure 8.44

Jobs will be available for workers at all levels of education.

Nevertheless, jobs will be available at all levels of education because of the large size of the occupation groups requiring less than college training and the need to replace workers who will leave their jobs from 1990 to 2005.

Fastest growing occupations, 1990-2005



SOURCE: Bureau of Labor Statistics

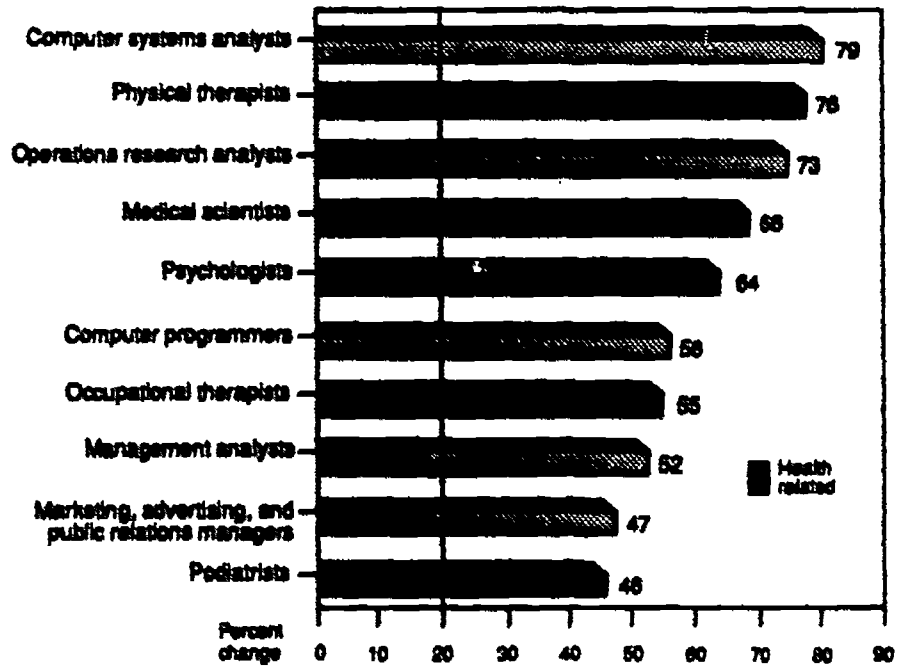
Figure 5.45

Due to rapid growth in the health services industry, many growing occupations are health related.

In conjunction with the projection of rapid growth in the health services industries, it makes sense that many of the fastest growing occupations are health-related. Related occupations such as medical secretaries, not considered a health service occupation, are also expected to grow rapidly because of their role in health service industries.

It should be noted that of the fastest growing occupations requiring at least a bachelor's degree or more education, the top occupations are tied to the health service industry or computer technology.

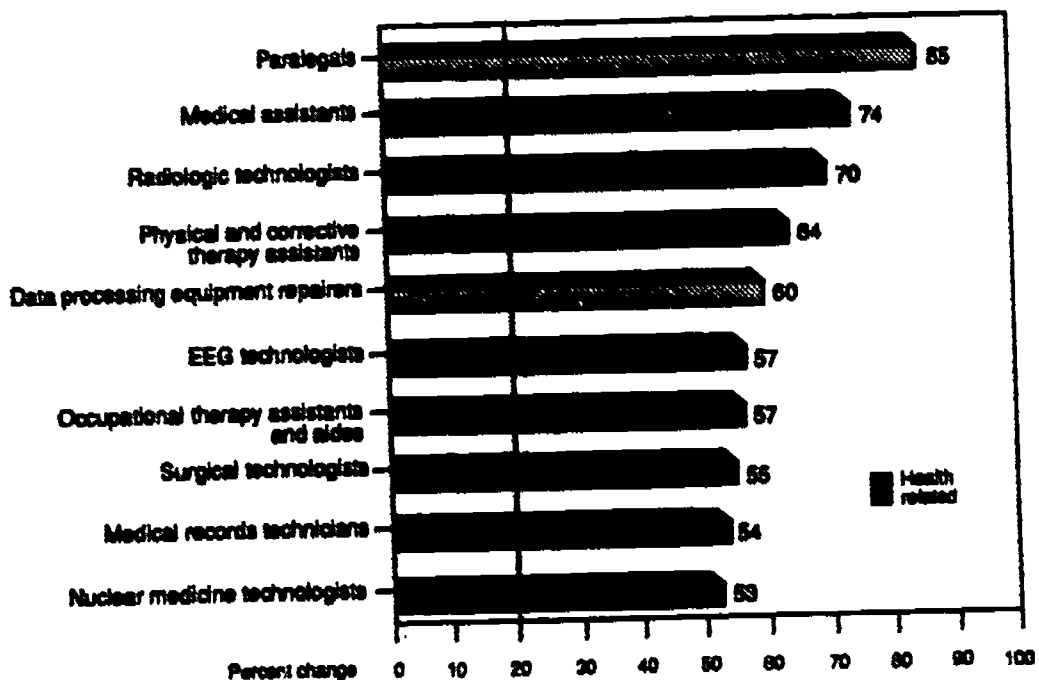
Fastest growing occupations generally requiring at least a bachelor's degree, 1990-2005



SOURCE: Bureau of Labor Statistics

Figure 3.46

Fastest growing occupations generally requiring post-secondary training but less than a college degree, 1990-2005



SOURCE: Bureau of Labor Statistics

Figure 5.47

Once again, health related occupations dominate the lists of growing occupations at all levels of educational attainment.

Once again, health service occupations are a sizable proportion of the fastest growing occupations requiring some post secondary training or extensive employer training.

Fastest growing occupations generally requiring no more than a high school diploma, 1990-2005



SOURCE: Bureau of Labor Statistics

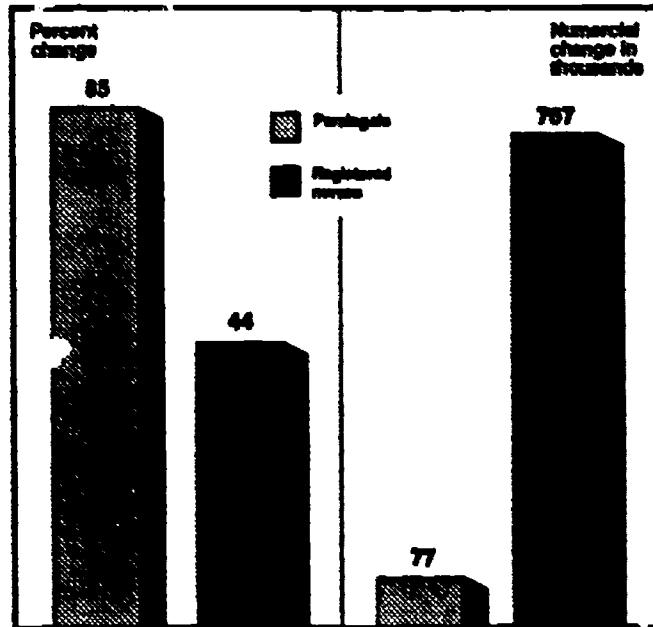
Figure 5.48

In general, occupations that do not require high levels of educational attainment are expected to grow more slowly than average.

Of occupations requiring no more than a high school diploma, five of the ten fastest growing are in delivering personal services such as home health aides, personal home care aides, human service workers, and child care workers. These jobs often require some on-the-job training.

In general, major occupational groups with lower levels of educational attainment, except sales and service workers, are expected to grow more slowly than average.

**Job growth may be viewed in two ways:
Changes, 1990-2005**



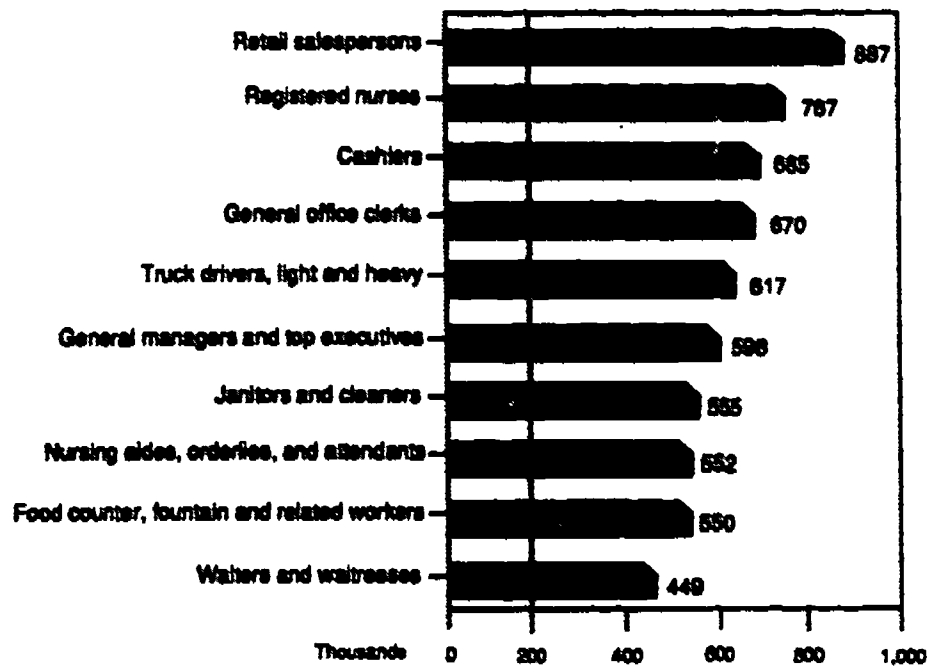
SOURCE: Bureau of Labor Statistics

Figure 5.60

Do not always assume that occupations with the fastest growth rate provide the most new jobs. Remember, "growth" refers to the percentage of already existing jobs, not the actual number of jobs.

Occupations with the fastest growth rate do not necessarily provide the most new jobs. For example, although employment of registered nurses is projected to grow less in percent change than paralegals, this occupation will generate ten times more new jobs in actual numbers because there are many more registered nurses than paralegals. In general, fast growth is an indicator of favorable job opportunities. But "large numbers of new jobs" strongly indicates favorable job opportunities.

Occupations adding the most jobs, 1990-2005



SOURCE: Bureau of Labor Statistics

Figure 5.50

Among the 500 occupations for which projections were developed, 30 will account for half of total employment growth over the 1990 to 2005 period. Growth stems from the rising demand and the need to replace workers who will leave their jobs from 1990 to 2005.

Employment change in declining occupations, 1990-2005



SOURCE: Bureau of Labor Statistics

Figure 5.91

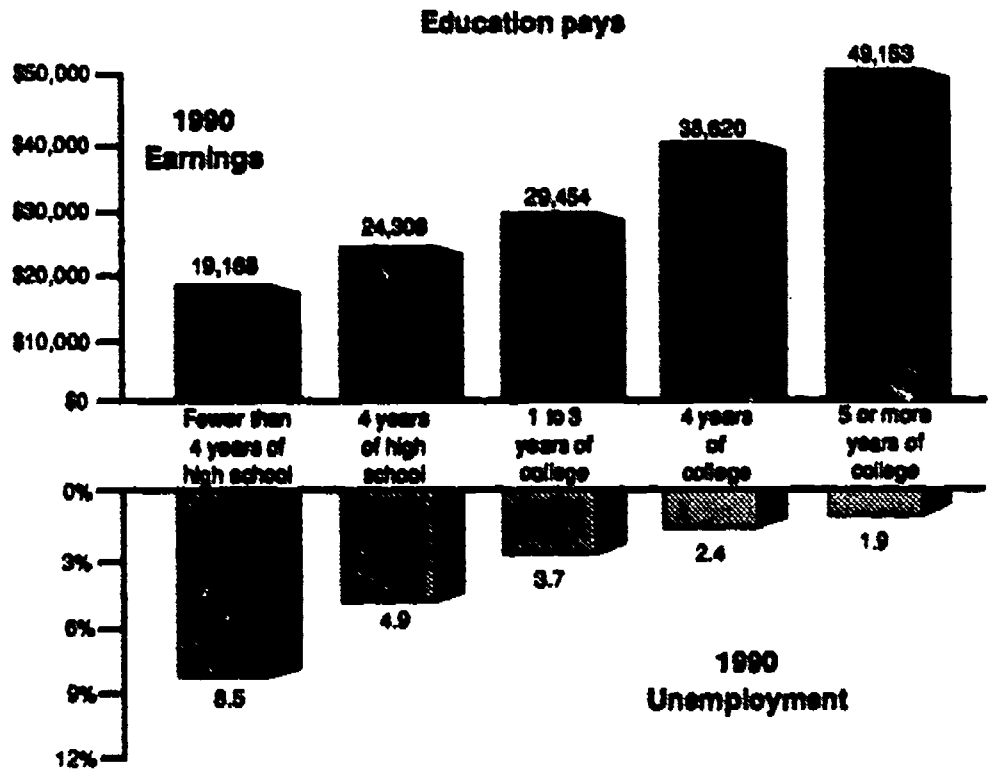
Occupations with the greatest decline in employment are concentrated in declining industries or affected by technological change.

Occupations with the greatest decline in employment are concentrated in declining industries or industries affected by technological change. Some occupations are affected by both factors. About half the declining occupations are concentrated in manufacturing. Even though the demand for a particular occupation may be declining, there will still be a need for new workers to replace people leaving these occupations.

Combining Projections with Other Information

Another way to use labor market information is to combine it with other indicators such as educational attainment and earnings.

Another way to look at labor market information is to combine occupational information with other indicators, such as educational attainment, earnings, and unemployment.



SOURCE: Bureau of Labor Statistics

Figure 5.22

Three of the four fastest growing major occupational groups have the highest proportion of college-educated workers - technicians, professional specialty occupations, and managers.

The two slowest growing major groups are those that have the highest proportions of workers with less than a high school education - fabricators and laborers; and agriculture, forestry, and fishery workers. Service workers are the exception. Their numbers are growing rapidly but the educational requirements are low.

Not only is education important in getting higher paying jobs, but people with more education have higher earnings within virtually all occupations.

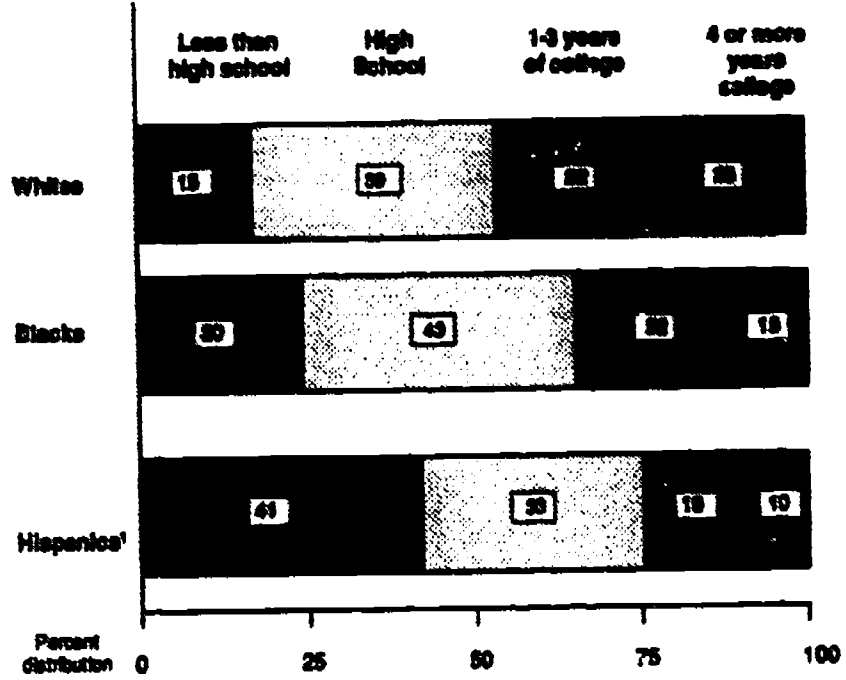
Annual earnings of workers by highest level of educational attainment, 1987

Occupational group	Total	Less than high school	High school	Some college	4 years of college or more
Average, all occupations	\$21,543	\$16,849	\$18,802	\$21,875	\$31,029
Managerial	30,284	22,308	23,288	27,255	37,252
Professional specialty	30,118	18,177	23,233	27,458	31,311
Technicians	24,489	18,207	21,358	23,830	28,004
Marketing and sales	22,220	18,748	17,854	22,548	32,747
Administrative support	17,120	15,585	18,554	17,481	20,823
Service	13,443	10,784	12,093	18,937	21,381
Precision production	24,858	20,485	25,140	27,042	30,938
Operators	18,132	15,385	18,303	21,827	22,114
Agriculture-related	11,781	10,571	12,730	18,331	17,130

SOURCE: Bureau of Labor Statistics

Figure 5.23

Educational attainment of workers by race and Hispanic origin, 1990



SOURCE: Bureau of Labor Statistics
¹ Persons of Hispanic origin may be of any race

Figure A.54

The level of education attained is one of many factors which contributes to the low representation of blacks and Hispanics in certain occupational groups.

**Concentration of blacks and Hispanics
by major occupation group, 1990**

Occupation group	Percentage of total		Percentage of blacks	Percentage of Hispanics	Percentage of whites
	Blacks	Hispanics			
Total	10.1	7.5			
Managers	6.2	3.8	H	H	L
Professional specialty	6.7	3.4	H	H	L
Technicians	9.1	4.3	H	High	L
Sales workers	9.4	5.3	H	Average	A
Administrative support	11.4	8.5	L	Low	L
Service workers	17.3	11.2	H	L	H
Precision production	7.8	8.5	L	H	A
Fabricators and laborers	15.0	12.2	L	L	H
Agriculture related	6.1	14.2	L	L	H

SOURCE: Bureau of Labor Statistics

Page 6-28

Blacks and Hispanic workers have lower educational attainment than whites. As a result, blacks and Hispanics are underrepresented in the fast growing and higher paying occupations.

Blacks and Hispanics are underrepresented in the fast growing and higher paying managerial, professional specialty, and technician jobs. Blacks are concentrated in three major occupational groups:

service occupations; administrative support occupations, including clerical; and fabricators and laborers.

Despite changes in individual occupations, the overall structure of occupations will remain relatively stable.

Hispanics are concentrated in service occupations; in fabricator and laborer occupations; and in farm occupations. All of the major occupational groups in which minorities are found in large numbers had below average annual earnings, and of these, only service workers are projected to grow faster than average.

Despite individual occupational gains and declines, the overall structure of occupations will remain relatively stable. This means that workers with a variety of levels of educational attainment will be needed. Jobs will be available for the less educated as well as for those who earn college degrees. However, among each of the major occupational groups, those workers with four year college degrees will earn more on average than workers without such degrees.

Despite this overall pattern, it is not correct to assume that good jobs will be available only for people with college degrees and only in fields that are projected to grow faster than average. Many occupations that do not require a four year college degree have above

average earnings and are expected to offer favorable employment prospects due to projected growth rates that are at least average, and to replacement rates. However, these jobs may still go to those with a college degree because of employer preference.

The bottom line remains that those without some education beyond high school will be at a serious disadvantage in the labor market. They will face low wages, dislocation and disruption throughout their working life.

Given these projections, we need to consider a number of challenges.

The plight of the American economy could ease if we could combine lower unemployment rates with higher productivity.

Productivity:
Development of world markets should provide an impetus to focus on high technology goods and services.

Education:
The potential imbalance between the educational preparation of those entering the labor force and the skill requirements of industry, requires attention.

Issues and Implications

The projections just described highlight certain implications for the future.

- **Productivity growth is linked to future increases in the American standard of living and our global competitiveness.**
- **We are challenged educationally to prepare all our potential workers, especially our minority populations, for the types of jobs that our economy is generating.**
- **A general shortfall in the educational attainment of the labor force will greatly influence our ability to address the previous two points.**
- **Slower projected growth of the labor force coupled with an economy continuing to produce jobs could result in lower unemployment rates than experienced in the last couple of decades. If lower unemployment rates could be coupled with increased productivity growth, the plight of the American economy could ease. A number of problems continue to be present, however, not the least of which is the unpreparedness of the work force.**

Productivity

Productivity growth has slowed in the past 10 to 15 years as compared to earlier periods. This contributes to dampened growth of real GNP and real disposable personal income. Productivity growth also affects our ability to compete in the global market. Foreign trade is projected to grow rapidly. The development of worldwide

markets demand a continuing emphasis on producing high technology goods and services to sell both at home and abroad.

Education

The potential imbalance between the educational preparation of those entering the labor force and the skill requirements of industry, requires attention. Not only are there significant numbers of people who do not graduate from high school, workers currently in the work force are also unprepared to meet the challenges technology brings to various jobs.

Current projections suggest that the occupations requiring the most overall education (managerial, professional and technical occupations), will experience a faster rate of growth than occupations with the lowest educational requirements. Some conclude that the difference between the educational requirements for some jobs and

markets demand a continuing emphasis on producing high technology goods and services to sell both at home and abroad.

Education

The potential imbalance between the educational preparation of those entering the labor force and the skill requirements of industry, requires attention. Not only are there significant numbers of people who do not graduate from high school, workers currently in the work force are also unprepared to meet the challenges technology brings to various jobs.

Current projections suggest that the occupations requiring the most overall education (managerial, professional, and technical occupations), will experience a faster rate of growth than occupations with the lowest educational requirements. Some conclude that the difference between the educational requirements for some jobs and the educational attainment of the potential labor force suggests a potential mismatch. This perceived mismatch of educational attainment and educational requirements for jobs requires a closer look.

For example, the latest projections of the supply and demand for college educated workers suggests an easing of the competition in the job market for college graduates from the early 1970s to present. This does not rule out the possibility of there being a mismatch of graduate skill levels and the needs of industry. The rapid growth of jobs for technicians with postsecondary training below the bachelor's degree could still indicate a potential gap. A shortfall could result for primarily three reasons:

1. The proportion of high school graduates going on to college has increased over the last decade. In previous years, some of these students would have opted for technical training.
2. A growing number of young people do not complete high school. Hispanics are the fastest growing component of the labor force and their low high school completion rate exacerbates this concern.
3. Some students who do complete high school are not skilled enough to enter secondary training. The United States continues to rank low in mathematical proficiency in a comparison of 13 year olds in several countries. The results of science and language proficiencies are similarly discouraging. Such data increases the concern that we need to do a better job of preparing workers for increasingly demanding jobs.

For example, the rapid growth of jobs for technicians with postsecondary training below the bachelor's degree could result in a shortfall.

Labor Shortage:
Those employers looking for 16-24 year old workers will feel increasing competition in recruitment.

Tightened immigration laws will also effect the numbers of entry level workers.

Labor Shortage

Is there or isn't there one? The difficulty experienced by employers in hiring entry level workers is a result of the sharp decline in the number of 16 to 24 year olds entering the labor market. This will continue. Institutions such as colleges and universities, the military, and firms who primarily recruit from this age group will experience the greatest pressure. There are and will be sufficient people in the labor force but they are already working. Employers will need to count on the workers they already have and provide the necessary continuing education.

Another factor that cannot be overlooked is the effect of U.S. immigration policy. The significant numbers of immigrants that came to this country during the 1970s and 1980s came primarily to be reunited with family. Many of these people became part of the entry level worker pool and were absorbed into the labor market. Illegal immigration has also provided a supply of entry level workers for selected occupations in some geographic areas.

Immigration policy is changing. The emphasis on who is allowed to immigrate is increasingly on the skill requirements of the immigrant, not on their familial connections. As control is tightened, the supply of entry level workers is also affected.

Employers accustomed to a large labor supply have had to adjust their hiring standards and management accordingly. Employers can no longer just turn away those who are less qualified.

Minorities:

All minority groups are projected to increase their share of the labor force.

Specific outreach programs will be needed to educate and train all minority groups to compete effectively.

Minorities

All minority groups are projected to increase their share of the labor force to the year 2000. Blacks and Hispanics currently are overrepresented in occupations with the slowest rates of projected growth, and underrepresented in occupations of fastest growth. These two groups also experience persistently high unemployment rates. Combining these factors with their lower educational attainment level suggests that these groups will be among the least able to adapt to increasing skills requirements and job opportunities. While there are jobs available for noncompleters of high school, entry into better paying jobs will be severely limited.

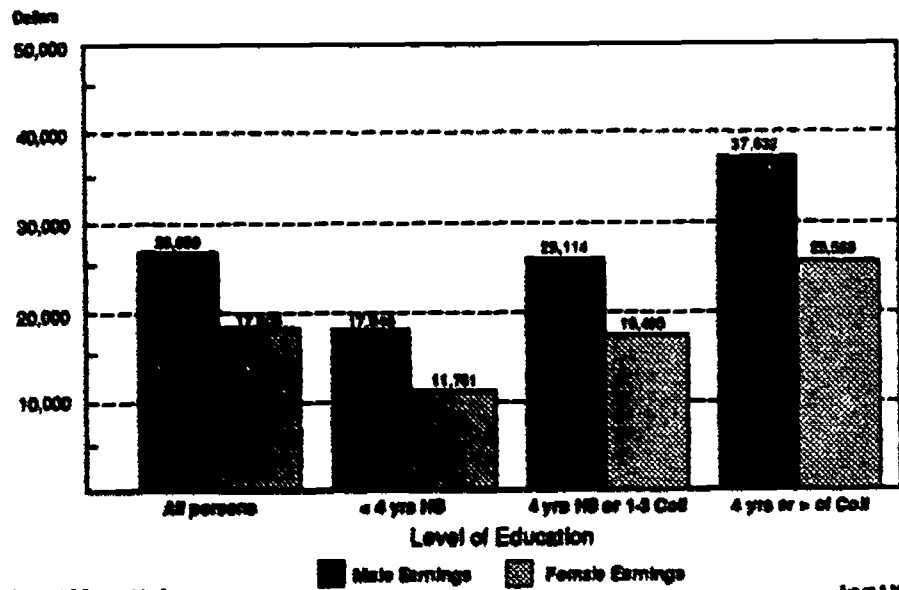
Blacks are also more likely to be counted among the discouraged. In 1988, blacks made up 11% of the work force but constituted over 27% of the discouraged workers. Among the 16 to 24 year olds, these figures are even more alarming. In 1988, blacks made up over 37% of young discouraged workers; young Hispanics made up nearly 16%, compared to their labor force participation rate of 2.2% and 1.8% respectively. Black male participation in the work force is decreasing at a significant rate and there is a very high rate of incarceration among young black males. To further exacerbate the problem, teenage pregnancy also is high among black families. It will take specific outreach programs to bring these groups back into the labor force, and educate them to compete effectively.

Women:
Women will continue to exert their influence on the work world.

Women

Women continue to increase their participation rate both in the full-time labor market and in part-time and contracted employment. This has profound implications for business practices. Because many women are raising families as well, the labor force is becoming less mobile. With the rise of two career households, it is no longer a given that if the husband is relocated, the family will follow. Women also are not as likely to leave the labor force when they have children. Thus, there is an increased demand for child care. Even though average earnings are still short of men's earnings, women will continue to put pressure on the corporate board rooms and the segregation policies that still exist in many occupations. This may lead to a potential labor shortage in traditionally female jobs.

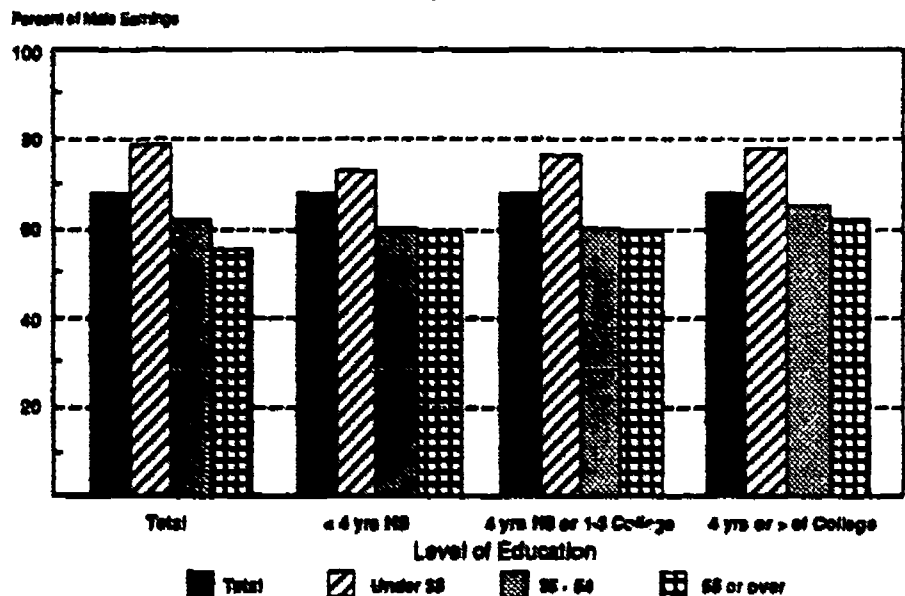
Educational Attainment and Earnings
 Male versus Female
 Year round, full time workers



Source: US Bureau of the Census

Figure 5.26

Female Earnings as a Percent of Male Earnings
 By age and education level
 Year round, full time workers



Source: US Bureau of the Census

Figure 5.27

Industrial Shift:
Closer collaboration with public training institutions can help industries maintain a skilled work force.

Occupational Shift:
Shifting skills within occupations requires a flexible work force.

Industrial Shift

Many believe that the bulk of jobs created will be in firms least able to provide systematic work force training. While employers will continue to provide the majority of training, the trend is toward closer collaboration with the public sector. Despite overall growth, there are still industries and occupations experiencing absolute declines in employment. These declines result from technological change, the substitution of foreign-made products for domestic ones, changing consumer tastes and shifting government priorities. Individuals displaced from these jobs and industries will continue to need retraining. While the manufacturing sector will decline in total share of employment, the retirement of workers in those industries points to a need for replacement workers through the year 2005. The modest decline projected in factory jobs masks a pronounced shift occurring in the occupational distribution of manufacturing employment to more highly-skilled jobs.

Occupational Shift

Even though the overall structure of occupations will remain constant, there will be dramatic shifts that occur within particular occupations. The title of the occupation may not change, but the skills required may change due to new technology and reorganization of work to improve quality and productivity. This kind of flexibility usually requires a more educated and skilled work force, and people already working will require training.

Conclusion

All of these issues are interrelated. Understanding the dynamics of the labor force and the specific projections for the economy, industries and occupations can guide career development professionals to assist clients and students in making good career choices. The slowing rate of growth in productivity is linked to the need for our economy to remain competitive. Remaining competitive requires an available pool of highly skilled, educated and adaptable workers. The increasing sophistication of jobs in the future challenges all of us to meet the educational needs of all those who will enter the labor force.

OTHER USES OF INFORMATION

Career and labor market information also describes the specific populations in our country.

It can be used to break down sexist and stereotypical preconceptions about people in the labor force.

Other Uses of Information

So far this module has concentrated on questions and information sources that can be used with clients and students. These are questions that enable an exploration of occupations, work settings and labor markets.

Career and labor market information also describes the specific populations in our country, where they are located and where they are not. It provides us with useful background information that can help both counselor and the client understand the world in which we must work. It can be useful in working with students and adults to help break down sexist and stereotypical preconceptions about people in the labor force. This kind of information can be used, for example, to show people in specific populations what others have accomplished in their working lives, i.e., to point out the occupations employing concentrations of women or minorities, the incomes of people with different levels of education, the differences in the incomes of men, women, whites, blacks and Hispanics, high school graduation rates, and poverty levels. These data could be used with people of color to point out their economic and labor force conditions, and to provide them with an impetus for changing their situation.

Counselors in a high school setting may be aware that students learn some of this information in economics or social studies classes. Counselors may be able to coordinate with these classes or add to those curricula. Career and labor market information could also be used as an introduction to units on career exploration which are common in middle school and high school grades.

The following example illustrates how educators have used labor market statistics to promote self-awareness and sex equity in the classroom. The boxed statements indicate those built upon labor market information. A point to keep in mind is that similar kinds of statements can be created for other specific populations, such as blacks and Hispanics.

Sample of How Labor Market Information is Used

- When elementary school girls are asked to describe what they want to do when they grow up, they frequently identify only a few career options, and even these fit stereotypic patterns. The majority identify only two careers, teaching and nursing. Boys, on the other hand, are able to identify many more potential occupations.
- Many girls enter college without completing four years of high school mathematics. This lack of preparation in math serves as a "critical filter," inhibiting or preventing girls from many science, math, and technologically related careers.
- The preparation and counseling girls receive in school contributes to the economic penalties that they encounter in the workplace. Although over 90 percent of the girls in our classrooms will work in the paid labor force for all or part of their lives, the following statistics reveal the cost of the bias that they encounter.

Using Labor Market Information to
Promote Self-Awareness and Sex Equity

- More than a third of families headed by women live below the poverty level.
- A woman with a college degree will typically earn approximately the same amount as a male who is a high school graduate.
- The typical working woman will earn 59 cents for every dollar earned by a male worker.
- Minority women earn even less, averaging only 50 percent of the wages earned by white males.
- Women are 79 percent of all clerical workers, but only 5 percent of all craft workers.
- Women must work nine days to earn what men get paid for five days of work.
- In contrast to the popular belief that things are getting better for female workers, since 1954 the gap between the wages earned by men and women has not gotten smaller.
- A majority of women work not for "extra" cash but because of economic necessity. Nearly two-thirds of all women in the labor force are single, widowed, divorced, or separated, or are married to spouse earning less than \$10,000 a year.

Developed by Myra and David Sadler
Mid-Atlantic Center for Sex Equity

Distributed by the Department of Public Instruction,
P.O. Box 7841, Madison, Wisconsin 53707

Barbara Stone-Vocational Equity
Melissa Keyes-Sex Equity

Figure 5.58

LIMITATIONS OF CAREER AND LABOR MARKET INFORMATION

An understanding of the limitations is helpful in understanding and using various sources.

Most surveys are completed by a sample of the population and then inflated to represent the entire country.

Given the limitations of sample surveys, it is not always easy to find current, local data.

Limitations of Career and Labor Market Information

We tend to think that with so many surveys going on that we should have data to answer all possible questions. However, there are some basic limitations to the process of data collection and publication. There are constant trade-offs when selecting data to answer a question. Sometimes we ask questions and want statistics that no one collects. Sometimes the data we want are not available for the location or the time period we specify. Sometimes data elements are not defined in the way in which we want the information defined. A basic understanding of the limitations of career and labor market information is helpful in understanding and using various sources.

Complete vs. Sample

One of the most basic limitations of labor market statistics comes in the data collection process. Surveys are expensive, and individuals and businesses frequently resent the time necessary to fill out a survey. There are rules of statistical reliability that must be followed in creating and evaluating a survey.

The only data collection program that attempts to reach the entire population is the census, and even then only a select number of questions (the short form) go to the entire population. The long form, which asks questions about employment, education, and income, goes to an average of 20% of the population.

All other surveys are conducted on a scientifically selected "sample" of the nation. Data from the sample are then "inflated" to represent the entire country. It is the nature of a sample survey that there must be a specified number of respondents in the survey for the data to be accurate for the given geographical location, or for the type of data. The nature of a given survey determines the limitations of the data that can be reported.

National vs. State vs. Local Data

When working with students and clients, it is usually best to have the most local and most current information possible. Locating local and current information can be a frustrating exercise. Given the limitations of sample surveys, it is not always easy to find current, local data. Many states, however, do make serious efforts to develop local data.

The census is the best source of local data because it has information about places as small as 2,500 population. Selective monthly labor force data from BLS programs are usually available for states, counties and metropolitan areas.

Data about the characteristics of people in the labor force are usually only available at the national level through the decennial census. The sample in the Current Population Survey (CPS) is not sufficient to give us detailed data for most states. Our understanding of local trends and changes in the labor market must then be based on, and compared to, trends and changes observed at a national level.

Not all data are updated monthly or even annually. Another problem is the length of processing time for the larger data collection programs.

It should be noted that the slowness of significant statistical changes means that information that is several years old may still be useful and reliable.

Remember that those who have an argument to present will select the data necessary to make a point.

Timeliness

There are at least two reasons why we cannot always find data for selected time periods. One is that not all data are updated monthly or even annually. Another reason is that the larger data collection programs require longer processing times.

The best example of the "timeliness" limitation is the decennial census data. Because it is so large and expensive, the census is conducted only once every ten years. The detailed information in the Current Population Survey (CPS) is collected once a year. The CPS collects limited labor force data each month. At each level, the data are more limited.

These surveys also offer an illustration of the processing problems. The limited information on the labor force is processed and released within a month. The more detailed information from the CPS is processed and becomes available six months to a year after collected. The 1990 Census of Population data began to be released one year after they were collected, and release of detailed information for states and places will continue for another two years, at least. This means that it will be about 1993 when the most detailed information about occupational employment, educational attainment and income becomes available.

Fortunately, while specific numbers may indeed change from year to year leading us to think that only the most recent data are reliable, in fact, changes in data about any given demographic characteristic do not change greatly from year to year. It is only over time that we see significant changes. The slowness of significant statistical changes means that data that are two, or five or ten years old may be reliable and useful.

Institutional Bias

Except when dealing with the primary data sources, we encounter data that have been selected for us, usually for a particular purpose. There are many jokes and serious admonitions about the truth that statistics can be used to prove anything. This is not to say that the data are biased or unreliable. However, the people who have a particular story or argument to present select from the mass of data very carefully in order to make a point. This tendency is useful when we are looking for data about a particular ethnic population, a given age group or a given geographical location. It means that special interest groups have already sorted through all the statistics to find what is relevant to their causes.

"Information" is created when data are selected, compared, added, subtracted, analyzed and formed into a story or an argument. While it is important to know who has turned statistics into information, one should not assume that the bias of the analyst is necessarily bad. We rely on special interest groups to cull from the mass of numbers data that are related and present a desired picture. As an example, the Women's Bureau in the Department of Labor compiles data about women from the Current Population Survey. The Bureau regularly

NETWORKS AS SOURCES

There are people in the community or state who can help you locate the information you need.

One of the closest resources is the local library.

Other resources include: SOICCs

Regional planning agencies

State Data Centers

Employment Security Offices

Government Printing Office Bookstores

Chambers of Commerce

publishes highly useful information about the condition of women in the United States. Without this work, all of us would have to do our own selecting and synthesizing.

Networks As Sources

The old maxim "It is not what you know, but who you know" also applies to finding people to help you access and interpret labor market information. If the long list of published sources seems more like a maze, remember that there are people in the community or state who can help you find the information you need. Most of these human resources are more than willing to help you answer the occasional question or direct you to resources that you can use with clients or students.

One of the closest resources is the local library. Many libraries have basic reference materials: the decennial census, the U.S. Statistical Abstract, the state Blue Book, a manufacturers' directory to name a few. Other large libraries may be part of information networks that supply them with reports from the Bureau of Labor Statistics or the Bureau of the Census. Three of these networks are: the Government Printing Office Depository Libraries, the Census Depository Libraries, and the State Data Center Affiliates. Some libraries may also have CIDS and other career resources. Each of these libraries are sent copies of government reports. The librarians are trained at helping users begin to use the sources.

The State Occupational Information Coordinating Committees also offer another point of access to the wide range of LMI. (See Appendix B for a list of the SOICCs.)

Regional planning agencies frequently have staff skilled at analyzing labor market statistics.

Each state has a State Data Center affiliated with the Bureau of the Census, which prepares reports and helps people use data produced by the Bureau. (See Appendix O for a list of the State Data Centers.)

Employment Security Offices in each state have labor market analysts, sometimes at both state and local levels, who collect, analyze, and disseminate labor market statistics.

Government Printing Office Bookstores are located in several major cities. They serve as retail outlets for publications of the federal government. They usually have copies of the major reference works as well as copies of the most recent releases. They frequently concentrate on reports with information about the state and region in which they are located. (See Appendix J for a list of the Government Printing Office Bookstores.)

State and local Chambers of Commerce are another possible source of labor market information, especially information about local geographical areas.

WHAT IS CAREER AND LABOR MARKET INFORMATION? HOW CAN IT BE ACCESSED? HOW CAN IT BE USED?

BACKGROUND INFORMATION MODULE 5

Occupations have been classified since primitive times. At first, workers were divided into two categories: hunters and gatherers, and later into laborers and non-laborers. As we look back into history, other class systems emerged, such as the peasantry, the royalty, the clergy and the educated. As society became more complex, so did the work and the concomitant classification systems. In Europe during the Middle Ages, a system of workers' craft unions, or guilds, surfaced and first created the category of skilled workers.

By the early 1900s, the subordinate role of laborers was widely recognized. Some theorists believed this was due to workers having a smaller head size and brain width. The theorists contended that the brains of the more academic types, such as university teachers, averaged a weight of 1500 grams, versus the brain weight of unskilled laborers, which averaged only 1410 grams. Intelligence was measured by the size of people's heads and was correlated with their occupations.

During the depression, the government tried to ascertain how many citizens were employed or unemployed. In the United States, federal involvement in the classification of workers dates back to the 1820 census, when statistics about the work force were tabulated for the first time. The Bureau of Labor was established in 1884 within the Department of the Interior. In 1888, the Bureau became an independent federal agency. The Department of Labor was created by an Act of Congress in 1913, making it the ninth executive department.

Direct government involvement in the labor market and the national economy did not take place until the country faced its most severe economic downturn after the Stock Market Crash of 1929 that led to the Great Depression of the 1930s. The current configuration of programs can be traced back to the 1930s when the government attempted to ascertain how many citizens were employed and unemployed as the Depression deepened. At the Depression's lowest point, one out of every four workers was unemployed. In response to those conditions, the government developed many programs to stimulate the economy and put people to work, such as the Civilian Conservation Corps (CCC) in 1933, and the Works Progress Administration (WPA) in 1935.

During World War II, the government needed labor market information to train workers and fill jobs. Despite the efforts of the Roosevelt Administration to spur economic recovery, the Depression lasted throughout the 1930s until the United States became involved in World War II. As the nation geared up for war, workers were needed in every industry. In contrast to the 1930s when the government was creating jobs for workers, the government was now looking for workers to fill the jobs as industries raced to speed up the production of war materials. In both of these critical time periods, the government needed information about the labor market in order to formulate policy and develop programs. Labor Market Information became increasingly important during this period as the United States developed its strong industrial economy and its position as a leading world power.

What follows is a brief survey of selected topics in career and labor market information. These topics include answers to questions commonly asked by students, counselors, job seekers and job

placement staff. The sources mentioned in each section are relatively accessible through SOICCs, public or school libraries or employment security offices. For the most part, these sources are published by the federal government. Private publications are cited when they are a unique source of information.

Population

All of us are curious about the population. Somehow it is intriguing to watch our particular age cohort move across the years. If we are part of the Baby Boom, it is easy to watch our bulge move like a tidal wave across population charts. Or, if we are teachers or employers, we watch the Baby Bust (or Birth Dearth) generation grow into the 1990s and we wonder where to recruit new fast food workers or how are we going to use the empty classrooms until there are more students.

Knowing about population trends helps in understanding the trends in the labor force. For example, the labor force of the 1990s and the year 2000 is already born. We know, therefore, that there are fewer youth entering the labor force than at any time in the past twenty years. This trend affects the way employers recruit new workers and establish retraining programs for existing workers. Reports from the *Current Population Survey* and projections from the Bureau of Labor Statistics in *Outlook 2000* and the *Monthly Labor Review* offer us the data that show these trends.

Most states have programs that work with the Bureau of the Census to estimate state and local populations. A Demographic Office or State Data Center would be a local source to contact. Area libraries should also have easily available sources.

Other federally published reports that contain population data for states and metropolitan areas include the *Statistical Abstract of the United States*, the *City and County Data Book*, the *State and Metropolitan Area Data Book*. There also may be state published statistical abstracts, Blue Books, which are labor market reports that contain population statistics.

The 1990 Census data will provide the most complete population profile, not only of the country, but also of states, metropolitan areas, cities, towns, villages, reservations and numerous unincorporated areas. The first data, released in early 1991, is a population count by race and ethnic group; the data is used for defining new voting districts. The second wave of data includes age and marital status details. This is the beginning of the wealth of data that will become available between 1991 and 1993.

Wage and Income Information

Career development facilitators know that whatever other information is provided, clients are most likely to ask, "How much does it pay?" Sometimes it is easy to answer this question. Other times a complete exploration of wages and income and cost of living is necessary to fully appreciate the financial implications of an occupation, a labor market, or a level of education. Wage and Income Information includes a wide array of data: wage and earnings; personal and family income; cost of living; and earnings by occupation, industry, education, sex, race, age and poverty levels.

Counselors and teachers in high schools may use income information to try to persuade marginal students to graduate. Teachers construct exercises in budgeting to enable students to understand the realities of independent living and, perhaps, the desirability of further education or training. Professionals counseling displaced workers may explore job potential in terms of providing a "standard of living." Counselors and teachers working with high school girls or displaced homemakers find comparisons of male and female earnings useful. Such comparisons are basic to encouraging the client to explore nontraditional occupations.

Many states conduct wage surveys, providing the most local, current and occupationally specific data available. Contact an Employment Security Office to locate these kinds of reports. The Bureau of Labor Statistics (BLS) conducts annual wage surveys in selected metropolitan areas throughout the country. The reports are called *Area Wage Surveys*. These data are current and local. However, only a limited number of occupations are reported. BLS also conducts *Industry Wage Surveys* for selected industries. The occupations in these reports are those commonly found in industries, such as banking, nursing homes or contract construction. Sometimes local wages are reported for areas that have a high concentration of employment in the industry. There is about a two year time lag from when data are collected to publication.

Professional and trade associations are another source of occupational wage data. Sometimes associations publish special reports; sometimes data are published in professional journals. Awareness of this source of data may be limited to members of the trade or profession.

The popular press often publishes occupational wage information. Special interest magazines often do surveys. It is useful to keep a clipping file of these kinds of stories; sometimes the information is unique and will not appear in regular surveys.

At the national level earnings by occupation and sex are collected by the Current Population Survey. These data are published in *Employment and Earnings* each quarter, with an annual average in the January issue. Earnings are reported for year-round, full-time workers separately from all workers or part-time workers. These data are the basis for almost all comparisons of male and female earnings.

While occupational wages are most commonly requested, there are also data on wages by industry. There are two national programs, directed by the BLS, which provide this kind of information. Each month the Current Employment Statistics (CES) program collects earnings of non-supervisory and production workers. These data are available by state and metropolitan areas for manufacturing industries. They also are available by state for non-manufacturing industries. Each state's labor market information office, in the Employment Security (Job Service) office, is a common source of this information. The CES offers the most current earnings information possible. These data are usually published by each state, but they also are available each month in *Employment and Earnings*, published by BLS.

The second program is Covered Employment and Wages (CEW), which collects information from all employers covered by states' Unemployment Insurance laws. The data are processed quarterly, with about a six month time lag. Each state has a different way of providing this information. Annually, BLS publishes press releases with the annual average wage information for states and metropolitan areas. Detailed industry data for each state are published in the annual report, *Employment and Wages*.

Because data on earnings and wages by industry are available for prescribed geographical areas, it is possible to compare the wages offered by different industries. Clients and students can easily see the economic benefit of seeking a job in one industry compared to another.

Job seekers of all ages often try to compare their own wages with the cost of living. "If it costs too much to live in one city, will it be cheaper to live in a different city?" "Can I move out of my parent's house if I get this job at this rate of pay?" "How much more does it cost today than it did last year; should I find a new job that pays more?"

Job placement professionals and counselors should know how to answer these kinds of questions or where to find the information. There are two different cost of living indexes. One is the Bureau of

Labor Statistics *Consumer Price Index*; the other is the American Chamber of Commerce Researchers' Association report, *Cost of Living Index*.

The *Consumer Price Index (CPI)* is the most often quoted cost of living index. It is most valuable for comparing changes in the cost of living in particular places. Each month the Bureau of Labor Statistics (BLS) collects the cost for a market basket of goods and services in cities throughout the country. Each surveyed location has its own market basket and its own index number. There is a combined number for the whole country. Because of the way the CPI is calculated it is not possible to compare the index numbers of different metropolitan areas, it is only possible to compare the percentage change in the index numbers from one date to another. It is the basis for numerous wage contracts, rental agreements and cost increase agreements. The CPI is reported each month in numerous news articles in local newspapers and national magazines.

The *Cost of Living Index* from the American Chamber of Commerce Researchers' Association is valuable because it allows comparison of the cost of living in different cities across the nation. Each month the national index is 100 and the index numbers for each location are compared to that. This method allows the comparison of index numbers from one city to another. Data are collected by local Chambers of Commerce in cities across the country. Information is published quarterly. It is most easily available from the local Chamber of Commerce.

A third source for cost of living information is another BLS program, the *Consumer Expenditure Survey*, which reports dollars spent rather than an index number. This survey asks households how they spend their income. The reports, published with about a two year lag time, show in detail and in dollars, expenditures for housing, food, utilities, clothes, fuel, and taxes. There is a limited amount of information for different regions in the country. Expenditures for households with different levels of income also are reported. This kind of information would be useful for "real world" exercises in the cost of living.

Family and Household Income

The *Current Population Report, Series P-70*, which reports the results of the Survey of Income and Program Participation, reports earnings by education in the issue titled "What's It Worth."

Many questions are asked about household or family income. Household or family income is frequently used as a standard for program eligibility. Grant applications often ask for family income. Family income offers a way to measure economic health. Poverty levels are defined in terms of household income.

The census income information is the most recent hard data for states, counties and cities. All estimates of local household or family income are created by a formula. The Current Population Survey collects income information each year at the national level. These data are published each year in the *Series P-60, Consumer Income* reports. Data are offered for households, families and persons.

Median family income is a commonly sought after number. A median is the number that represents a half-way point; half of families have an income below that number, half, above. Family is defined by the Bureau of the Census as persons living together, related by blood, marriage or adoption. There are no one-person families. There are, however, one-person households. Household income, therefore, tends to be lower than family income.

A source for more localized information is the *Survey of Buying Power*, created and published by Sales and Marketing Management Magazine each summer. It presents what is called median

household Effective Buying Income (EBI). EBI is defined as income after taxes are taken out; in other words, disposable income. EBI is given for all states, counties, metropolitan areas, and cities in the metropolitan areas.

Per Capita Personal Income

One of the best measures of changes in income in local areas is the Per Capita Personal Income created by the U.S. Bureau of Economic Analysis, Department of Commerce. This measure of income comes from the total earnings of persons in an area. The income may be from wage and salary, from self-employment, or from transfer payments. This total income figure (usually in billions of dollars) is then divided by the entire population in the area, to derive the per capita personal income figure. Because personal income measures actual dollars of income, it is possible to see real economic change in an area and to compare the income in more than one area.

The Bureau of Economic Analysis publishes Per Capita Personal Income for states, counties and metropolitan areas each year, though because of the processing time there is a time lag of more than a year. The published report is titled *Local Area Personal Income*.

Poverty Data

Poverty data provide valuable information about a given geographical area. They may offer insight into the economic condition of the labor market or school district. They can provide advance notice to a counselor about the living conditions of the client population. The data certainly provides supporting evidence of the need for various employment, training and economic development programs.

Poverty guidelines are established by the U.S. Department of Health and Human Services each year and are intended to be used for establishing eligibility for various government programs. The guidelines are based on estimated expenditures for a nutritious diet, and are updated each year using the *Consumer Price Index*.

Estimates of the number and percent of persons and families at the poverty level are based on income information. The poverty guidelines are used as the income cutoff. The Current Population Survey provides national level data on the numbers of persons, households and families with different levels of income. The poverty rate for the country can then be estimated.

Income by Education

The relationship between schooling and income is of great concern to students, parents, counselors and adult job seekers. The questions are: "How much more can I expect to earn if I graduate?" or "Can I recover my investment if I take this training class for a different occupation?"

There are data gathered at the national level to answer these questions. Two sources give the clearest information. *Money Income and Poverty Status in the United States* (annual, Series P-60, *Current Population Reports*) contains information on income by education. The table "Educational Attainment of Persons - Percent Distribution and Median Earnings of Persons with Earnings, by Occupation of Longest Job, Age, Work Experience, and Sex" offers a lot of ammunition to help convince students to stay in school.

Table 15. Educational Attainment of Persons—Percent Distribution and Median Earnings in 1988 of Persons With Earnings, by Occupation of Longest Job, Age, Work Experience, and Sex

(Persons 15 years old and over as of March 1988. For meaning of symbols, see text)

Characteristics	All workers				Year-round, full-time workers			
	Percent distribution		Median earnings (dollars)		Percent distribution		Median earnings (dollars)	
	Male	Female	Male	Female	Male	Female	Male	Female
TOTAL¹								
All persons with earnings	70 487	90 688	20 612	11 096	46 285	34 237	26 696	17 661
Percent	100.0	100.0	20 612	11 096	100.0	100.0	26 696	17 661
Less than 4 years high school	20.2	18.0	9 672	4 843	14.1	8.8	17 843	11 781
4 years high school or 1 to 3 years college	54.1	63.4	29 310	11 688	57.4	65.8	25 174	16 485
4 years or more of college	25.7	18.6	11 630	5 565	28.5	25.4	37 679	25 500
Under 35 years:								
Total	48.9	68.3	14 788	9 087	48.2	48.1	21 407	16 518
Less than 4 years high school	12.4	8.2	4 716	2 180	8.1	3.8	14 788	10 488
4 years high school or 1 to 3 years college	34.5	30.9	15 541	9 903	28.7	28.6	20 918	15 217
4 years or more of college	5.3	8.9	29 308	16 854	8.8	16.9	30 442	23 280
35 to 54 years:								
Total	24.8	38.0	28 888	14 860	46.6	44.3	31 635	19 889
Less than 4 years high school	5.7	4.8	16 288	8 523	5.7	4.8	20 331	12 234
4 years high school or 1 to 3 years college	21.1	24.6	29 908	13 511	25.4	28.7	29 284	17 863
4 years or more of college	12.0	9.4	40 684	22 826	15.6	11.9	41 020	27 309
55 years and over:								
Total	14.4	12.7	9 862	6 589	13.1	11.6	29 253	18 512
Less than 4 years high school	4.1	3.0	18 070	8 329	3.3	4.3	20 480	12 230
4 years high school or 1 to 3 years college	6.8	7.7	21 587	10 311	8.4	7.3	27 948	16 643
4 years or more of college	3.4	2.0	35 783	18 881	3.6	1.8	48 370	28 248

Figure 5.59

The second source is *What's it Worth? Educational Background and Economic Status: Spring 1987* (Series P-70, Current Population Reports). This report presents information from the Survey of Income and Program Participation (SIPP) another Bureau of the Census survey. Often, education is measured by the number of years of schooling an individual has completed. In *What's it Worth?* educational attainment is based on formal degrees received and the field of study in which the degrees were obtained.

Table 2. Four-Month Average Income, Earnings and Work Activity, and Educational Attainment, by Sex, Race, and Age: Spring 1987

Educational attainment	Monthly income		Monthly earnings		Months with work activity	
	Mean	Standard error	Mean	Standard error	Mean	Standard error
TOTAL, 18 YEARS AND OVER						
Both sexes	\$1,325	\$14	\$1,075	\$14	2.55	0.02
Doctorate	4,118	555	3,637	957	3.40	0.14
Professional	4,323	358	4,003	388	3.45	0.11
Master's	2,776	81	2,378	73	3.38	0.05
Bachelor's	2,109	47	1,829	41	3.18	0.03
Associate	1,630	58	1,458	54	3.18	0.05
Vocational	1,417	91	1,088	65	2.84	0.07
Some college, no degree	1,283	30	1,088	23	2.81	0.03
High school graduate only	1,135	14	821	14	2.61	0.02
Not a high school graduate	761	13	452	15	1.58	0.04
Male	1,810	24	1,540	25	2.95	0.02
Doctorate	4,493	661	3,950	667	3.43	0.15
Professional	4,840	430	4,480	448	3.48	0.11
Master's	3,327	111	2,801	110	3.58	0.05
Bachelor's	2,777	76	2,471	71	3.49	0.04
Associate	2,133	68	1,977	64	3.60	0.06
Vocational	1,917	112	1,689	129	3.33	0.11
Some college, no degree	1,683	54	1,483	42	3.09	0.04
High school graduate only	1,578	23	1,350	23	3.06	0.03
Not a high school graduate	1,046	23	709	25	2.09	0.05
Female	883	12	652	10	2.18	0.02
Doctorate	(B)	(B)	(B)	(B)	(B)	(B)
Professional	2,494	336	2,311	346	3.34	0.24
Master's	2,098	104	1,733	91	3.12	0.09
Bachelor's	1,388	36	1,138	30	2.84	0.05
Associate	1,208	64	1,022	60	2.82	0.08
Vocational	1,159	14	773	49	2.58	0.10
Some college, no degree	892	10	710	18	2.55	0.04
High school graduate only	785	14	583	13	2.25	0.03
Not a high school graduate	489	8	207	9	1.09	0.04

Figure 5.60

Recent concerns about the quality and quantity of the labor force have sent educators and planners to statistics generated by the educational system. Schools have been anxious about the number of dropouts as well as the number of graduates going to college. Businesses assess local labor force potential by looking at the educational attainment of the population and the training programs from which workers graduate. Program planners need to know about target populations for training programs.

One of the biggest issues in the labor force is that of literacy. There are many different definitions of literacy, ranging from the ability to read anything to the ability to read materials at a specified reading level. Unfortunately there are no precise ways to measure literacy levels in the population as a whole. In general, if one completed more than eight years of school, one is considered literate. However imperfect they may be, estimates of illiteracy in the population are based on statistics of persons with less than an eighth grade education.

Statistics of educational attainment are found in the census, especially for small geographic areas. Estimates for the nation are updated with the Current Population Survey.

Another issue of concern is data about dropouts. While there is much concern about dropouts there is little statistical data to analyze the dropout situation. There are several different measures of a dropout rate, each providing a significantly different picture of the situation. At the present time, there seems to be no way to compare statistics collected at the state level with statistics reported at the national level, unless the definitions and calculation methods are the same.

Other education indicators include graduation rates, enrollment levels, graduates in major subjects, and surveys of graduates anticipating further education.

The National Center for Education Statistics (NCES) in the U.S. Department of Education publishes several statistical compilations. The data in these reports comes from federal and state agencies, private research organizations and professional associations.

A major source of this information is the *Digest of Education Statistics*, published annually for twenty-five years. It contains data about schools, students, teachers and programs. Some is presented for the entire nation; some by state. There are data for public and private schools, from preschool to graduate and professional schools.

Another compilation is *The Condition of Education*, which presents selected statistical data in the form of education "indicators," defined as key data that measure educational trends. This report is annual and mandated by federal law. A companion piece to this report is *Education Indicators*, designed to present statistical information in an accessible manner for a general audience.

Still another series is *Projections of Education Statistics*. The 1989 edition offers projections to the year 2000. Included are projections for enrollments, graduates, instructional staff and expenditures for elementary and secondary schools and postsecondary institutions.

State departments of public instruction are the main source of education statistics at the state and local level.

Specific Populations

The term "Specific Populations" can refer to a large number of special, identifiable groups of our population. These populations may be people of various racial and ethnic backgrounds. They may be people of a designated age group, such as teenagers or older workers; they may be people in a particular situation, such as teenage mothers, displaced homemakers, workers with disabilities or dislocated workers.

While the people in these groups are individuals with particular idiosyncrasies and needs, they are also identifiable by the characteristics attributed to the group. Statistical information about the group is useful in understanding its demographic characteristics, labor force participation and economic conditions. Counselors and job placement professionals may find these data useful in their dealings with people of these populations.

Curricula developed for working with teenage girls, displaced homemakers, and racial and ethnic groups offer suggestions for the types of information that are important to share with students and other clients. Information can be used to dispel stereotypes, offer possibilities and explain realities. For example, it is important for Hmong youth to learn where other Hmong live in order to find another community. It would be exciting for Hispanic women to see the full range of occupations in which Hispanic women are employed. It is instructive for teenage mothers to know the difference in earnings between men and women in certain occupations. It might be comforting for older people to know how many others over age 65 are working for pay.

The information commonly included in curricula includes demographic characteristics such as age, sex and location; labor force participation including employment and unemployment rates; and economic conditions such as income, earnings, poverty status and education attainment. Such information provides incentives for overcoming the difficulties that may confront people in the group, while offering the vision of what is possible. These kind of statistics can be accompanied by stories about real life people who can serve as role models for persons with special needs.

The most complete source of this important statistical data is the census. Information about the race and age of the population at national, state and local levels is the first data released from the 1990 Census of Population. As these data are published by the Bureau of the Census, there will be many articles in the popular press. Full reports are available in libraries and State Data Centers.

To help broaden public understanding of the census, the Bureau of the Census and the education community have developed the *1990 Census Education Project*. One result of this collaboration is a teaching kit containing ten teacher-ready lessons for K-12 classes. The lessons introduce students to a variety of concepts about information from the census. Some of the exercises have classroom extensions that can be performed to complement outreach suggestions. *The 1990 Census Education Project* was developed before April 1, 1990 to help prepare the public before Census Day. The lessons, however, are timeless and certainly can be used now that 1990 data is being published. One kit was sent to all school principals and superintendents in spring 1989. Contact Census Awareness and Products Program Staff in any of the 12 regional census centers for both actual information and for training and technical assistance.

Current estimates of minority population are problematic. The Bureau of the Census, in the *Current Population Reports, Series P-25, Population Estimates*, publishes annual estimates of state populations with breakdowns by age and sex. There are also annual estimates of black and Hispanic populations by state. The most complete data, especially for local areas, are in the 1990 Census.

To provide a snapshot of ethnic and racial populations following the 1970 and 1980 Censuses, the Bureau of the Census published a series of booklets. The booklets from 1980 were titled: *We, the Americans; We, the American Women; We, the Black Americans; Nosotros...We, the Mexican Americans, the Puerto Ricans, the Cubans, and the Hispanos from other countries in the Caribbean, Central and South America, and from Spain; We, the First Americans; We, the Asian and Pacific Islander Americans*. While the booklets do not have state or local information, they do provide a summary of information about the population, its households, education, employment and income levels. Large public and academic libraries should have copies of these reports.

Until 1993, and between Censuses, we rely on the data from the Current Population Survey. The U.S. Bureau of the Census publishes these data in *Current Population Reports*. The U.S. Bureau of Labor Statistics publishes data in *Employment and Earnings* and articles in *Monthly Labor Review*. Organizations like the Urban League, La Raza, the Children's Defense Fund, the U.S. Women's Bureau and the American Association of Retired Persons use these data in their analyses of specific populations. Newspapers frequently report on information provided from these publications. Local chapters of these national organizations often will have copies of the reports.

How Others Use LMI

In the past years curricula for career exploration and job search skills have been developed for use with various populations. Though written with a specific audience in mind, these curricula share certain characteristics of organization, activities and information. Most of these courses involve

teacher presentations and research by the participants. The teacher presentations usually include reference to the wider labor market and incorporate various types of labor market data.

Below is a list of resources that have incorporated, to one degree or another, labor market information into curricula or presentations.

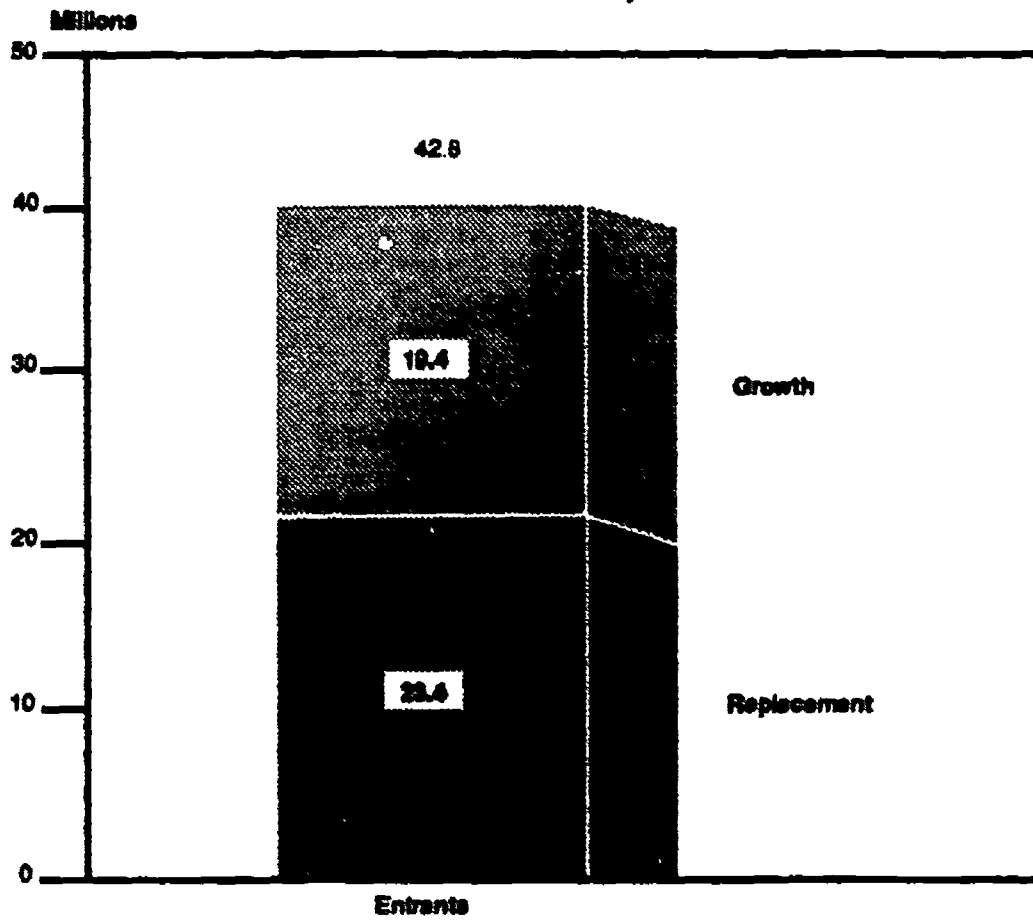
- An America that works: the life-cycle approach to a competitive work force: A statement by the research and policy committee of the committee for economic development* (1990). New York: Committee for Economic Development.
- A study of work family integration issues*, (1990). Augusta, MN: Maine Occupational Information Coordinating Committee.
- Allison, P. B., (ed.) (1984). *Labor, worklife, and industrial relations: Sources of information*. New York: Haworth Press.
- Audiovisual Career Information Delivery System Enhancement (ACE) Consortium*. Available from ACE Distribution Service c/o Kansas Careers, Bluement Hall, Kansas State University, Manhattan, KS 66506-5303.
- Chichenomics*. Video available from WRI Educational Institute, San Diego, CA.
- Gassman, R. and Deutsch, N., (1990). *Increasing options through live/work planning, for teachers and counselors to use with young people ages 13-18*. Madison, WI: Wisconsin Department of Public Instruction.
- Graff, A. and Leonard, D., (1980). *The tools of the trade: A blueprint for moving young women into nontraditional careers*. Madison, WI: Skilled Jobs for Women, Inc.
- It's your future! Catalyst career guide for high school girls*, (1984). Princeton, NJ: Peterson's Guides.
- Keller, B. and Tonelli, J., (1986). *Ready, willing, and able...A life and career planning series for women with disabilities*. Wausau, WI: North Central Technical Institute.
- LeCompte, M. (ed.). (1991). *Job hunter's source book: Where to find employment leads and other job search resources*. Detroit: Gale Research.
- Lindquist, C. L., & Feodoroff, P. L. (1989-1991). *Where to start career planning: Essential resource guide for career planning and job hunting*. Princeton, NJ: Peterson's Guides.
- Norwood, V., (1979). *How women find jobs: A guide for workshop leaders*. Santa Fe, NM: New Mexico Commission on the Status of Women.
- Perry, N. and Donald, S. N., (1990). *PREP, planning to realize educational potential*. Augusta, MN: Maine Occupational Information Coordinating Committee.
- Sanders, J. S., (1986). *The nuts and bolts of NTO: How to help women enter non traditional occupations, 2nd edition*. Netuchen, NJ: The Scarecrow Press, Inc.
- Savage, K. M., & Dorgan, C. A. (eds.). (n.d.). *Professional careers sourcebook: An information guide for career planning*. Detroit: Gale Research.
- U.S. Women's Bureau, (1984). *Women in nontraditional careers (WINC): Curriculum guide*. Washington, DC: U.S. Superintendent of Documents, Government Printing Office.
- Women's Center of Dallas, (1980). *The career shopper's guide, a development plan manual for an employment resource and training service*. Dallas, TX: The Women's Center of Dallas.

What Is Information? How Can It Be Accessed? How Can It Be Used?
Module 5
References

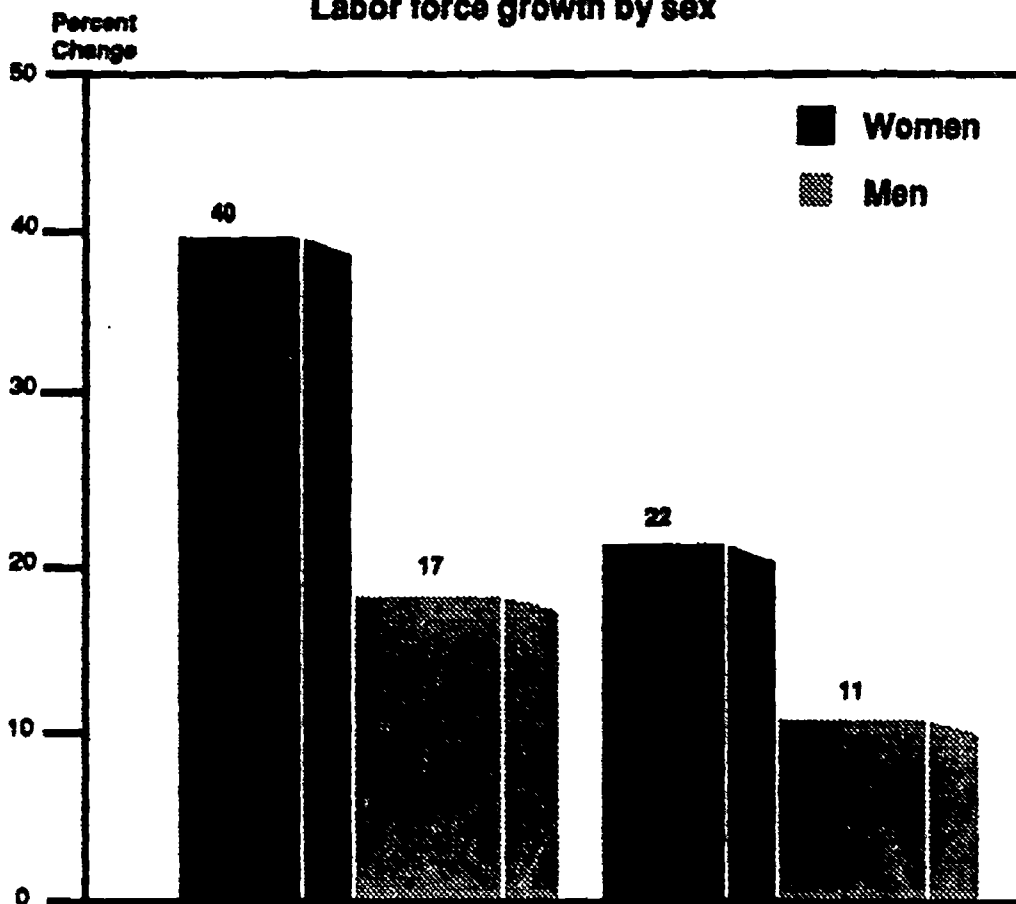
McKee, W. L., & Froeschle, R. C. (1985). *Where the jobs are: Identification and analysis of local employment opportunities*. Kalamazoo, MI: W. E. Upjohn Institute for Employment Research, 1985.

Two Examples of Information

Labor force entrants, 1988-2000



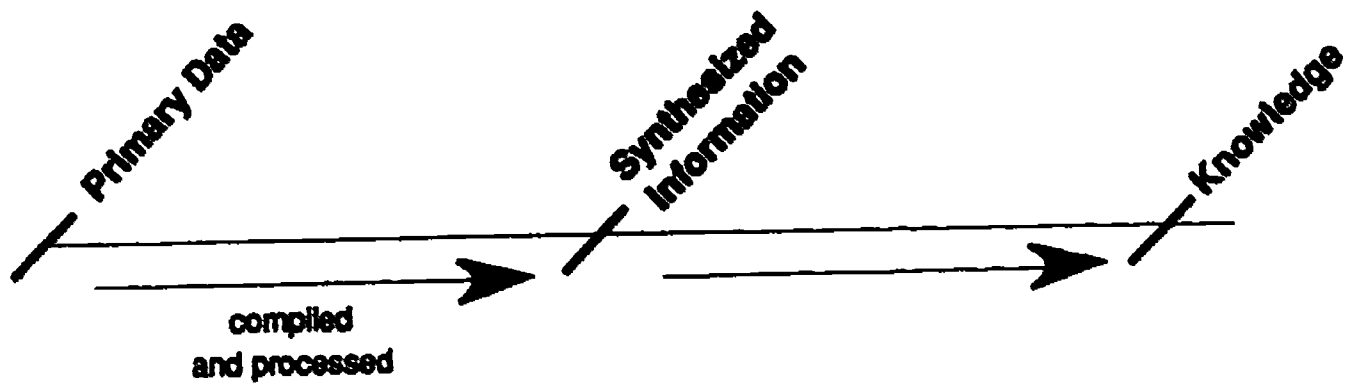
Labor force growth by sex



SOURCE: Bureau of Labor Statistics

731

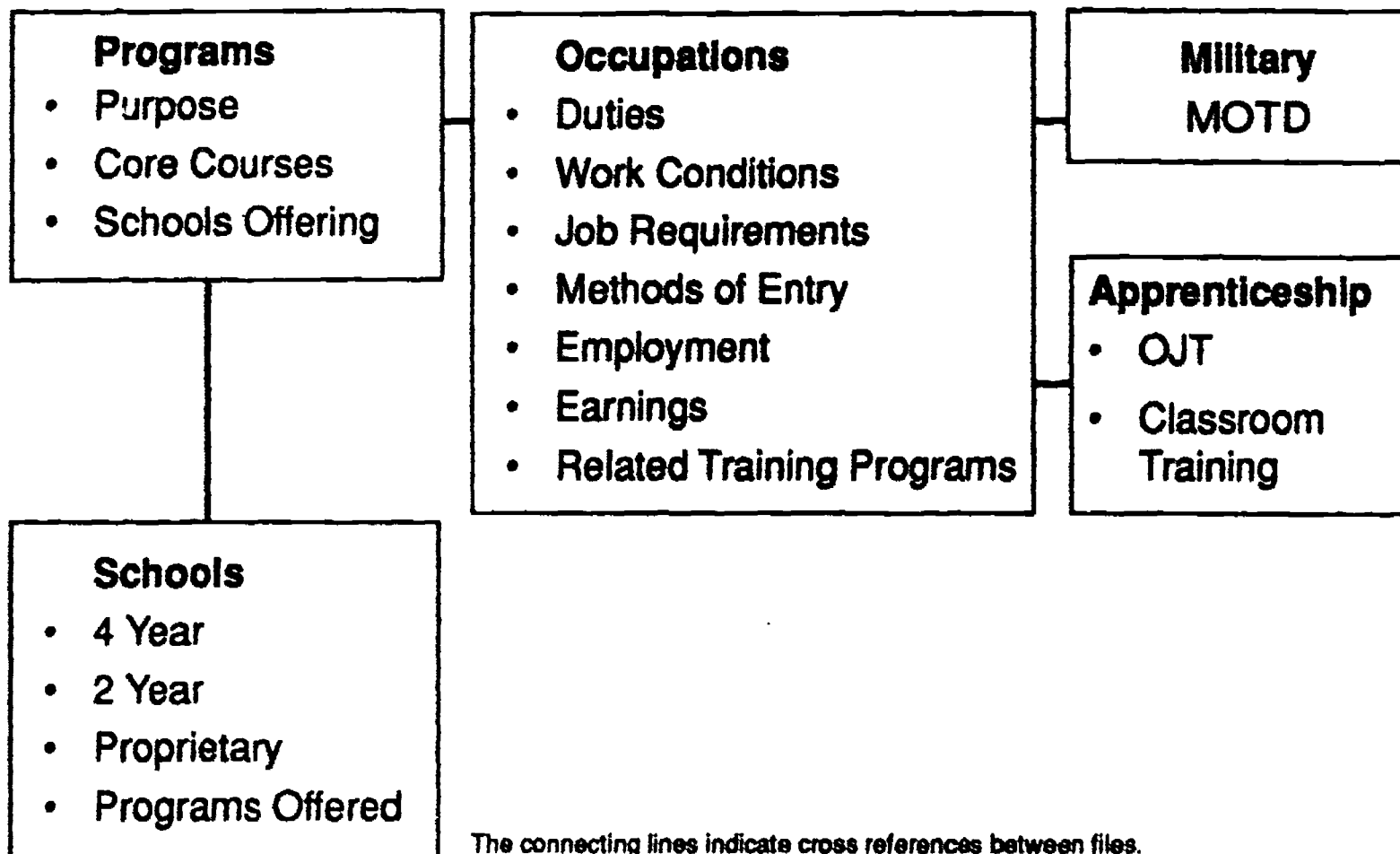
Figure 5.1



A Continuum from Primary Data to Knowledge

Figure 5.2

CIDS Files and File Cross References (Example)



This chart illustrates the type of information found in CIDS programs.

Figure 5.3

Example from a CIDS Printed Resource

3620.2

Ultrasound Technologists

Work Description

Ultrasound technologists use special kinds of sound waves to help people who are ill. They are also known as diagnostic medical sonographers. They use machines known as ultrasound scanners to find medical problems in patients.

A technologist carefully places a patient against the machine. Only the area of the body that must be tested is put against the machine. A technologist then starts the scanner. This points high frequency sound waves at the correct part of the patient's body. Sound waves go through the outside of the body and bounce off the patient's body organs and tissues. Shadowy pictures, called images, can be recorded on a screen or film. The images show the shape and position of body parts such as the heart, kidneys, or muscle and tissue masses. These images can show places where liquids, called fluids, are building up in the body. They can also show the rate of growth of a baby while it is inside of its mother. Then doctors study these images to find out what kind of treatment the patient needs.

An ultrasound technologist must first study the results of other medical tests, called diagnostic tests, that have been done on the patient. They look for information that will help them choose the right ultrasound equipment. This information also helps them find which area of the patient's body to treat. Technologists explain to patients how each test works and what it is for. They make sure that the images the machine makes can be read and understood clearly. Only then do they record the test results.

Some ultrasound technologists specialize in brain testing, heart testing, eye testing or testing how babies develop in the womb. To become certified to give a special type of test, an individual must pass a national exam in each specialty area.

Working Conditions

Ultrasound technologists generally work 40 hours per week. Some work rotating shifts. Others must be ready to go to work at any time.

Work Places

Ultrasound technologists work in hospitals and clinics. They may also work in some doctor's offices.

Workers' Comments

Ultrasound technologists like working with patients. They like giving ultrasound tests because the tests are painless and do not expose patients or themselves to any harmful effects. Ultrasound tech-

nologists like being members of health care teams. They think doctors respect them and the work that they do.

Getting the Job

Some hospitals have training programs in ultrasound technology. Training programs generally last one year. To get into one of these programs, ultrasound technicians must finish two years of college or a two-year vocational school program in allied health. After finishing the one-year training program, an ultrasound technologist may become certified by taking an exam. The American Registry of Diagnostic Medical Sonographers gives this exam. Technicians may be certified in one or more specialties and are then known as registered diagnostic medical sonographers.

Applicants must have good grades in math, physics, biology, zoology, and English. Some understanding of how to use computers may be valuable in the future.

Pay and Employment

Typical salaries range from about \$19,700 to \$32,900 per year.

Salaries vary a great deal from hospital to hospital. Ultrasound technologists are often paid on the same salary scale as X-ray technicians.

The national outlook for this occupation is good. Job openings may exceed the number of qualified applicants throughout the 1980's.

Moving Up

Ultrasound technologists may be promoted by becoming certified to give more than one kind of ultrasound test. With more work experience, a technologist may be promoted to a supervisor or educational coordinator. Some technologists earn college degrees so they can teach ultrasound technology to others.

Where to Write

You may be able to get more information about this occupation by writing to:

American Soc of Radiologic Technicians
15000 Central Avenue, S.E.
Albuquerque, NM 87123

Sample Classroom Activities

INTERVIEW A WORKER

<p>OBJECTIVE Students will obtain information about careers they are interested in.</p>
<p>MATERIALS • chalkboard • chalk</p>
<p>ACTIVITY</p> <ol style="list-style-type: none"> 1. Ask each student to identify a career that they would like to know more about. Record their answers on the chalkboard. 2. Ask the class if they know anyone who works in any of these careers. 3. Have students interview someone who is in the career that they are interested in. <ol style="list-style-type: none"> a. What do they do on their job? b. What education/training is needed? c. How did they find this job? d. Other questions suggested by class 4. Have students report the results of their interview back to the class. 5. Discuss with the class, "Are you more or less interested in this career as a result of this interview?"
<p>COMMENTS This exercise may be repeated a number of times throughout the year.</p>
<p>PERFORMANCE INDICATORS The middle/junior high school student will be able to: 12.4: Describe skills needed in a variety of occupations, including self-employment.</p>
<p>EVALUATION Each student has personally interviewed someone engaged in a career of interest to the student.</p>
<p>RESOURCES <i>Career Exploration Workbook</i>. (VSC) Schrunk, Louise. <i>Lifeplan: A Practical Guide to Successful Career Planning</i>. (Workbook)</p>

Grade					
7	8	9	10	11	12

Curriculum Area	
Lang. Arts	•
Math	□
Health/Science	□
Social Studies	•
Family/Cons. Sci.	□
Art/Music	□
Tech/Voc. Education	•

Self-Concept	
Positive Self-Concept	•
Interaction Skills	•
Growth and Change	□

Environment	
Achievement	•
Work and Learning	□
Career Information	•
Job-Seeking Skills	□
Needs of Society	□

Career Planning	
Decision Making	□
Life Roles	□
Occupational Roles	□
Career Planning	•

DG Activity 35

Figure 5.5

Sample Index

NATIONAL CAREER DEVELOPMENT GUIDELINES COMPETENCIES AND STUDENT PERFORMANCE INDICATORS

Each competency is broken down into its corresponding student performance indicators. The number(s) in parentheses following each performance indicator denote the activities in this book (for grades 7-9) that address that specific performance indicator. Note: while each activity addresses several performance indicators only the key indicators are listed on the activity page under "Performance Indicators."

NATIONAL STUDENT PERFORMANCE INDICATORS FOR MIDDLE/JUNIOR HIGH SCHOOL

Self-Knowledge

1. Knowledge of the influence of a positive self-concept.
 - 1.1 Describe personal likes and dislikes.
(5, 6, 8, 15, 16, 17, 18, 22, 30, 34, 35, 44, 45, 53, 54, 58, 60, 66, 69, 70, 71, 72, 79, 83, 86, 87, 90, 93, 95, 100, 108, 109, 114, 115, 117, 120, 121, 132, 134, 137, 139, 141)
 - 1.2 Describe individual skills required to fulfill different life roles.
(6, 13, 19, 22, 27, 30, 38, 54, 56, 58, 60, 61, 62, 64, 65, 68, 67, 68, 69, 71, 75, 82, 83, 85, 86, 91, 93, 94, 97, 100, 103, 105, 108, 109, 110, 114, 115, 116, 117, 118, 120, 121, 123, 124, 125, 126, 127, 128, 129, 130, 134, 135, 138, 140)
 - 1.3 Describe how one's behavior influences the feelings and actions of others.
(9, 23, 24, 50, 54, 55, 61, 62, 79, 80, 84, 85, 86, 87, 89, 90, 91, 94, 97, 98, 101, 103, 105, 108, 111, 114, 115, 116, 117, 120, 122, 124, 126, 128, 129, 130)
 - 1.4 Identify environmental influences on attitudes, behaviors, and aptitudes.
(18, 38, 57, 78, 80, 81, 82, 84, 90, 92, 94, 96, 97, 99, 101, 102, 103, 106, 107, 108, 110, 112, 114, 118, 119, 122, 123, 125, 127, 133, 134)
2. Skills to interact with others.
 - 2.1 Demonstrate respect for the feelings and beliefs of others.
(14, 17, 29, 41, 54, 59, 62, 63, 70, 72, 79, 80, 84, 85, 86, 87, 91, 93, 96, 97, 99, 100, 101, 102, 103, 105, 111, 112, 114, 115, 117, 120, 122, 123, 124, 125, 126, 127, 128, 137, 139)
 - 2.2 Demonstrate an appreciation for the similarities and differences among people.
(17, 23, 24, 54, 61, 62, 63, 71, 79, 86, 87, 88, 93, 95, 97, 99, 100, 101, 103, 109, 110, 112, 113, 114, 117, 121, 123, 127, 139)
 - 2.3 Demonstrate tolerance and flexibility in interpersonal and group situations.
(9, 14, 23, 29, 38, 39, 41, 61, 62, 63, 69, 71, 72, 79, 85, 87, 91, 92, 93, 95, 99, 102, 103, 105, 108, 110, 111, 112, 113, 114, 115, 117, 120, 122, 125, 126, 127, 128, 130, 131, 137, 139)
 - 2.4 Demonstrate skills in responding to criticism.
(69, 80, 84, 91, 100, 103, 111, 122, 131, 134)
 - 2.5 Demonstrate effective group membership skills.
(9, 14, 23, 27, 36, 39, 41, 50, 51, 54, 56, 59, 61, 62, 63, 69, 70, 71, 72, 74, 76, 79, 83, 84, 85, 86, 88, 89, 91, 92, 93, 95, 96, 97, 98, 99, 101, 102, 103, 104, 105, 106, 107, 108, 114, 115, 116, 117, 119, 120, 122, 123, 124, 126, 127, 128, 129, 130, 134, 137, 138, 139, 140)
 - 2.6 Demonstrate effective social skills.
(9, 21, 35, 36, 44, 54, 62, 72, 84, 88, 89, 93, 97, 98, 103, 113, 114, 115, 116, 117, 120, 123, 124, 126, 129, 137, 139)
 - 2.7 Demonstrate understanding of different cultures, lifestyles, attitudes, and abilities.
(2, 18, 38, 39, 54, 70, 72, 74, 79, 86, 93, 95, 100, 103, 109, 110, 112, 115, 119, 123, 127, 132, 133, 139, 141)

Figure 5.6

Example from OOH

Teacher Aides

(D.O.T. 099.327-010; 219.467-010; and 249.367-074, and -086)

Nature of the Work

Teacher aides help classroom teachers in a variety of ways to give them more time for teaching. They help and supervise students in the classroom, cafeteria, school yard, or on field trips. They record grades, set up equipment, or help prepare materials for instruction. They may also tutor and assist children in learning class material.

Aides' responsibilities vary greatly by school district. In some districts, teacher aides just handle routine nonteaching and clerical tasks. They grade tests and papers, check homework, keep health and attendance records, type, file, and duplicate materials. They may also stock supplies, operate audiovisual equipment, and keep classroom equipment in order. In other districts, aides also help instruct children, under the supervision and guidance of teachers. They work with students individually or in small groups—listening while students read, reviewing class work, or helping them find information for reports. Sometimes, aides take charge of special projects and prepare equipment or exhibits—for a science demonstration, for example.

Working Conditions

About half of all teacher aides work part time during the school year. Most work the traditional 9- to 10-month school year. They may work



Teacher aides help children review and understand their lessons.

outdoors supervising recess when weather allows and spend much of their time standing, walking, or kneeling. Working closely with the students can be both physically and emotionally tiring.

Employment

Teacher aides held about 682,000 jobs in 1988. About 8 out of 10 worked in elementary and secondary schools, with many concentrated in the lower grades. Some assisted special education teachers with physically, mentally, or emotionally handicapped children. Most of the others worked in child daycare centers. Employment was distributed geographically much the same as the population.

Training, Other Qualifications, and Advancement

Educational requirements for teacher aides range from less than a high school diploma to some college training. Districts that give aides some teaching responsibilities usually require more training than those that don't assign teaching tasks.

A number of 2-year and community colleges offer associate degree programs that prepare graduates to work as teacher aides. However, most teacher aides receive on-the-job training. Aides are taught how to operate audiovisual equipment, keep records, and prepare instructional materials. In addition, they are made familiar with the organization and operation of a school and with teaching methods.

Teacher aides should enjoy working with children and be able to handle classroom situations with fairness and patience. Preference in hiring may be given to those with previous experience in working with children. Aides also must demonstrate initiative and a willingness to follow a teacher's directions. They must have good oral and writing skills and be able to communicate effectively with students and teachers. Clerical skills may also be necessary.

Some States have voluntary certification for general teacher aides. To qualify, an individual may need a high school diploma or general equivalency degree (G.E.D.), or even some college training. Kansas, Louisiana, Texas, and Wisconsin grant permits for paraprofessionals, as some aides are called, in special education.

Advancement for teacher aides, usually in the form of higher earnings or increased responsibility, comes primarily with experience or additional education. Some school districts provide release time so that aides may take college courses. Aides who earn bachelor's degrees may become certified teachers.

Job Outlook

Employment of teacher aides is expected to increase faster than the average for all occupations through the year 2000, primarily reflecting rising enrollments and increases in the ratio of teacher aides to teachers. Enrollment growth will not occur at the same rate in all parts of the country. Largely because of migration to the South and West, enrollment increases are expected to be greater in those regions than in the Northeast and Midwest.

Teacher aide employment is sensitive to changes in State and local expenditures for education. Pressures on education budgets are greater in some States and localities than in others. A number of teacher aide positions are financed through Federal programs. For example, a 1986 law requires that public schools provide special education services to all children between the ages of 3 and 6 who need it. This will stimulate the demand for teacher aides who work with special education teachers.

Because of a relatively high turnover in the occupation, most openings for teacher aides are expected to occur as a result of the need to replace workers who transfer to other occupations or who leave the labor force to assume full-time housekeeping responsibilities, return to school, or for other reasons.

Earnings

In 1988-89, aides involved in teaching activities earned an average of \$7.05 an hour; those performing only nonteaching activities averaged \$6.14 an hour. Earnings varied by region and also by work experience and academic qualifications. Many aides are covered by collective bargaining agreements and have health and pension benefits similar to those of the teachers in their schools.

Related Occupations

The educational support activities that teacher aides perform demand organizational skills, cooperativeness, recordkeeping ability, and a talent for getting along with people. Other occupations requiring some or all of these skills include childcare workers, career guidance technicians, home health aides, library attendants, medical record technicians, nursing aides, receptionists, and retail sales clerks.

Sources of Additional Information

Information on teacher aides as well as on a wide range of education-related subjects, including teacher aide unionization, can be obtained from:

American Federation of Teachers, 555 New Jersey Ave. NW., Washington, DC 20001.

School superintendents and State departments of education can provide details about employment requirements.

Figure 5.7

Example from the DOT

526.685-014

526.685-014 COOK, FRY, DEEP FAT (can. & preserv.; hotel & rest.)

Tends deep-fat cookers to fry meats, vegetables, or fish in cooking oil: Empties containers or opens valves to fill cookers with oil. Sets thermostat to heat oil to specified temperature. Empties containers of meat, vegetable, or fish into metal basket and immerses basket into vat manually or by hoist. Sets timer. Observes color at end of frying time to determine conformity to standards and extends frying time accordingly. Removes basket from cooker, drains it, and dumps contents onto tray. May dip foods into batter or dye before frying. May specialize in a particular food product for canning or freezing or may fry variety of foods for immediate consumption.

526.685-018 COOK, VACUUM KETTLE (can. & preserv.)

Tends vacuum cooker and open kettle to cook fruit and berries preparatory to making jams and jellies: Observes thermometer, turns rheostat and steam valve, or pushes switch or lights burner to heat vacuum cooker and open kettle to specified temperature. Turns valve to transfer contents of kettle into vacuum cooker. Observes *refractometer* on vacuum cooker to determine sugar content and adds ingredients according to formula. Places container under discharge outlet of distillation jacket of cooker to reclaim esters. Opens valve or starts pump to transfer contents of vacuum cooker to holding tank or filling machine.

526.685-022 COOKER (cereal)

Tends steam-heated pressure cookers to cook cracked and tempered grain for further processing into cereal products: Presses button to load first cooker with measured amount of grain and liquid flavor. Clamps lid of cooker in place, using wrench. Moves dials and turns valves to attain specified temperature and pressure in cooker. Removes lid of cooker and dumps cooked grain onto conveyor after determining that grain has reached specified color and consistency. Records cooking time and number of batches prepared. May start automatic equipment that admits steam, rotates cooker, and stops cooker after specified time.

Figure 5.8

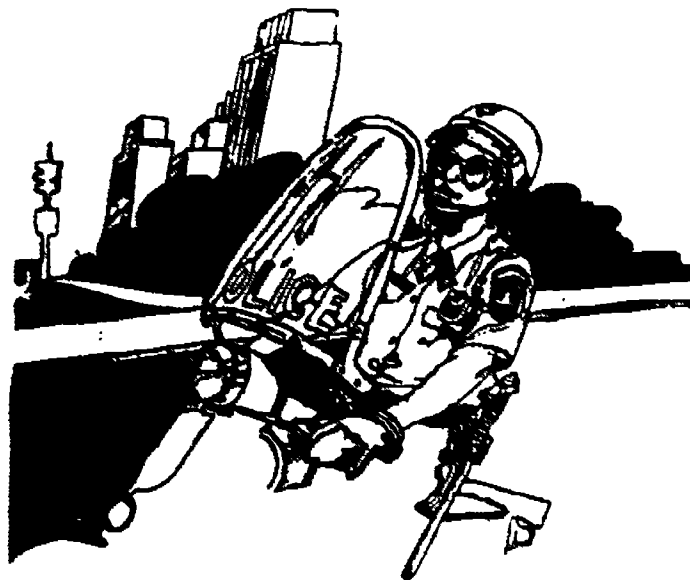
04.01 Safety and Law Enforcement

Workers in this group are in charge of enforcing laws and regulations. Some investigate crimes, while others supervise workers who stop or arrest lawbreakers. Others make inspections to be sure that the laws are not broken. Most jobs are found in the Federal, State, or local governments, such as the Police and Fire Departments. Some are found in private businesses, such as factories, stores, and similar places.

What kind of work would you do?

Your work activities would depend upon your specific job. For example, you might

- set procedures, prepare work schedules, and assign duties for jailers.
- direct and coordinate daily activities of a police force.
- direct and coordinate activities of a fire department.
- hire, assign, and supervise store detectives.
- investigate and arrest persons suspected of the illegal sale or use of drugs.
- patrol an assigned area in a vehicle or on foot and issue tickets, investigate disturbances, render first aid, and arrest suspects.
- patrol an assigned area to observe hunting and fishing activities and warn or arrest persons violating fish and game laws.



What skills and abilities do you need for this kind of work?

To do this kind of work you must be able to:

- work with laws and regulations, sometimes written in legal language.
- use practical thinking to conduct or supervise investigations.
- supervise other workers.
- plan the work of a department or activity.
- deal with various kinds of people.
- work under pressure or in the face of danger.
- patrol an assigned area to observe hunting and fishing activities and warn or arrest persons violating fish and game laws.
- keep physically fit.
- use guns, fire-fighting equipment, and other safety devices.

How do you know if you would like or could learn to do this kind of work?

The following questions may give you clues about yourself as you consider this group of jobs.

- Have you had courses in government, civics, or criminology? Did you find these subjects interesting?
- Have you been a member of a volunteer fire department or emergency rescue squad? Were you given training for this work?

- Have you watched detective television shows? Do you read detective stories? Do you try to solve mysteries?
- Have you been an officer of a school safety patrol? Do you like being responsible for the work of others?
- Have you used a gun for hunting or in target practice? Are you a good shot?
- Have you spoken at a civic or community organization? Do you like work that requires frequent public speaking?
- Have you been a military officer?

How can you prepare for and enter this kind of work?

Occupations in this group usually require education and/or training extending from one to over ten years, depending upon the specific kind of work. Local civil service regulations usually control the selection of police officers. People who want to do this kind of work must meet certain requirements. They must be U. S. citizens and be within certain height and weight ranges. In addition, they may be required to take written, oral, and physical examinations. The physical examinations often include tests of physical strength and the ability to move quickly and easily. To work in these jobs, persons should

Figure 5.9

ave the physical condition to use firearms or work on dangerous missions. Personal investigations are made of all applicants.

Most police departments prefer to hire people who have a high school education or its equal. However, some departments hire people if they have worked in related activities, such as guarding or volunteer police work.

Jobs with federal law enforcement agencies usually require a college degree. For example, to be hired as customs enforcement officer, a degree or three years of related work experience is required. FBI Special Agents are required to have a degree in law or accounting. Accounting degrees should be coupled with at least one year of related work experience.

Most management or supervisory jobs in this group are filled from within the ranks. Promotions are usually based on written examinations and job performance and are usually subject to civil service laws.

What else should you consider about these jobs?

Most workers in these jobs are on call any time their services are needed. They may work overtime during emergencies. Many of these jobs expose workers to great physical danger.

If you think you would like to do this kind of work, look at the job titles listed on the following pages. Select those that interest you and read their definitions in the Dictionary of Occupational Titles.

Safety and Law Enforcement

04.01.01 Managing

Fire Marshal (any ind.) 373.167-018
Guard, Chief (any ind.) 372.167-014

Manager, Internal Security (bus. ser.) 376.137-010

Battalion Chief (gov. ser.) 373.167-010
Captain, Fire-Prevention Bureau (gov. ser.) 373.167-014
Commanding Officer, Homicide Squad (gov. ser.) 375.167-010

Commanding Officer, Investigation Division (gov. ser.) 375.167-014
Commanding Officer, Motorized Squad (gov. ser.) 375.163-010

Correction Officer, Head (gov. ser.) 372.137-010
Deputy, Court (gov. ser.) 377.137-018
Deputy Sheriff, Chief (gov. ser.) 377.167-010
Deputy Sheriff, Commander, Civil Division (gov. ser.) 377.137-010

Deputy Sheriff, Commander, Criminal and Patrol Division (gov. ser.) 377.137-014

Desk Officer (gov. ser.) 375.137-014
Detective Chief (gov. ser.) 375.167-022
Fire Assistant (gov. ser.) 169.167-022
Fire Captain (gov. ser.) 373.134-010
Fire Chief (gov. ser.) 373.117-010
Harbor Master (gov. ser.) 375.167-026

Jailer, Chief (gov. ser.) 372.167-018
Launch Commander, Harbor Police (gov. ser.) 375.167-030

Park Superintendent (gov. ser.) 188.167-062
Police-Academy Instructor (gov. ser.) 375.227-010
Police Captain, Precinct (gov. ser.) 375.167-034
Police Chief (gov. ser.) 375.117-010

Police Commissioner (gov. ser.) I 188.117-118
Police Inspector (gov. ser.) I 375.267-026
Police Lieutenant, Patrol (gov. ser.) 375.167-038
Police Sergeant, Precinct (gov. ser.) I 375.133-010
Sheriff, Deputy, Chief (gov. ser.) 377.117-010
Traffic Lieutenant (gov. ser.) 375.167-046
Traffic Sergeant (gov. ser.) 375.137-026

Special Agent-in-Charge (r.r. trans.) 376.167-010

04.01.02 Investigating

Investigator, Private (bus. ser.) 376.267-018

Fire Warden (forestry) 452.167-010

Accident-Prevention-Squad Police Officer (gov. ser.) 375.263-010

Customs Patrol Officer (gov. ser.) 168.167-010
Deputy Sheriff, Civil Division (gov. ser.) 377.667-018
Detective (gov. ser.) 375.267-010
Detective, Narcotics and Vice (gov. ser.) 375.267-014
Fire Marshal (gov. ser.) 373.267-014

Fish and Game Warden (gov. ser.) 379.167-010
Investigator, Narcotics (gov. ser.) 375.267-018
Investigator, Vice (gov. ser.) 375.267-022
Pilot, Highway Patrol (gov. ser.) 375.163-014
Police Inspector (gov. ser.) II 375.267-030

Police Officer (gov. ser.) I 375.263-014
Sheriff, Deputy (gov. ser.) 377.263-010
Special Agent (gov. ser.) 375.167-042
Special Agent, Customs (gov. ser.) 188.167-090
State-Highway Police Officer (gov. ser.) 375.263-018
Wildlife Agent, Regional (gov. ser.) 379.137-018

Investigator (light, heat, & power) 376.367-022

Figure 5.9 continued

RESPIRATORY THERAPISTS

Army
Navy
Air Force

Asthma and emphysema (lung disease) patients suffer from breathing difficulties. Victims of heart failure, stroke, or near drowning may also have long-term breathing problems. Respiratory therapy is provided to patients with breathing problems. Respiratory therapists help patients regain breathing functions through therapy, exercise, and medication.

What They Do

Respiratory therapists in the military perform some or all of the following duties:

- Assist in reviving patients who are no longer breathing or whose hearts have stopped
- Operate and monitor respiratory therapy equipment during treatment
- Observe and record patient response to respiratory therapy
- Clean, sterilize, and maintain respiratory therapy equipment
- Instruct patients in breathing exercises to help clear lungs of fluids
- Instruct patients on how to operate home respiratory therapy equipment

Physical Demands

Respiratory therapists may have to lift and position patients for treatment.

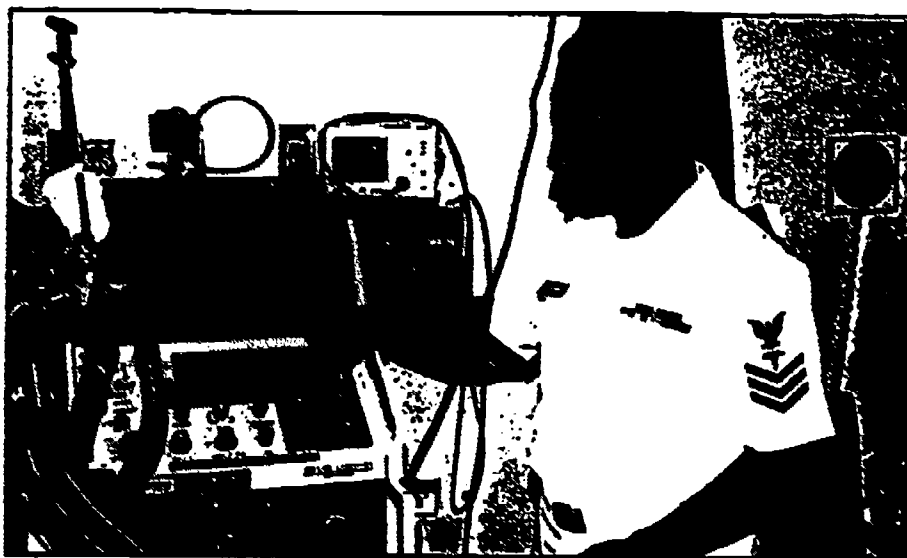
Helpful Attributes

Helpful school subjects include general science, chemistry, and biology. Helpful attributes include:

- Ability to deal with stressful situations
- Ability to respond quickly to emergencies
- Interest in helping others

Work Environment

Respiratory therapists usually work in hospitals or clinics. In combat situations, they may work in mobile field hospitals.



Training Provided

Job training consists of between 32 and 41 weeks of classroom instruction, including practice in providing respiratory therapy. Course content typically includes:

- Procedures for operating respiratory therapy equipment
- Methods for providing emergency care
- Techniques of respiratory therapy

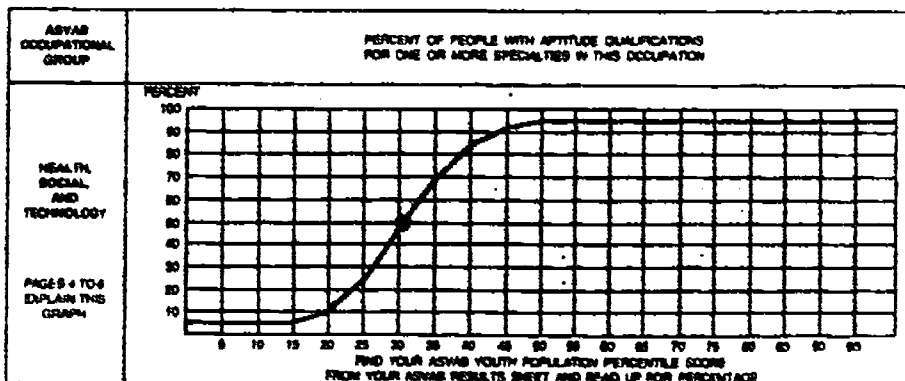
Further training occurs on the job and through advanced courses.

Civilian Counterparts

Civilian respiratory therapists work in hospitals and clinics and for ambulance services. Their duties are similar to those of military respiratory therapists. Civilian respiratory therapists may be called inhalation therapists or pulmonary therapists.

Opportunities

The military has about 310 respiratory therapists. On average, the services need about 30 new therapists each year. After job training, therapists provide treatment under the direction of a supervisor. With experience, they advance from caring for patients with minor respiratory problems to caring for patients with more serious problems. They may also supervise and direct the work of other respiratory therapists.



STANDARD OCCUPATIONAL CLASSIFICATION MANUAL

5233 Health Aides, Except Nursing

This unit group includes occupations involving performing various duties under the direction of trained medical practitioners, such as mixing pharmaceutical preparations, issuing medicines, labeling and storing supplies; assisting during physical examination of patients, giving specified office treatments, and keeping patients' records; preparing treatment room, inventory of supplies and instruments; preparing, bottling and sterilizing infant formulas. May also assist in physical and other therapy treatment.

Pharmacy helper.....	573.....	074387010
Physical therapist assistant.....	573.....	076224010
Occupational therapy assistant.....	573.....	076364010
Laboratory assistant, blood and plasma.....	323-573.....	078687010
Chiropractor assistant.....	573.....	079364010
Medical assistant.....	573.....	079367010
Podiatric assistant.....	573.....	079374018
Physical therapy aide.....	573.....	355354010
Ambulance attendant.....	573.....	355374010
Occupational therapy aide.....	573.....	355377010
Morgue attendant.....	573.....	355667010
Graves registration specialist.....	574.....	355687014
Formula-room worker.....	313-573.....	520487014
Ambulance driver.....	573.....	913683010

Note: See page 9 for explanation of job title codes.

Figure 5.11

Major Group 54.—FOOD STORES

The Major Group as a Whole

This major group includes retail stores primarily engaged in selling food for home preparation and consumption. Establishments primarily engaged in selling prepared foods and drinks for consumption on the premises are classified in Major Group 58, and stores primarily engaged in selling packaged beers and liquors are classified in Industry 5921.

Industry Group No.	Industry No.
--------------------------	-----------------

541 GROCERY STORES

5411 Grocery Stores

Stores, commonly known as supermarkets, food stores, and grocery stores, primarily engaged in the retail sale of all sorts of canned foods and dry goods, such as tea, coffee, spices, sugar, and flour; fresh fruits and vegetables; and fresh and prepared meats, fish, and poultry.

Convenience food stores—retail
Food markets—retail
Frozen food and freezer plans, except
meat—retail

Grocery stores, with or without fresh
meat—retail
Supermarkets, grocery—retail

542 MEAT AND FISH (SEAFOOD) MARKETS, INCLUDING FREEZER PROVISIONERS

5421 Meat and Fish (Seafood) Markets, Including Freezer Provisioners

Establishments primarily engaged in the retail sale of fresh, frozen, or cured meats, fish, shellfish, and other seafoods. This industry includes establishments primarily engaged in the retail sale, on a bulk basis, of meat for freezer storage and in providing home freezer plans. Meat markets may butcher animals on their own account, or they may buy from others. Food locker plants primarily engaged in renting locker space for the storage of food products for individual households are classified in Industry 4222. Establishments primarily engaged in the retail sale of poultry are classified in Industry 5499.

Fish markets—retail
Freezer food plans, meat—retail
Freezer provisioners, meat—retail
Frozen food and freezer plans, meat—
retail

Meat markets—retail
Seafood markets—retail

543 FRUIT AND VEGETABLE MARKETS

5431 Fruit and Vegetable Markets

Establishments primarily engaged in the retail sale of fresh fruits and vegetables. They are frequently found in public or municipal markets or as roadside stands. However, establishments which grow fruits and vegetables and sell them at roadside stands are classified in Agriculture, Major Group 01.

Fruit markets and stands—retail
Produce markets and stands—retail

Vegetable markets and stands—retail

INDUSTRY/OCCUPATIONAL RELATIONSHIPS ROUTE
<Chart 3>

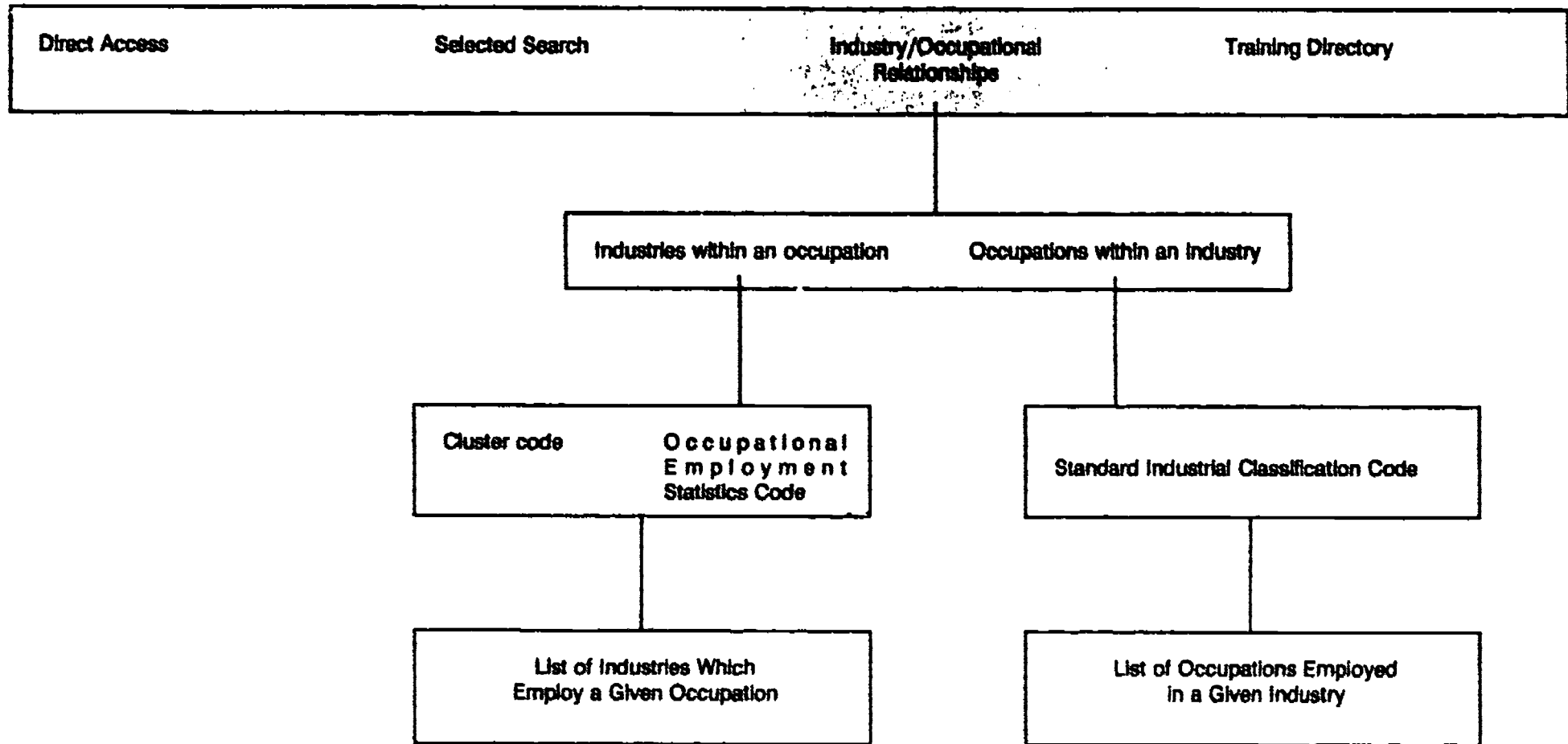


Figure 5.13

7.3.4

7.3.5

Press Return

NORTH DAKOTA OCCUPATIONAL INFORMATION SYSTEM
MATRIX REPORT

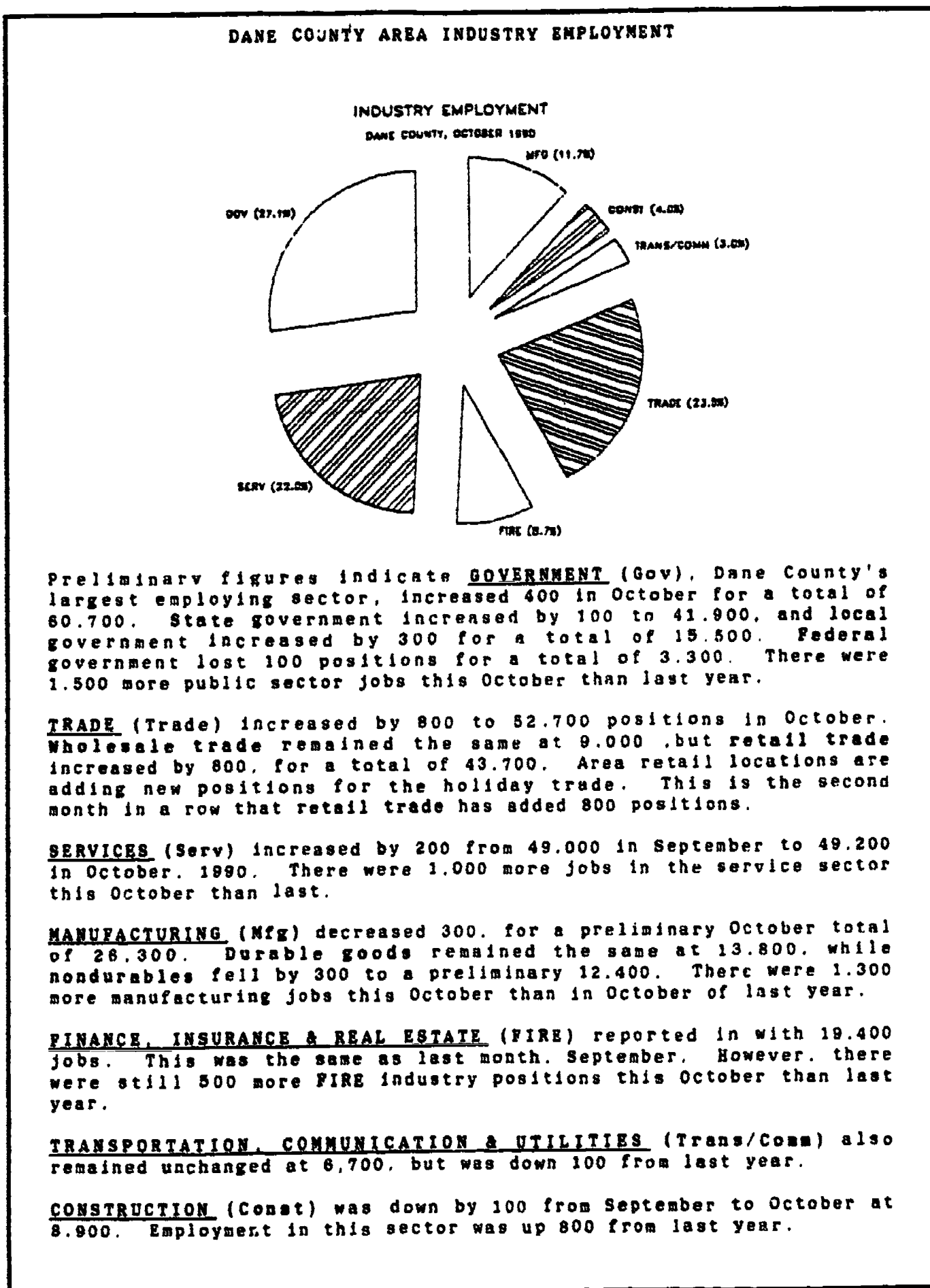
NORTH DAKOTA
CLUSTER TITLE: BOOKKEEPING & ACCOUNTING CLERKS NORTH DAKOTA CLUSTER # 0850

>>> OES OCCUPATION: [55338305] -- BOOKKEEPING & ACCOUNTING CLERKS
(Employment Level = 6111)

- SIC - CODE	-- STANDARD INDUSTRIAL CLASSIFICATION (SIC) TITLE -	PERCENT OF OES EMPLOYMENT
581	EATING AND DRINKING PLACES, TOTAL	2.89 %
517	PETROLEUM AND PETROLEUM PRODUCTS	3.02 %
588	MACHINERY, EQUIPMENT, AND SUPPLIES	3.06 %
515	FARM-PRODUCT RAW MATERIALS	4.37 %
983	LOCAL GOVERNMENT, EXC. EDUCATION	4.57 %
682	COMMERCIAL AND STOCK SAVINGS BANKS	4.89 %
882	SELF EMPLOYED AND UNPAID FAMILY WORKERS	8.98 %

[FIGURE 27] INDUSTRIES WITHIN AN OCCUPATION REPORT {sample}

Example of Local Information



Data produced in cooperation with the Bureau of Labor Statistics—USDOL.

Figure 5.15

OUTLOOK 1990 - 2005

Bureau of Labor Statistics Office of Employment Projections

- The BLS projections program is carried out in the Office of Employment Projections.
- The program began with the development of career guidance information to assist returning veterans from World War II.
- Projections for a 10- to 15-year period have been developed every other year since the mid-1960's.
- The latest set of projections, which covers the 1990 - 2005 period, is the subject of this slide presentation.

7.35

7.39

Figure 5.16

Sequence of Projection Procedures to Determine Occupational Demand

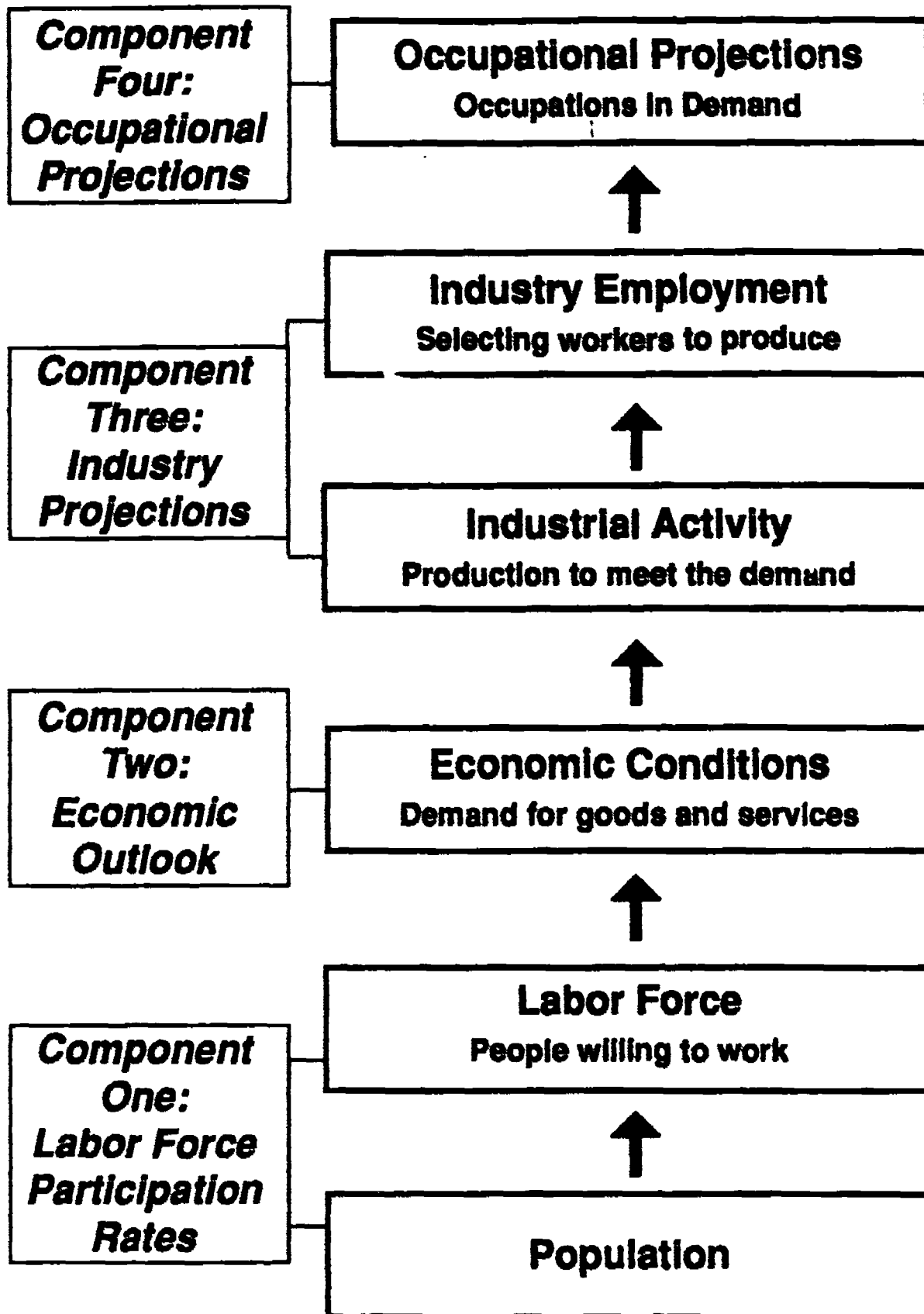


Figure 5.17

OUTLOOK: 1990-2005

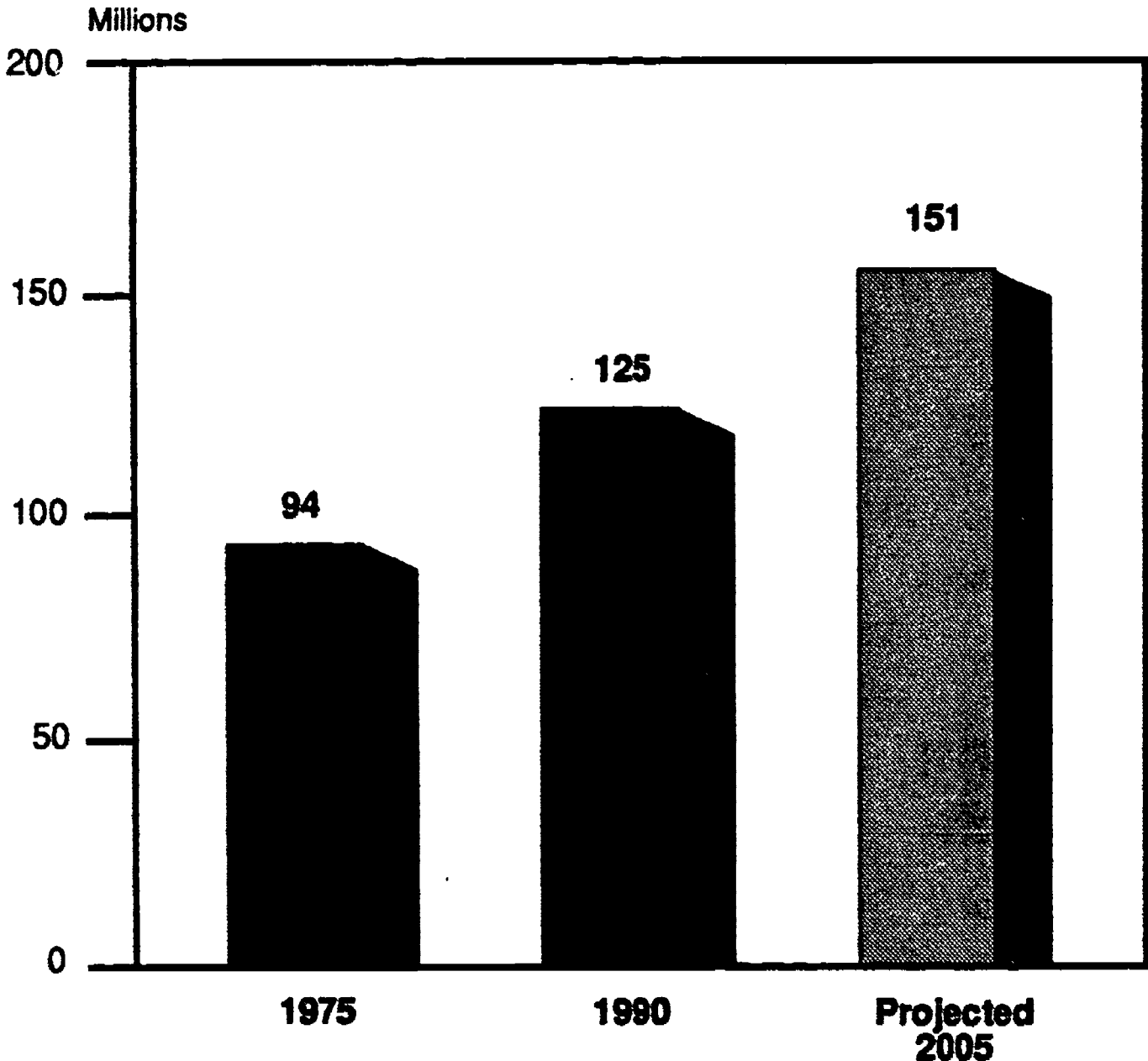
- *Labor force*
- Economic outlook
- Industry employment
- Occupational employment

711

Figure 5.18

712

Labor force will continue to grow



713

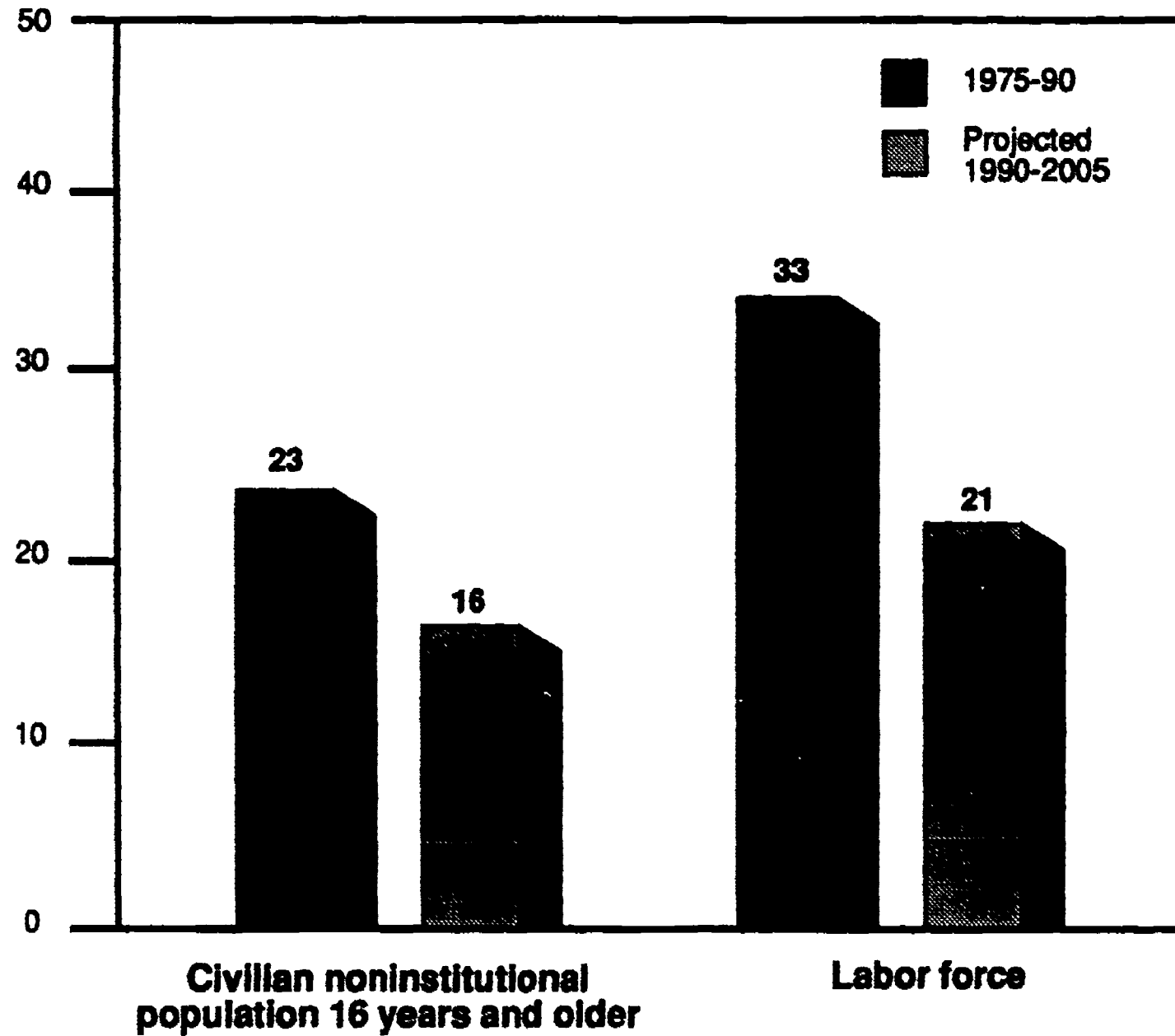
SOURCE: Bureau of Labor Statistics

Figure 5.19

714

Labor force grows faster than population

Percent change



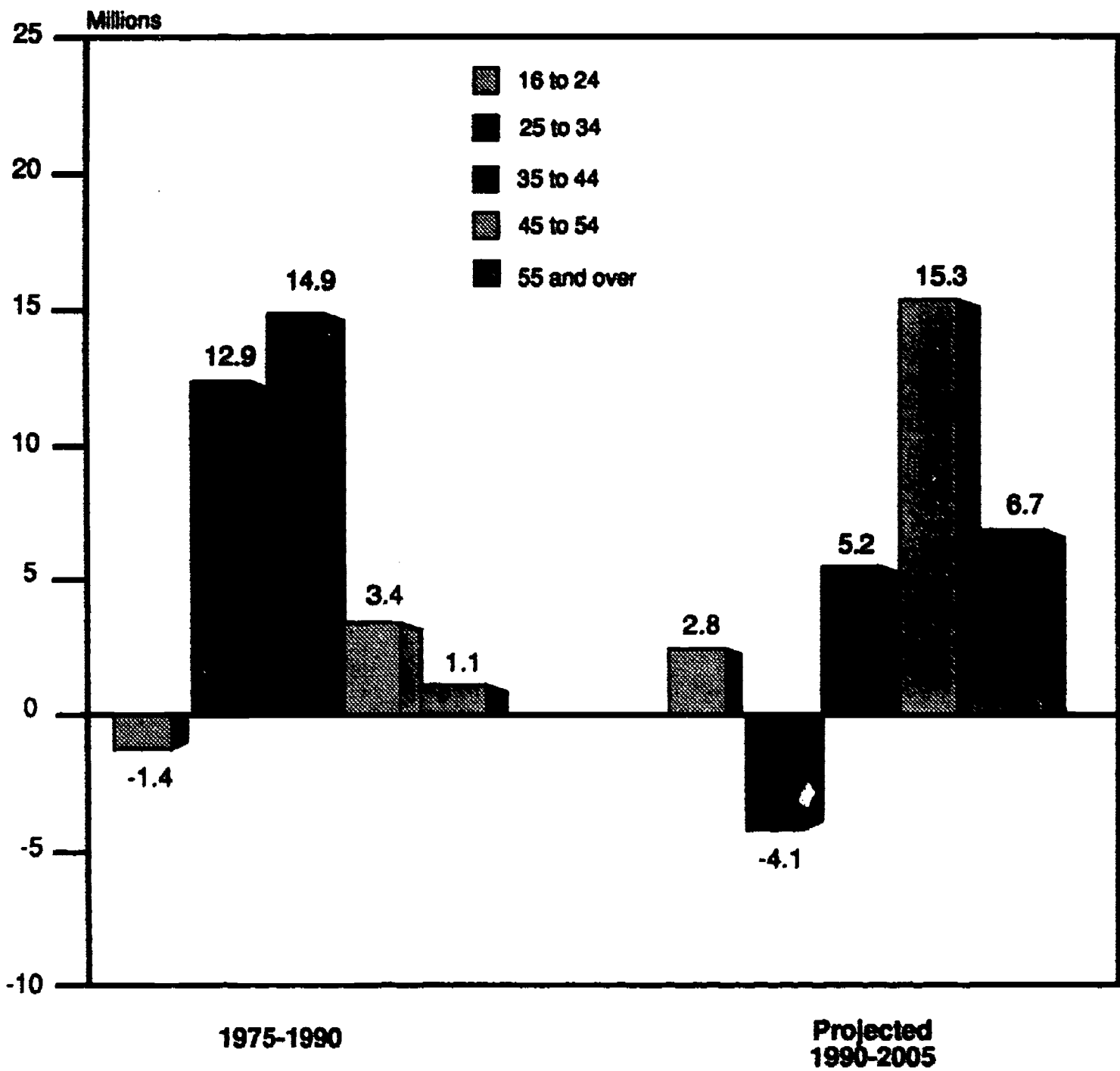
SOURCE: Bureau of Labor Statistics

Figure 5.20

716

715

Labor force growth by age



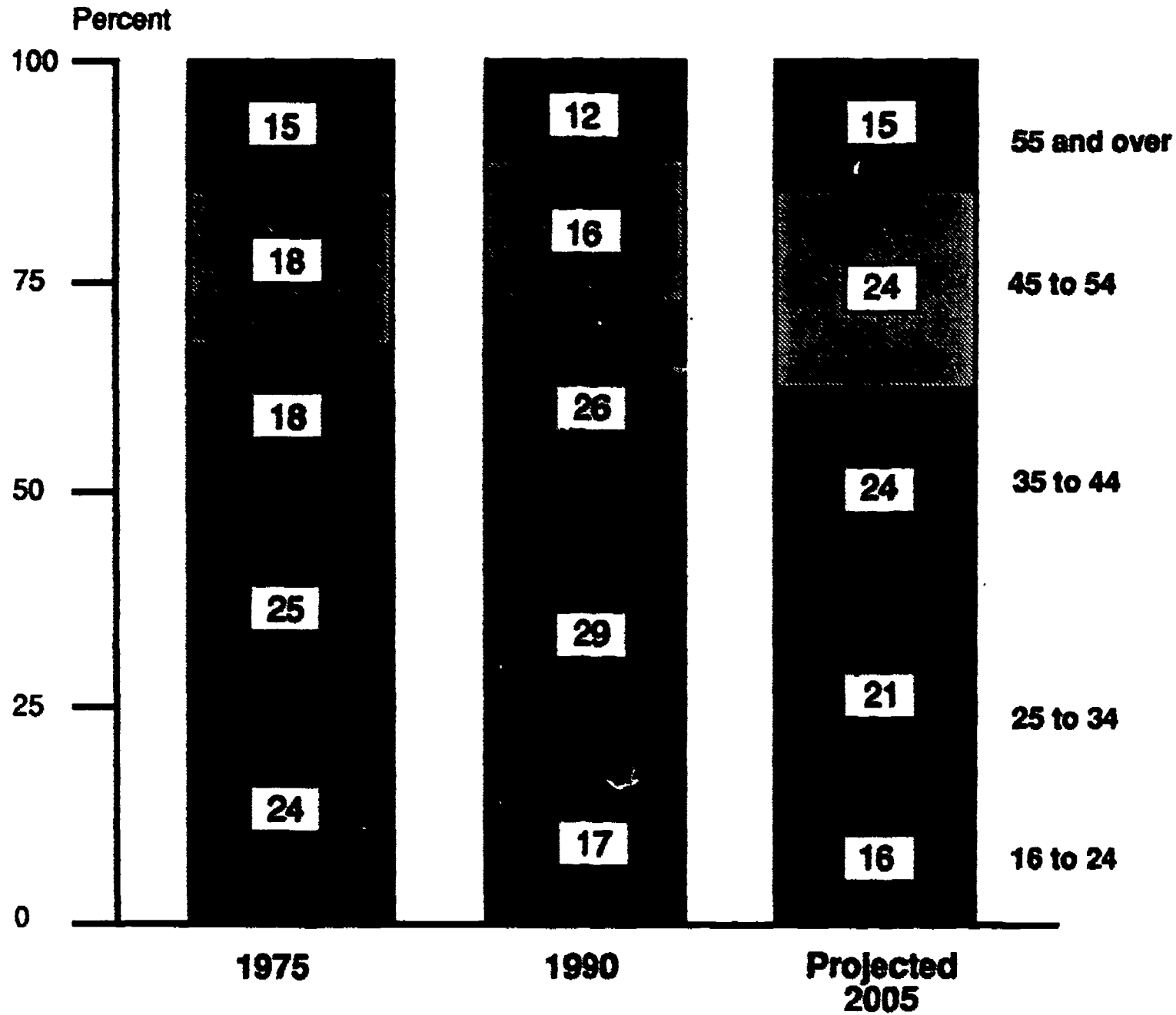
717

SOURCE: Bureau of Labor Statistics

Figure 5.21

715

Age distribution of labor force is changing

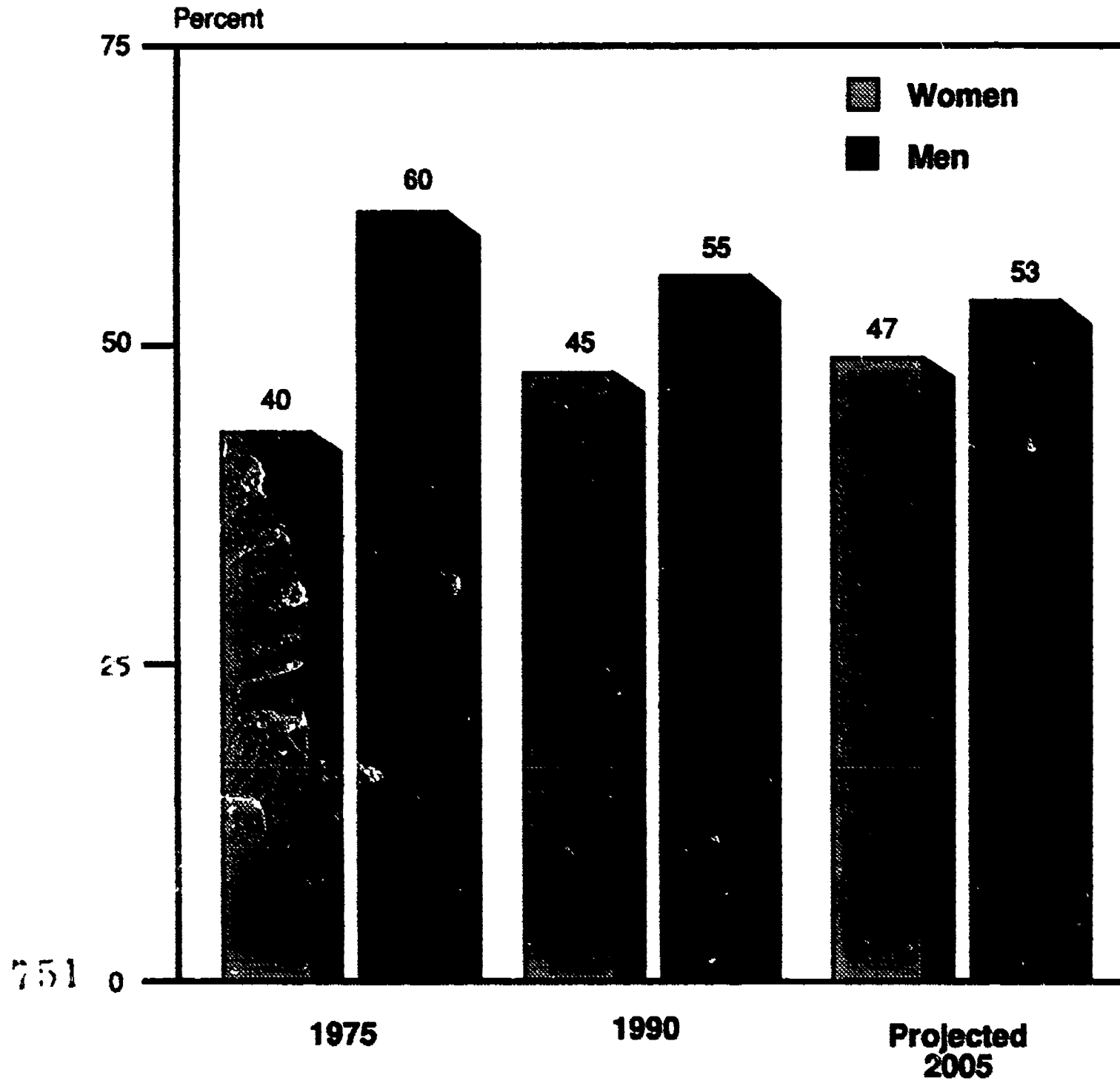


SOURCE: Bureau of Labor Statistics

Figure 5.22

750

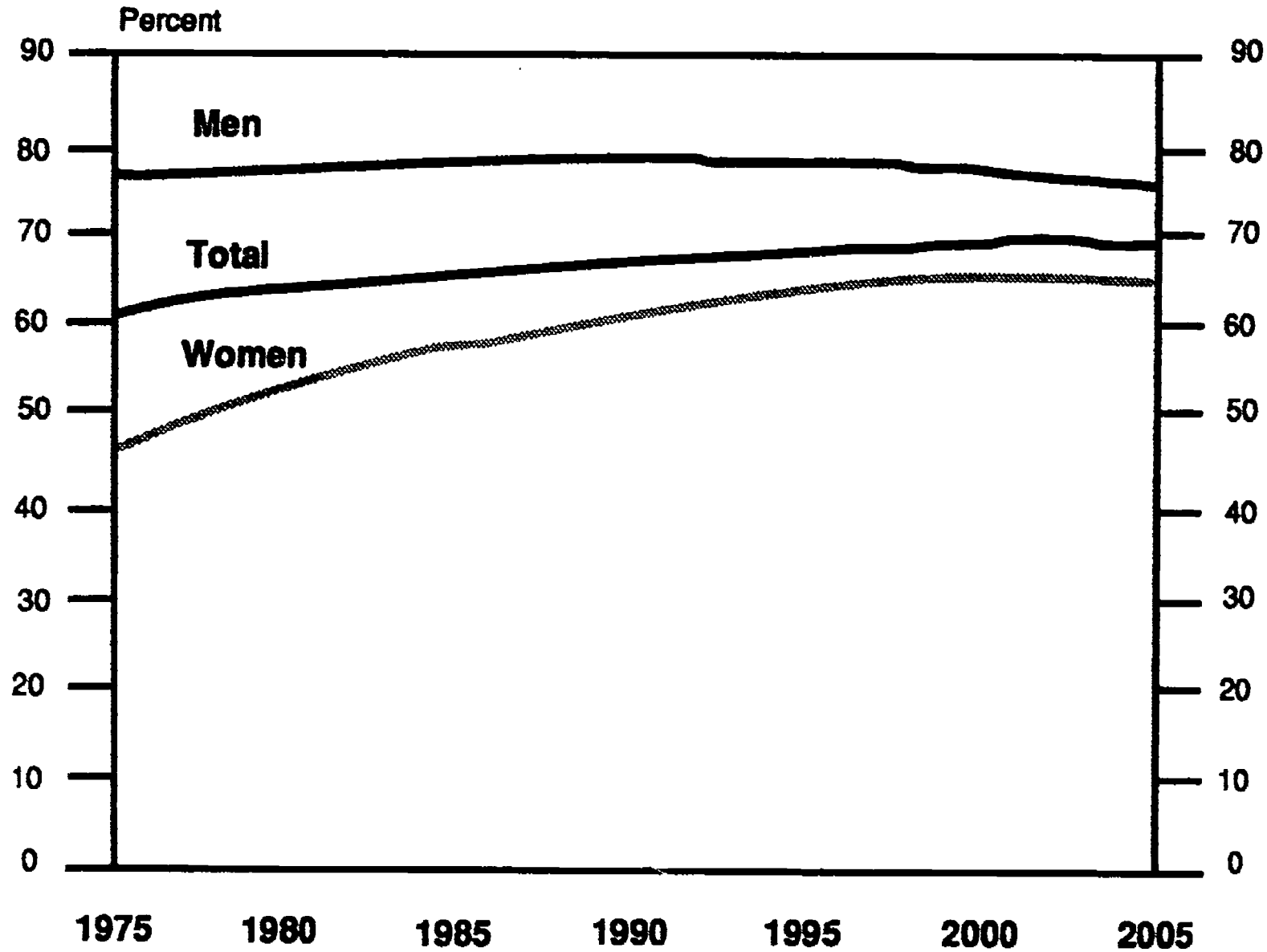
Women's share of labor force is growing



SOURCE: Bureau of Labor Statistics

Figure 5.23

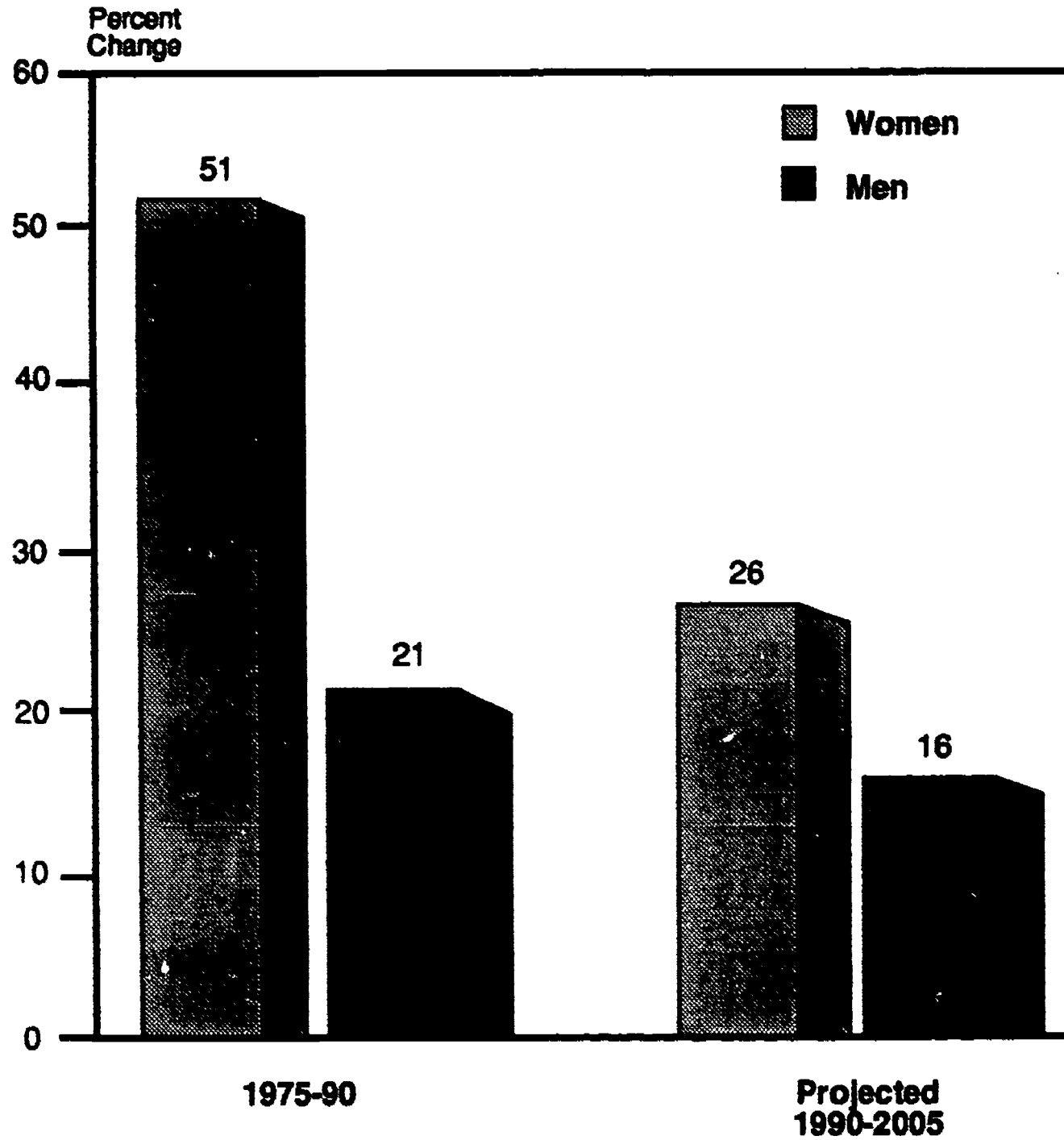
Labor force participation rate trends differ for men and women



SOURCE: Bureau of Labor Statistics

Figure 5.24

Labor force growth slows more for women than men



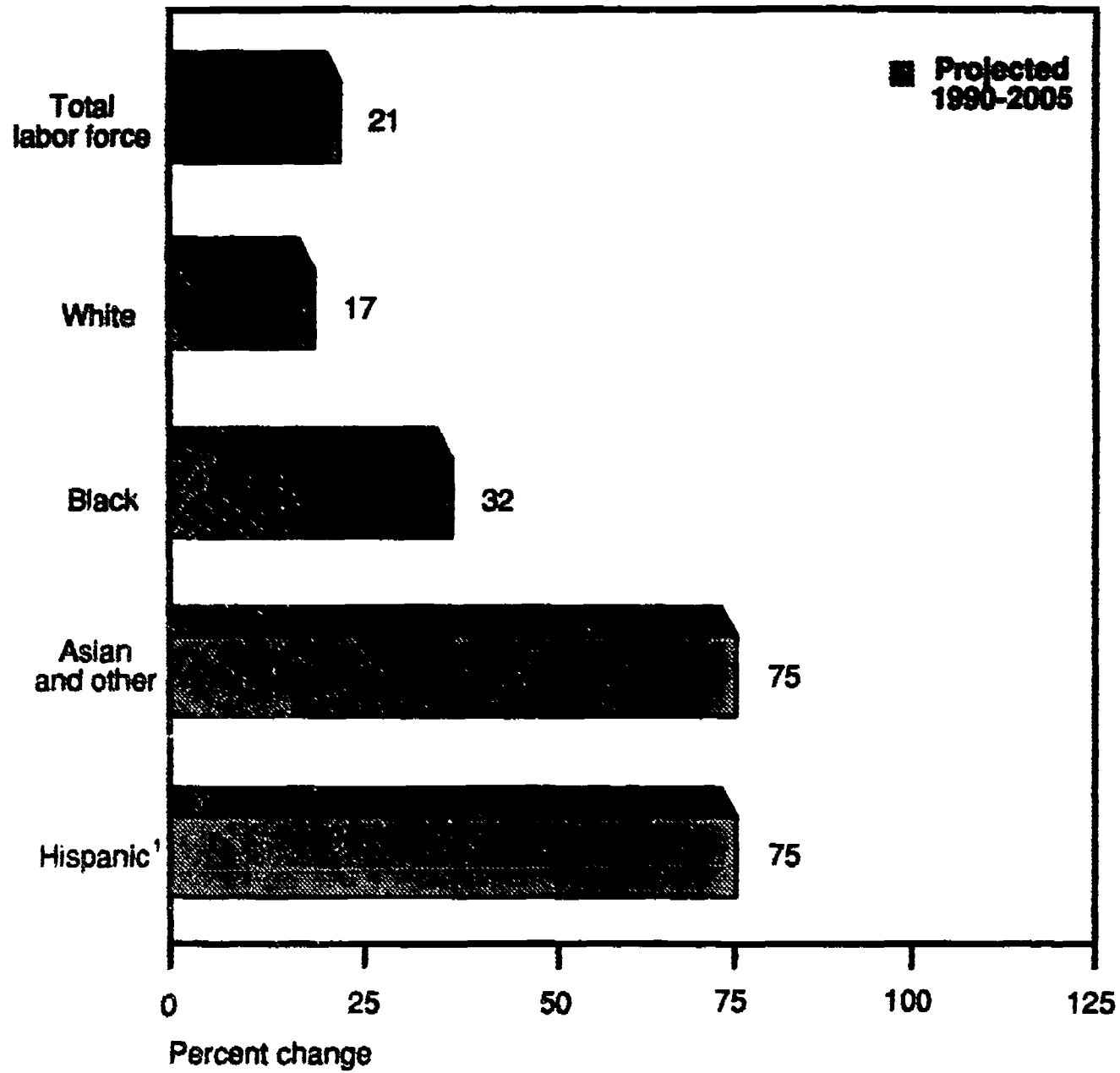
755

756

SOURCE: Bureau of Labor Statistics

Figure 5.25

Labor force growth by race and Hispanic origin

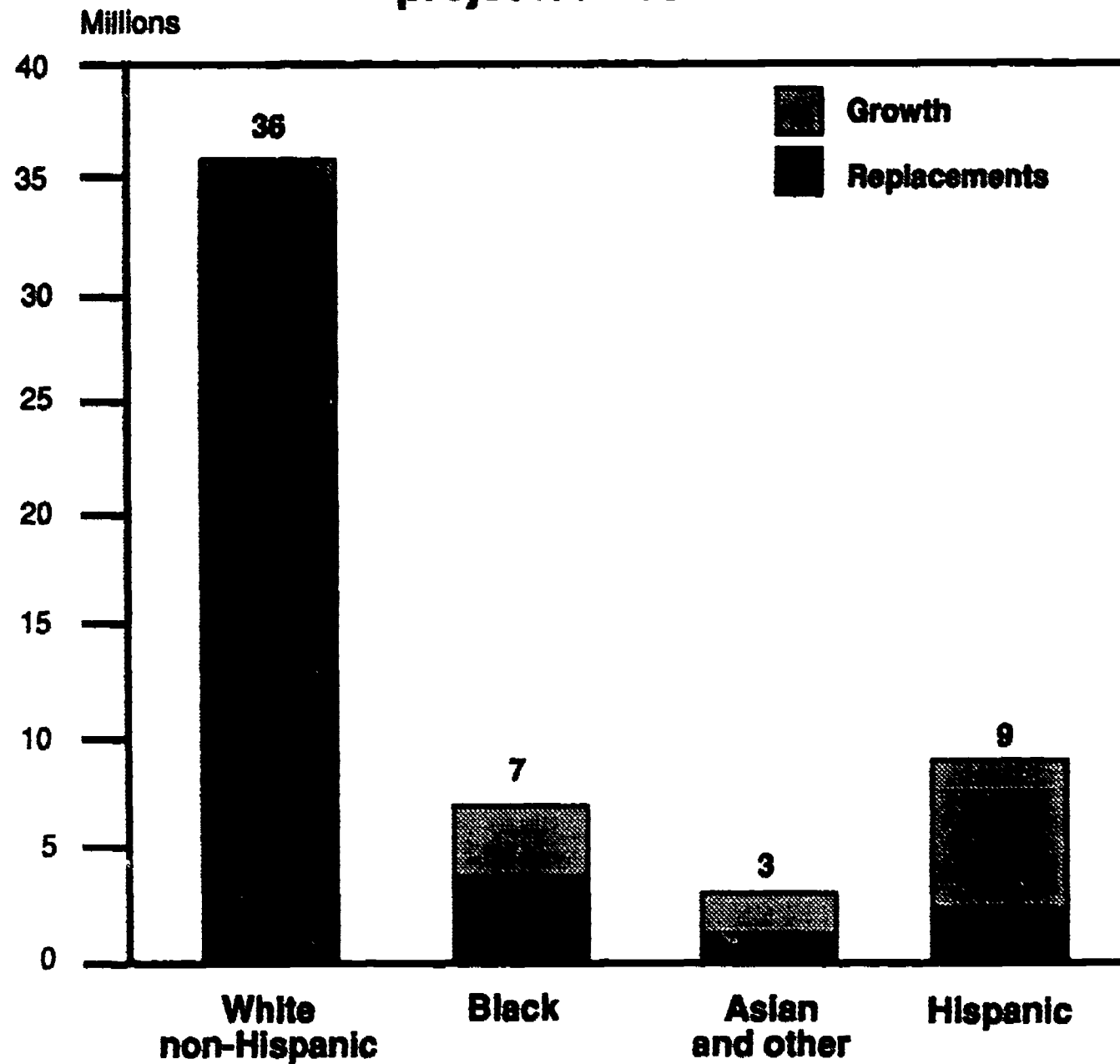


SOURCE: Bureau of Labor Statistics

Figure 5.26

¹ Persons of Hispanic origin may be of any race

Labor force entrants by race and Hispanic origin, projected 1990-2005



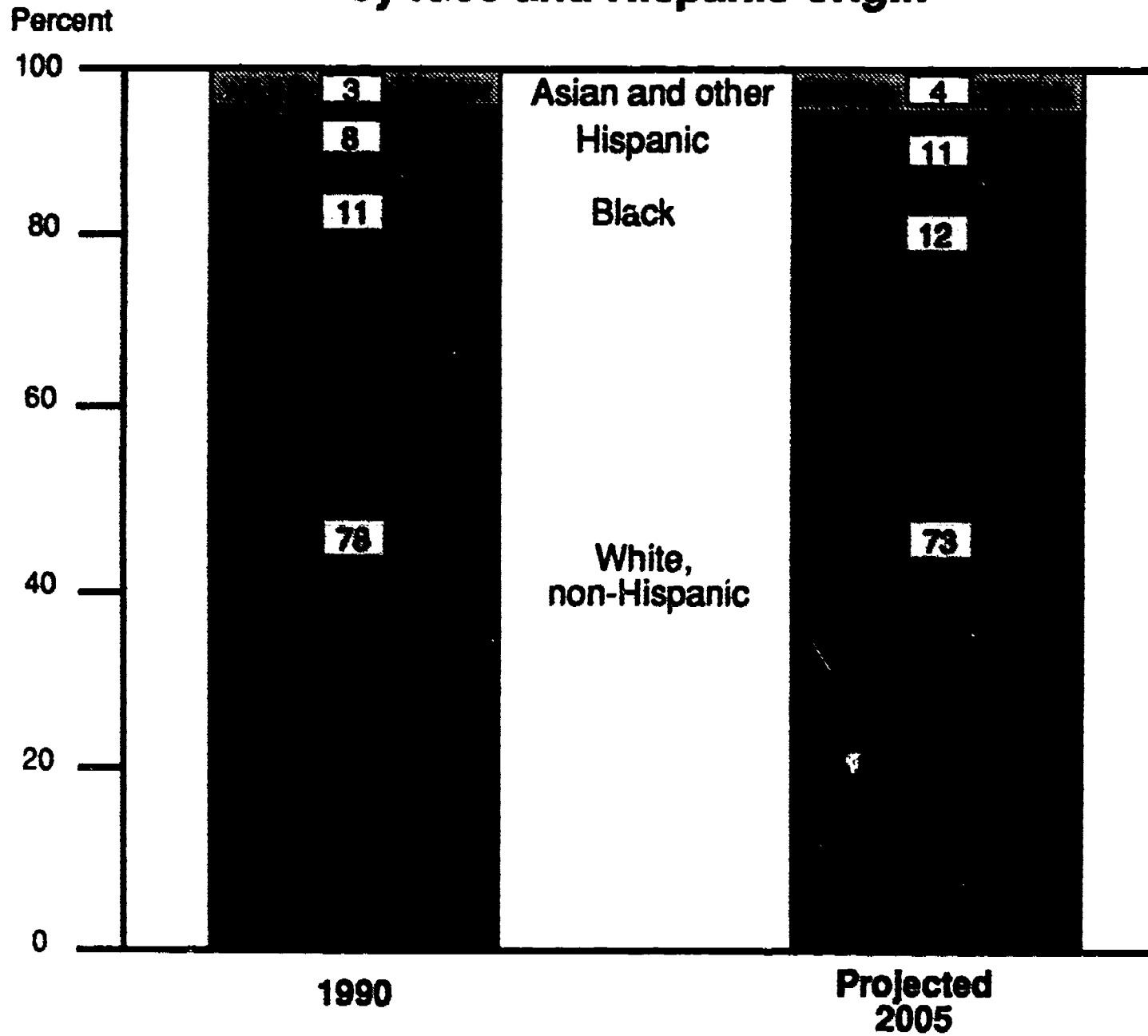
759

SOURCE: Bureau of Labor Statistics

Figure 5.2i

760

Distribution of the labor force by race and Hispanic origin



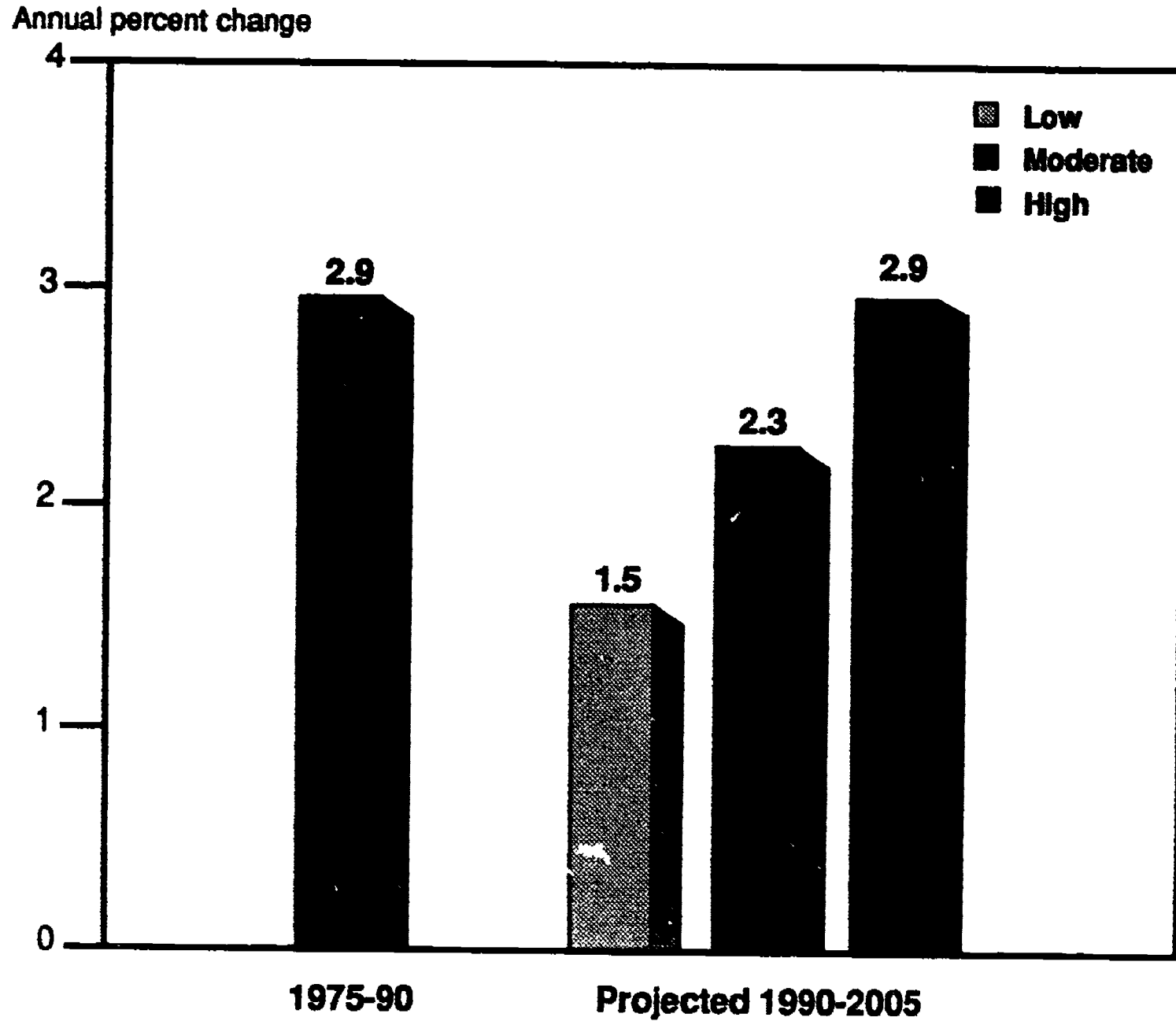
SOURCE: Bureau of Labor Statistics

Figure 5.28

OUTLOOK: 1990-2005

- Labor force
- ***Economic outlook***
- Industry employment
- Occupational employment

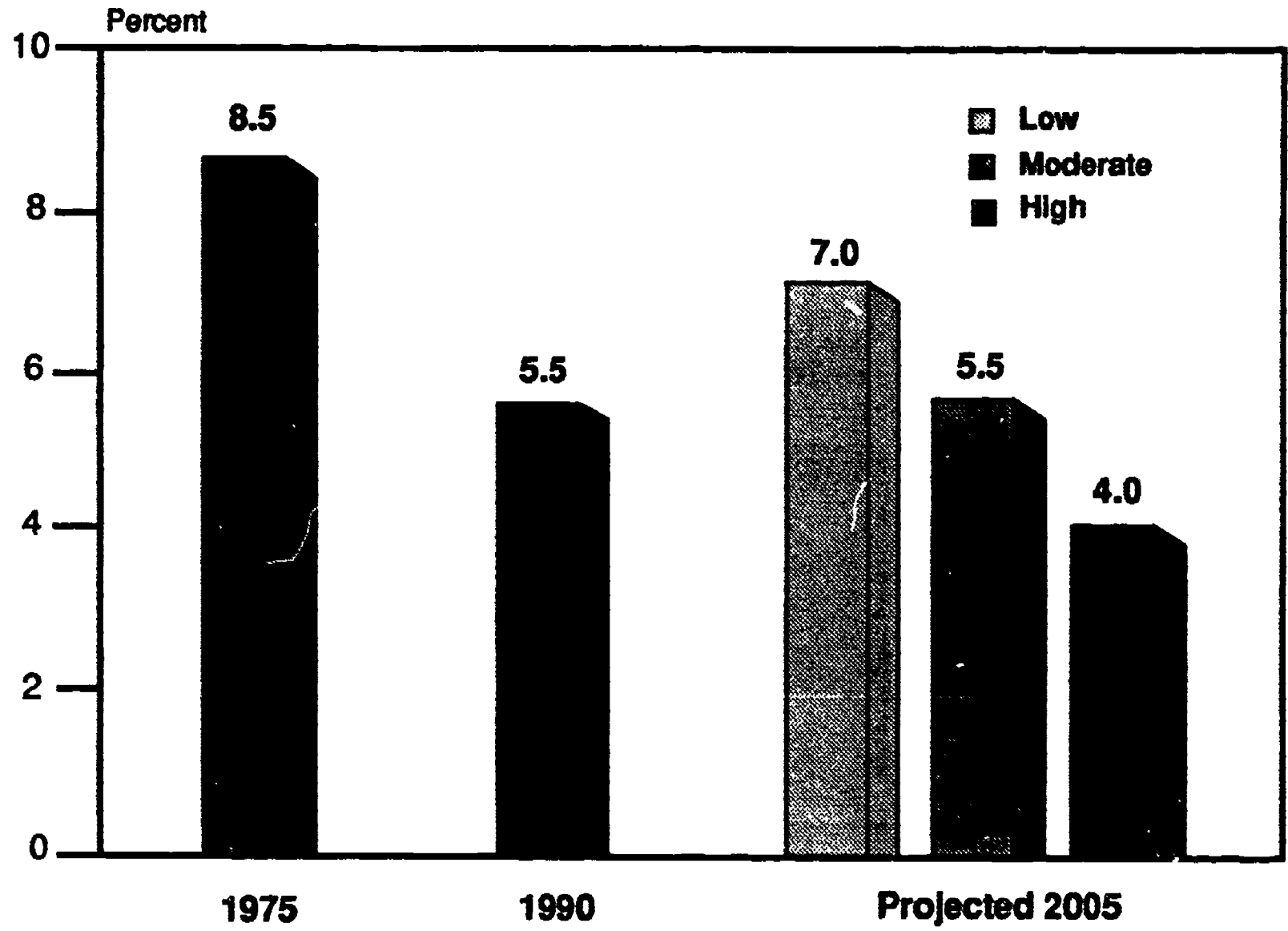
GNP growth and projected alternatives



SOURCE: Bureau of Labor Statistics

Figure 5.30

Unemployment rates and projected alternatives



767

SOURCE: Bureau of Labor Statistics

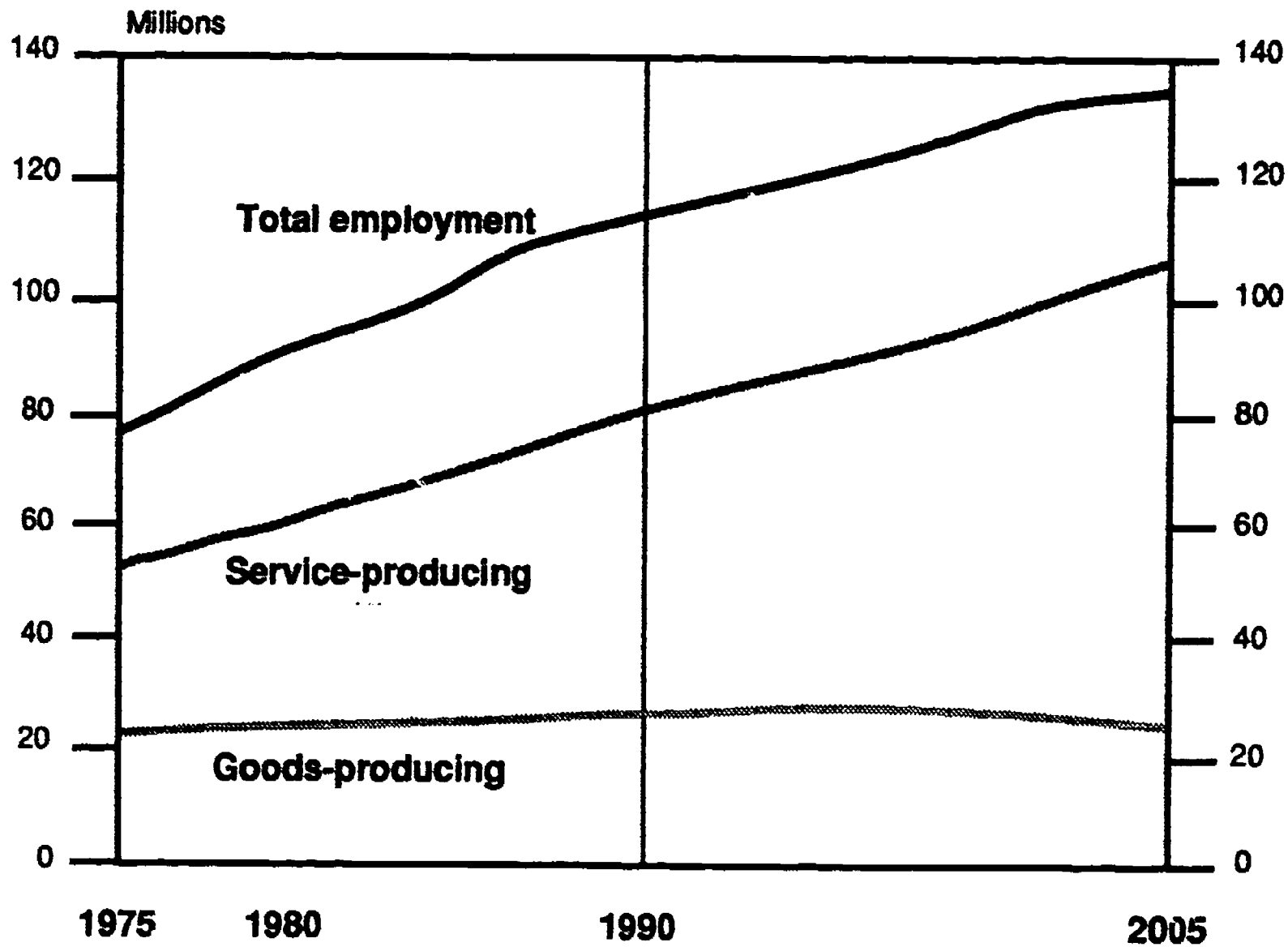
Figure 5.31

768

OUTLOOK: 1990-2005

- Labor force
- Economic outlook
- ***Industry employment***
- Occupational employment

Employment growth by major economic sectors, 1975-2005



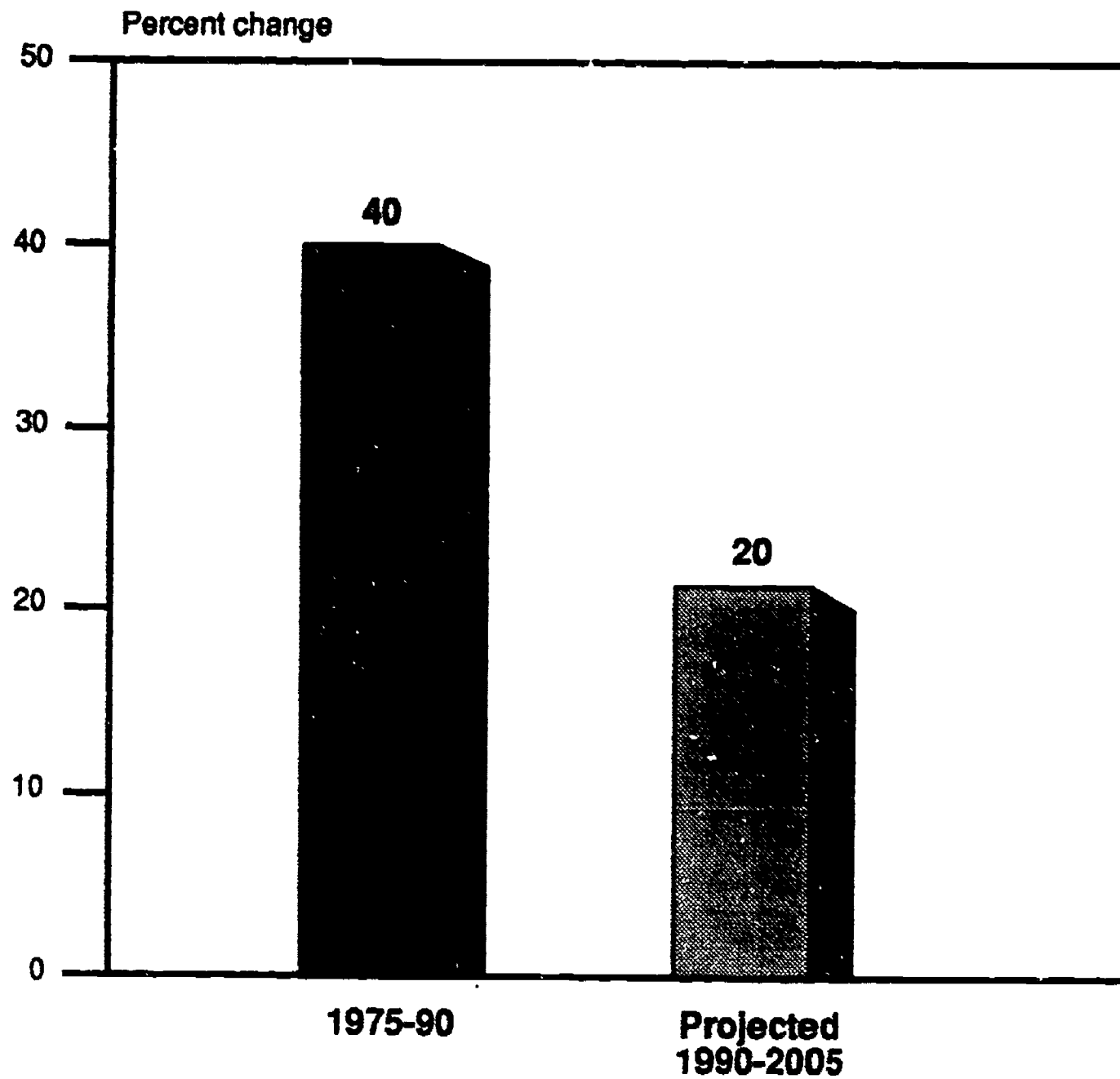
771

SOURCE: Bureau of Labor Statistics

Figure 5.33

772

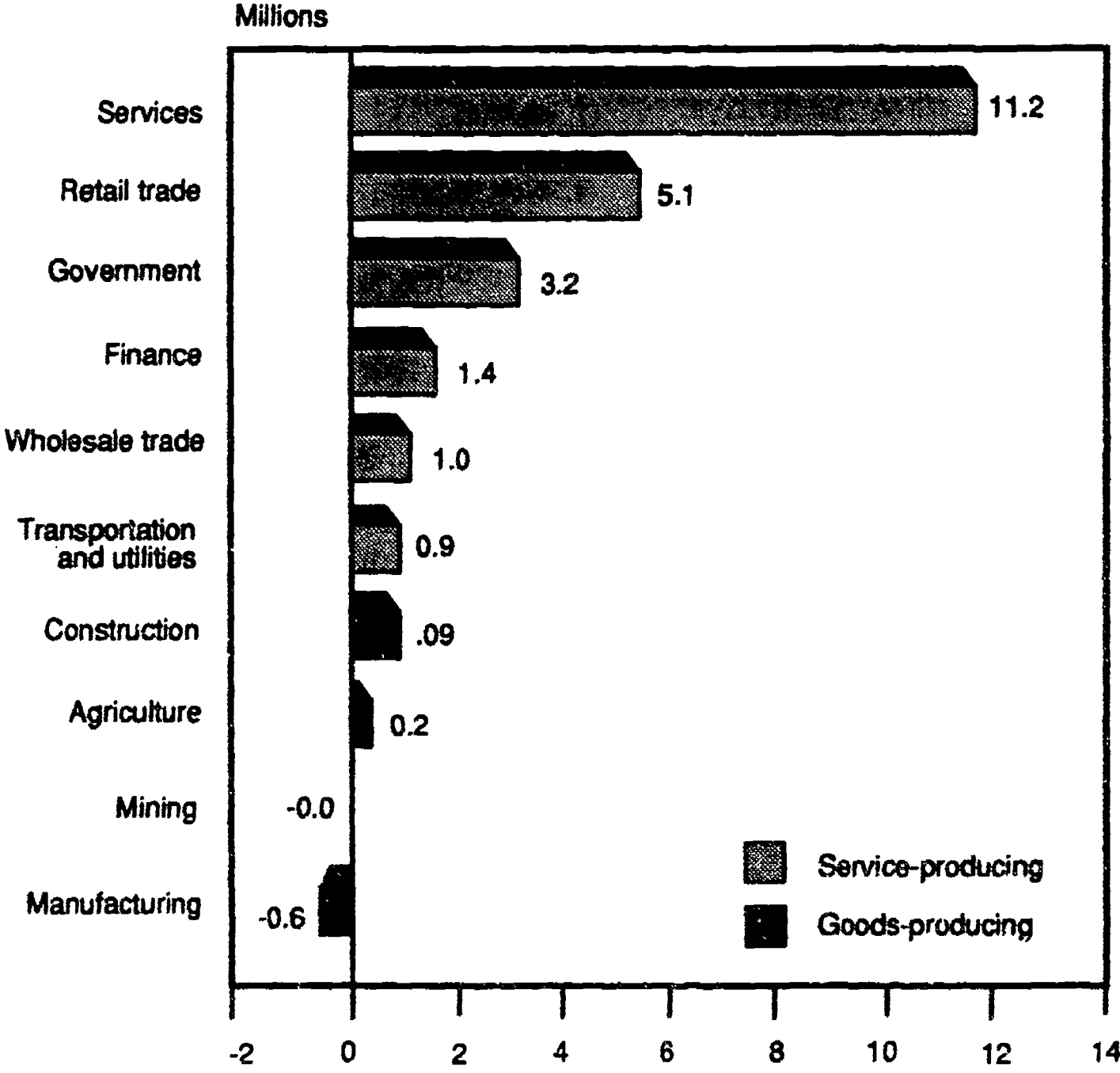
Employment growth, 1975-90 and projected 1990-2005



SOURCE: Bureau of Labor Statistics

Figure 5.34

Job growth in services outpaces other industry divisions, 1990-2005



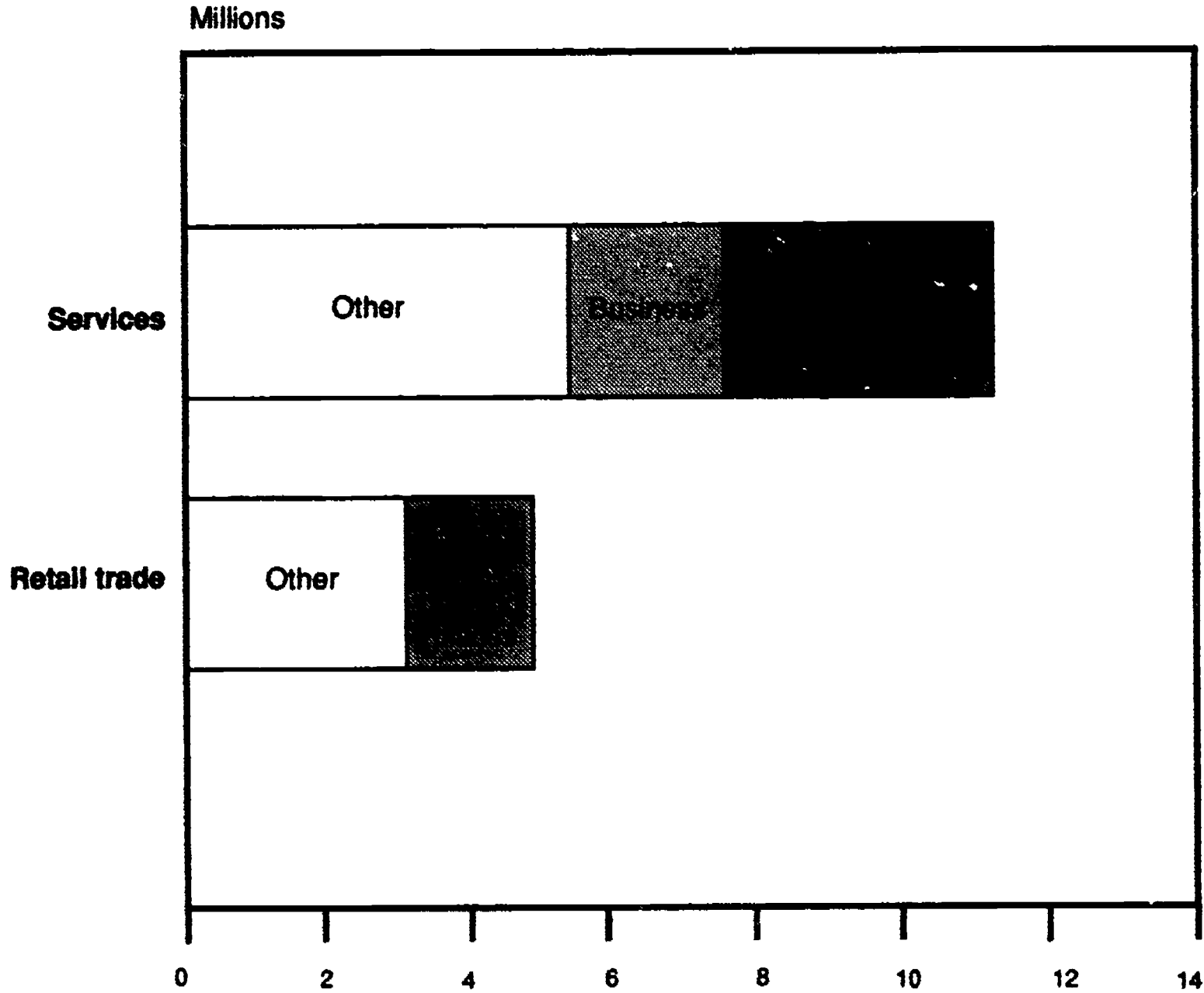
775

776

SOURCE: Bureau of Labor Statistics

Figure 5.35

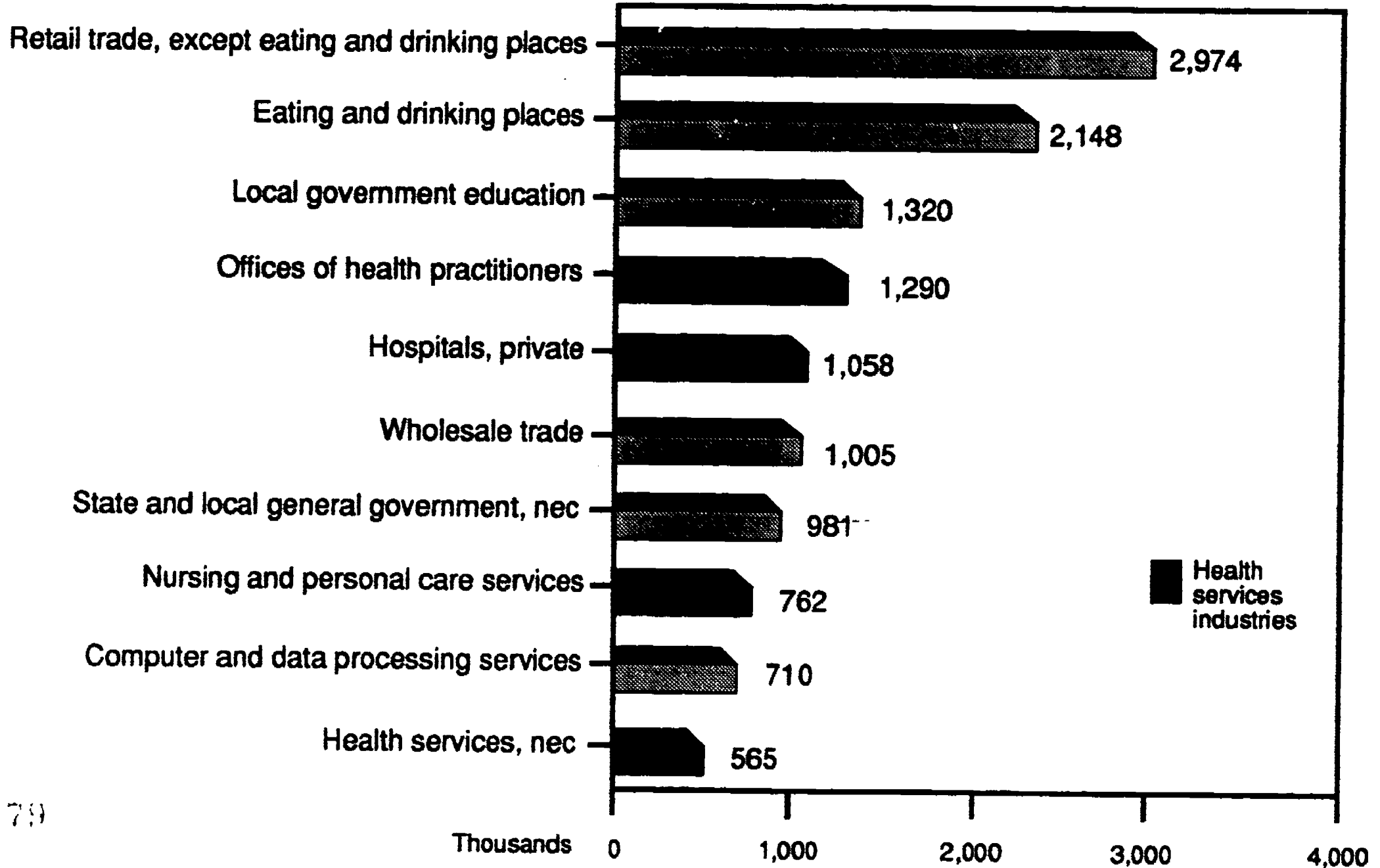
Employment growth within services and retail trade will be concentrated, 1990-2005



SOURCE: Bureau of Labor Statistics

Figure 5.36

Industries adding the most jobs, 1990-2005

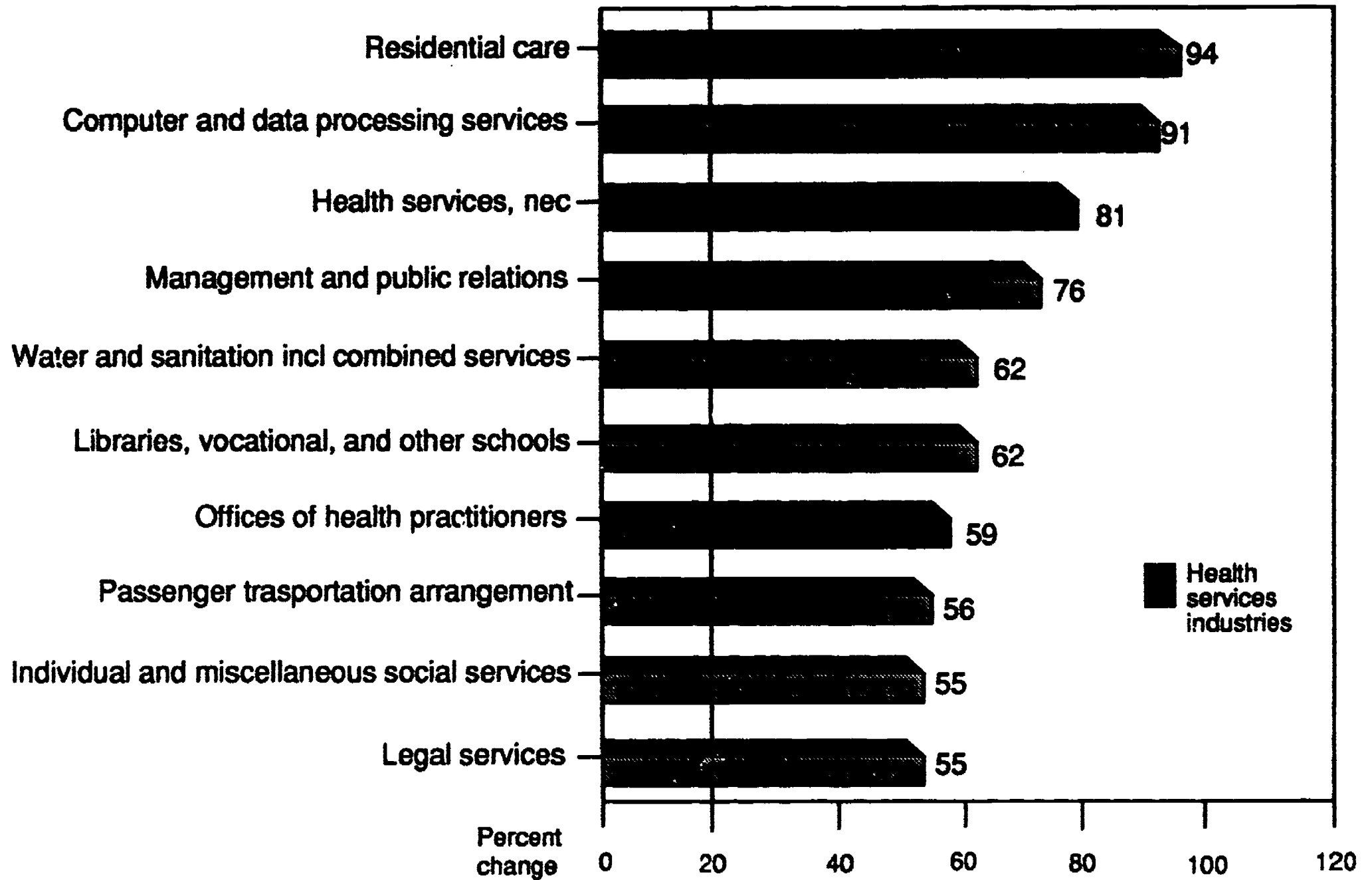


779

SOURCE: Bureau of Labor Statistics

Figure 5.37
850

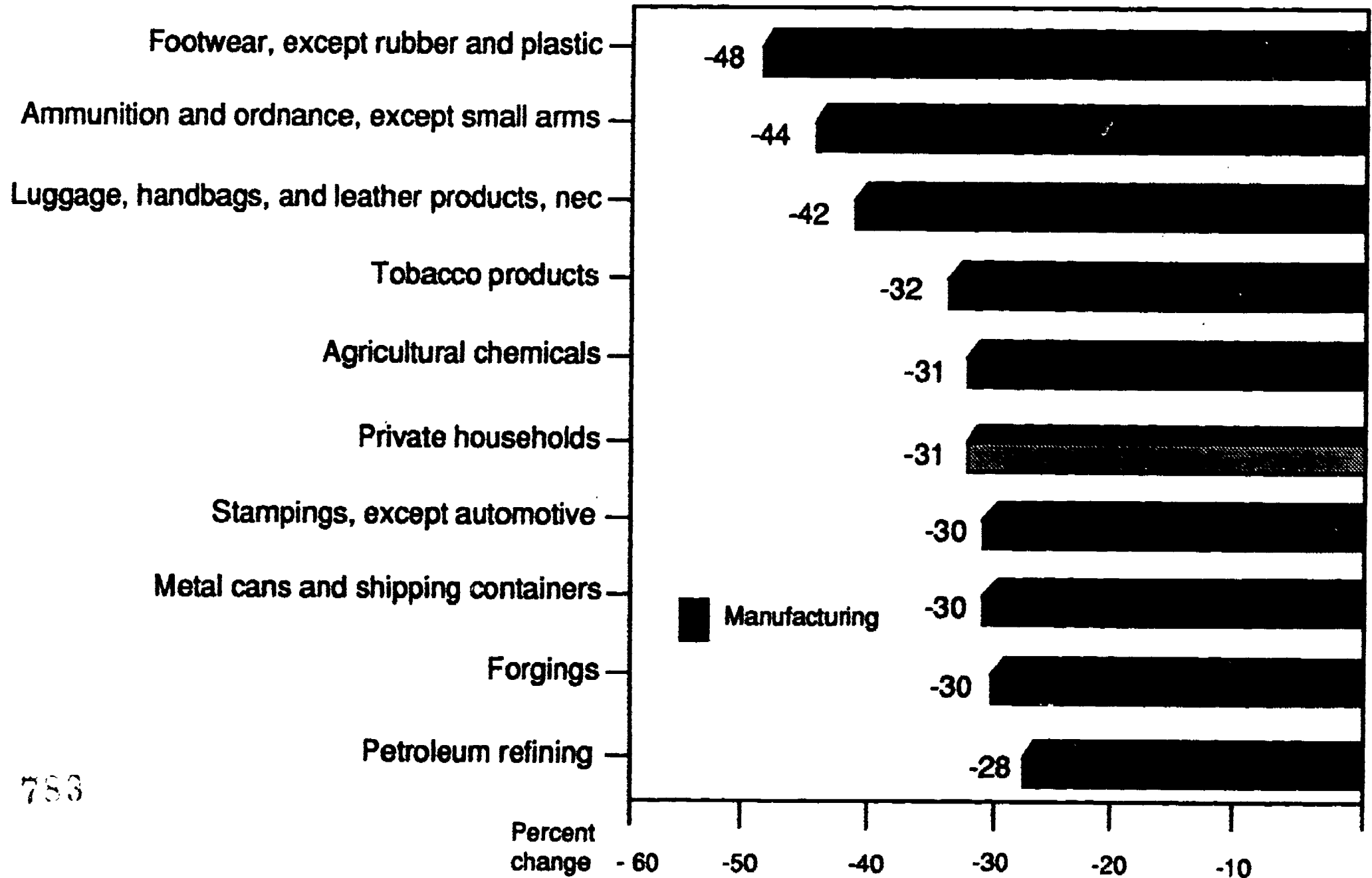
Industries with the fastest job growth, 1990-2005



SOURCE: Bureau of Labor Statistics

Figure 5.38

Industries with the most rapid job declines, 1990-2005



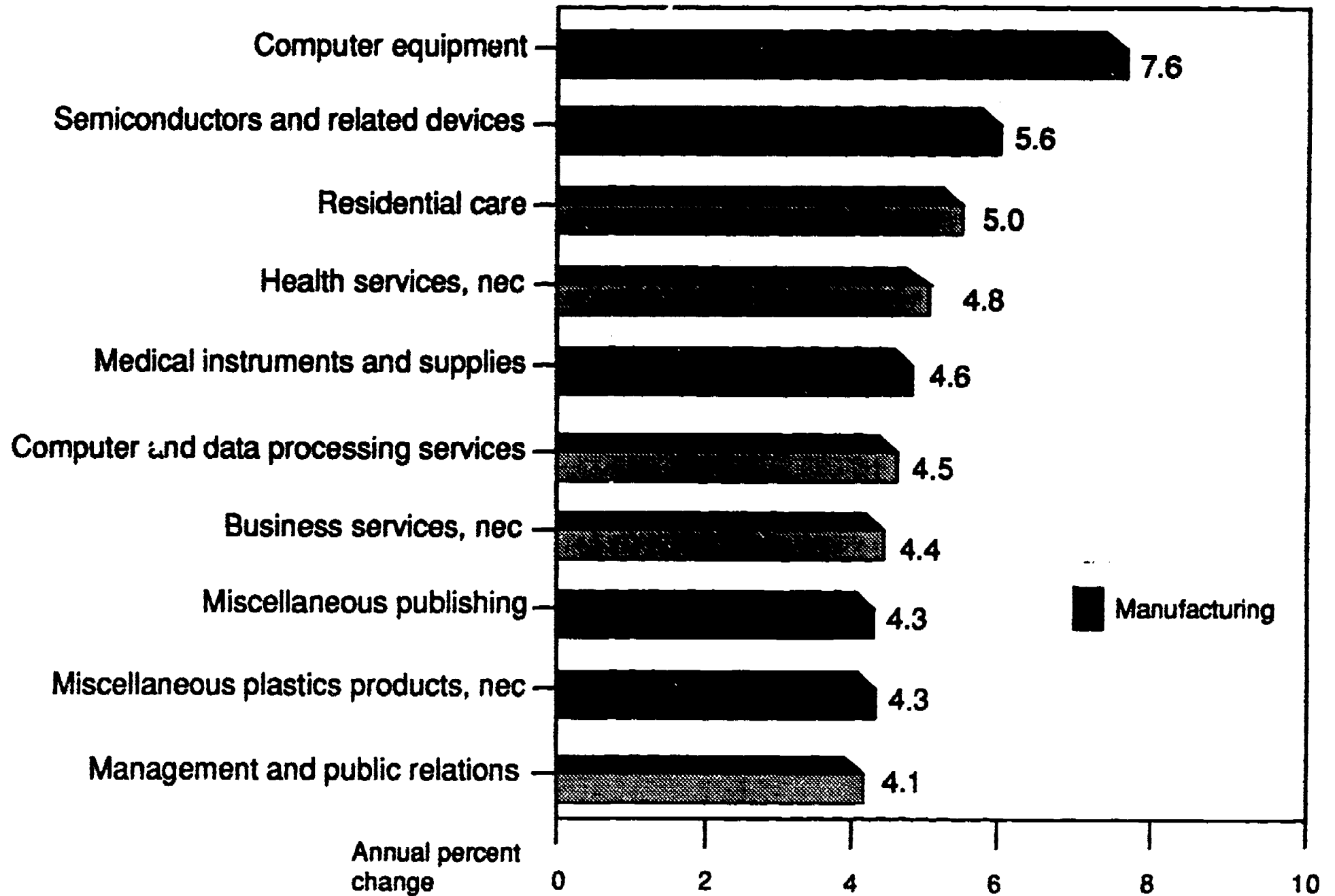
783

SOURCE: Bureau of Labor Statistics

Figure 5.39

784

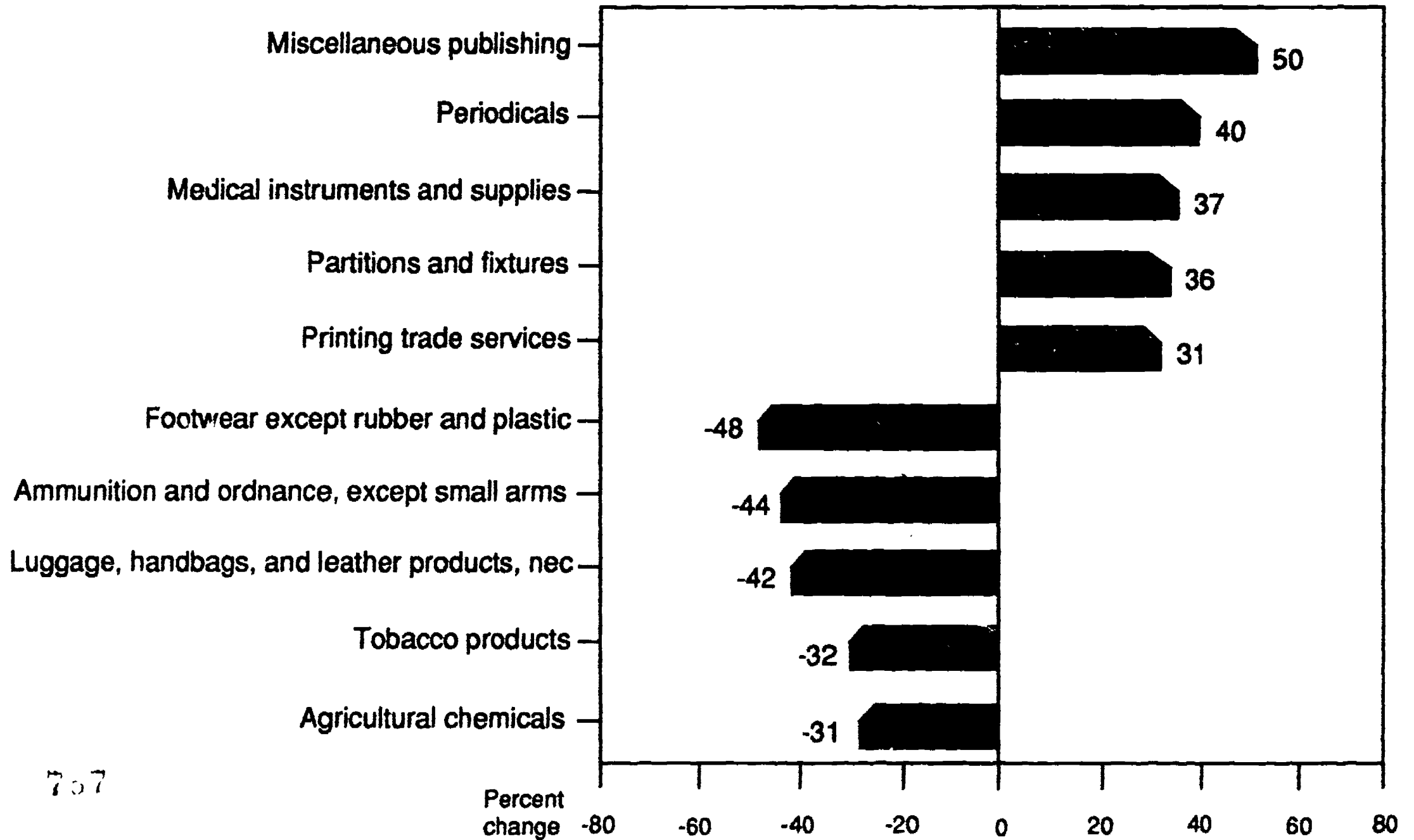
Industries with the fastest growing output, 1990-2005



SOURCE: Bureau of Labor Statistics

Figure 5.40

Fastest growing and declining manufacturing industries, 1990-2005



757

SOURCE: Bureau of Labor Statistics

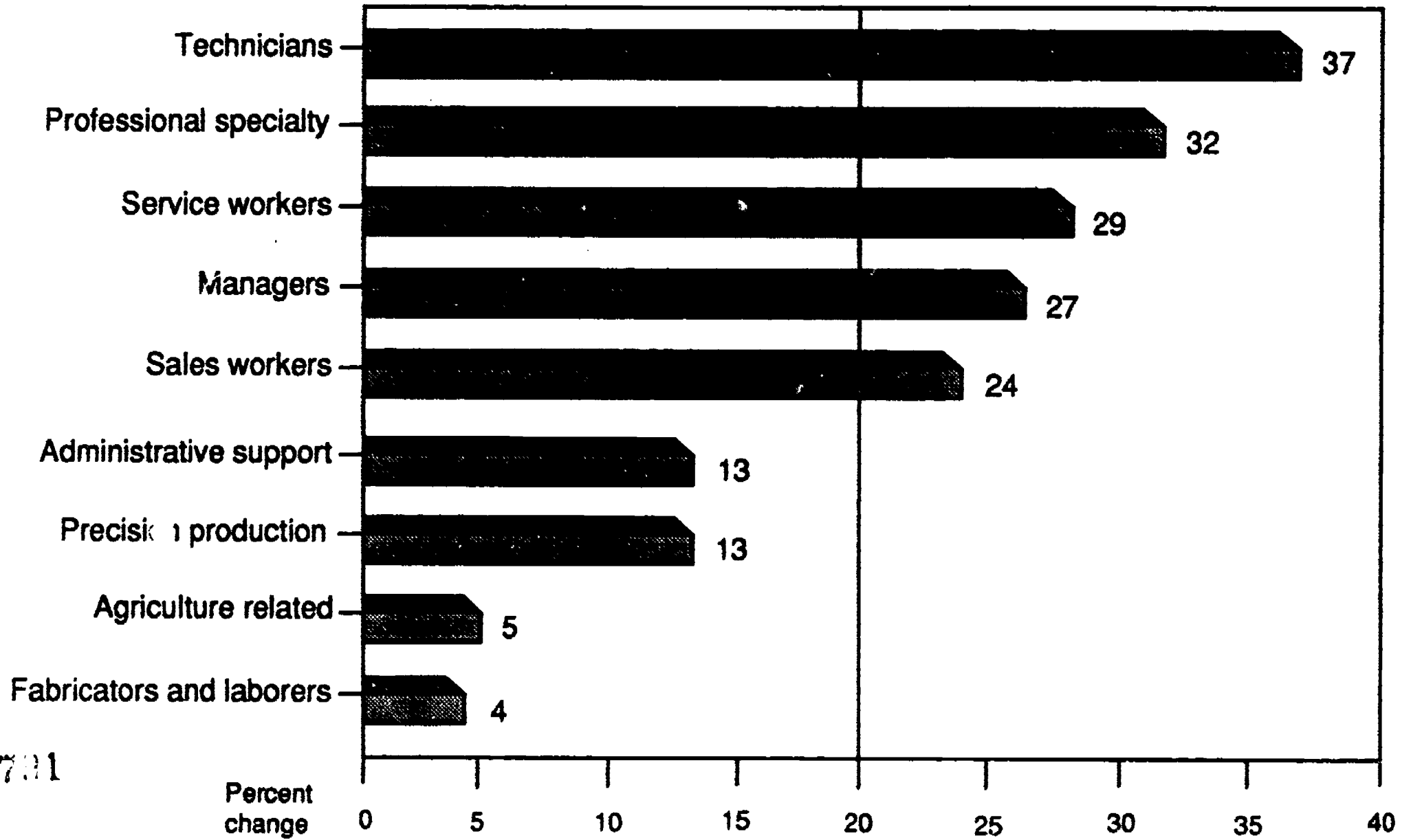
758 Figure 5.41

OUTLOOK: 1990-2005

- Labor force
- Economic outlook
- Industry employment
- ***Occupational employment***

Figure 5.42

Employment growth by major occupational group, 1990-2005



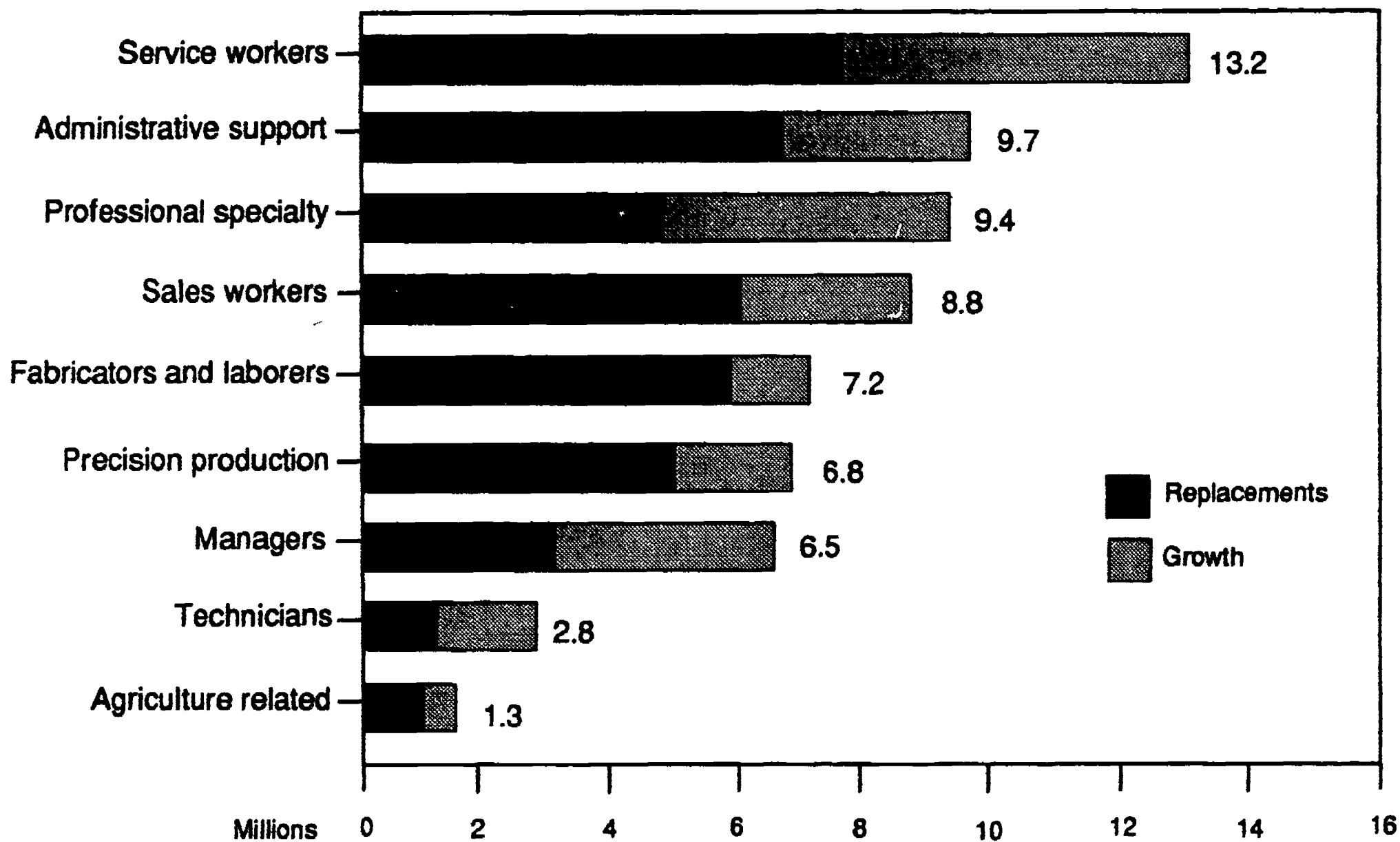
791

SOURCE: Bureau of Labor Statistics

Figure 5.43

792

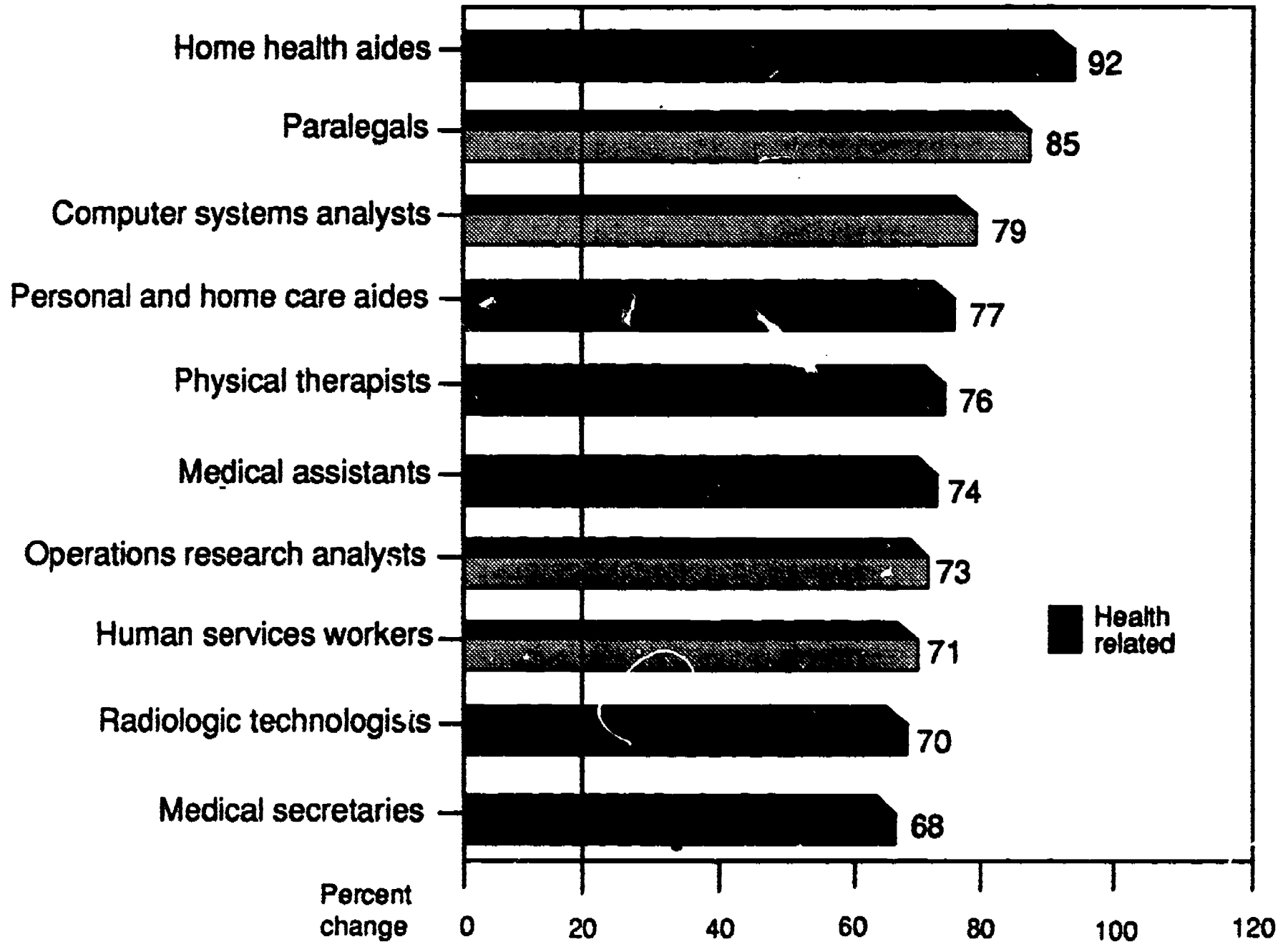
Job openings for replacement and growth, 1990-2005



SOURCE: Bureau of Labor Statistics

Figure 5.44

Fastest growing occupations, 1990-2005

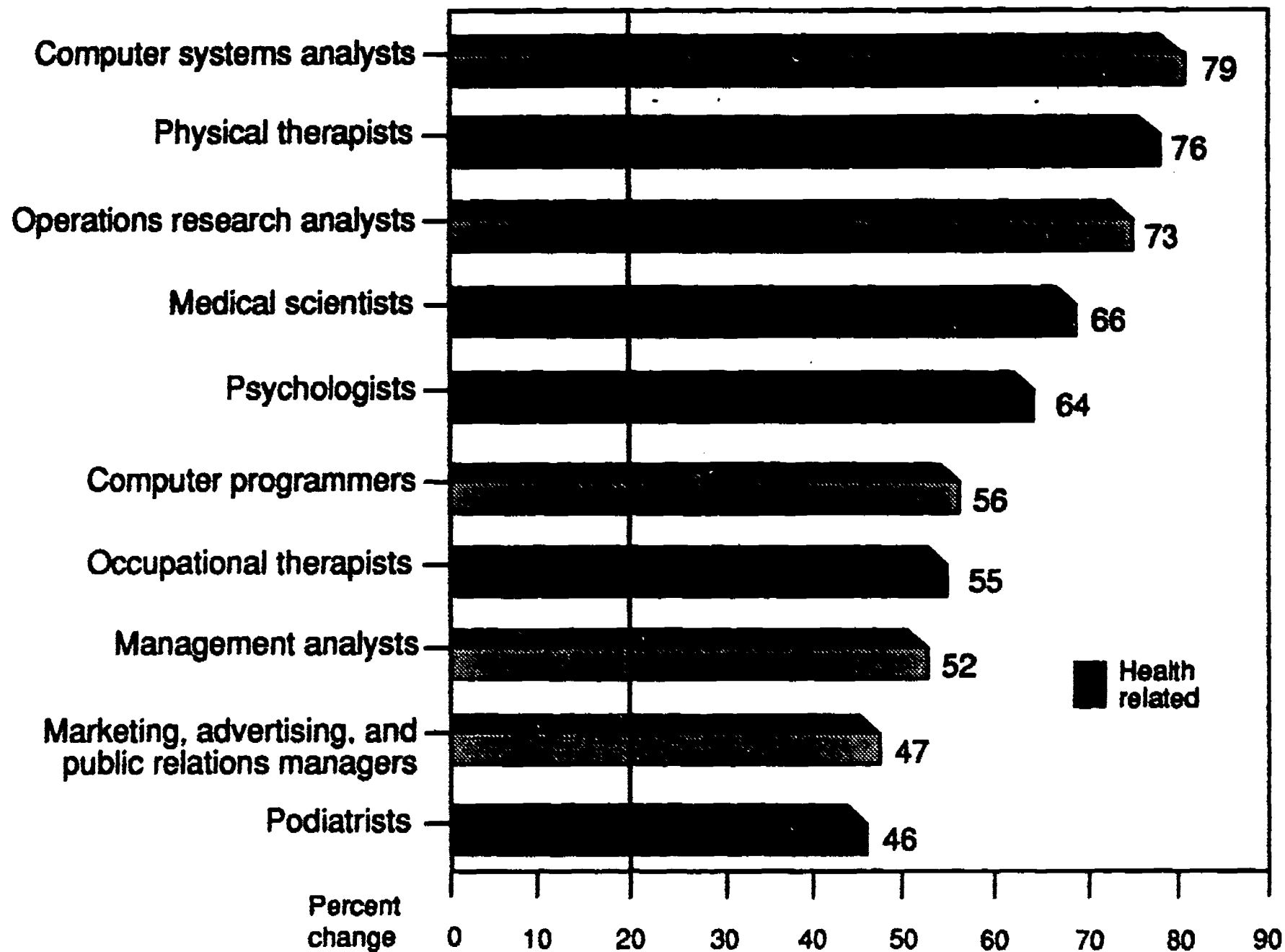


7.15

SOURCE: Bureau of Labor Statistics

Figure 5.45
7.16

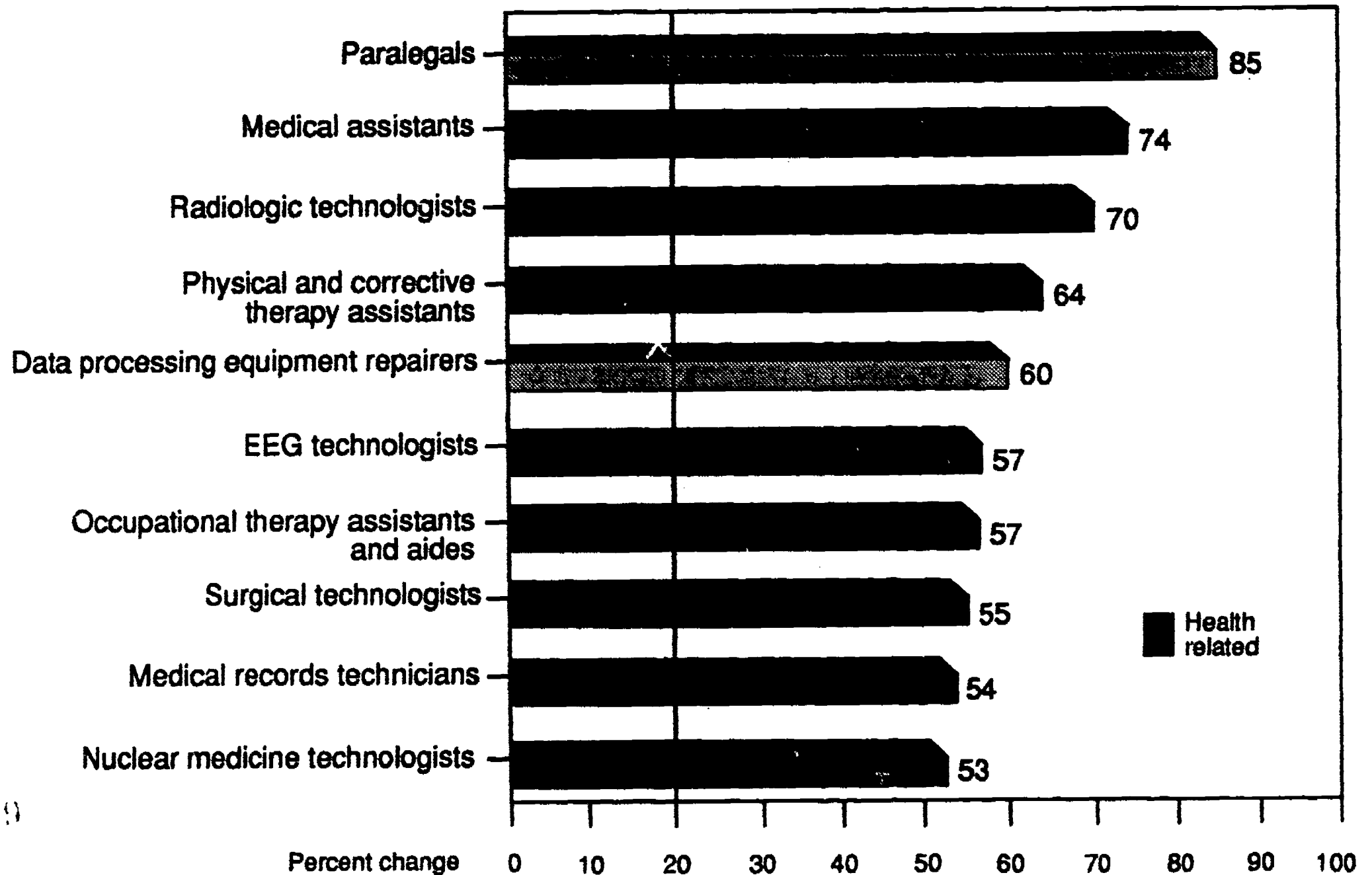
Fastest growing occupations generally requiring at least a bachelor's degree, 1990-2005



SOURCE: Bureau of Labor Statistics

Figure 5.46

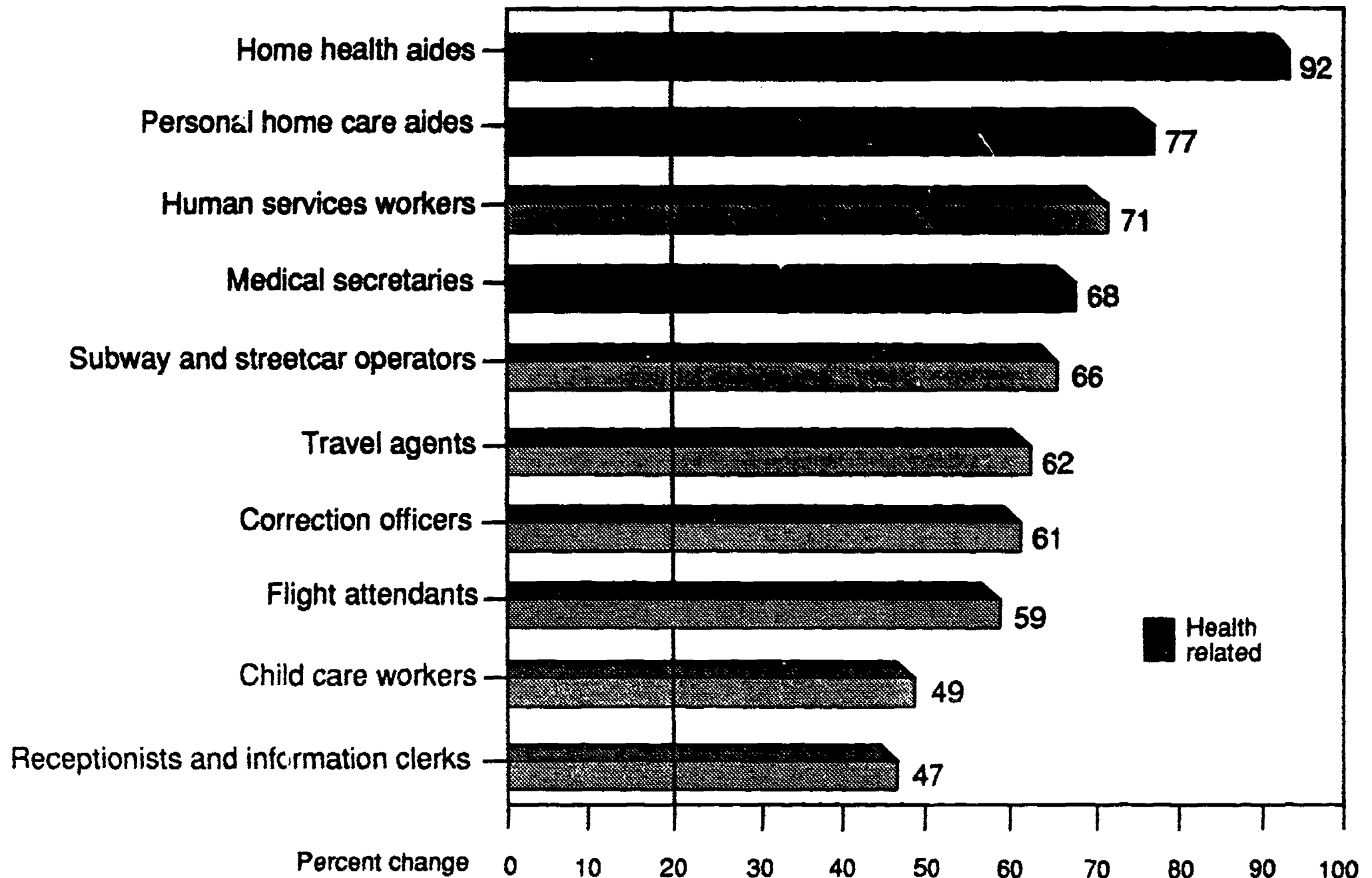
Fastest growing occupations generally requiring post-secondary training but less than a college degree, 1990-2005



SOURCE: Bureau of Labor Statistics

8 0 Figure 5.47

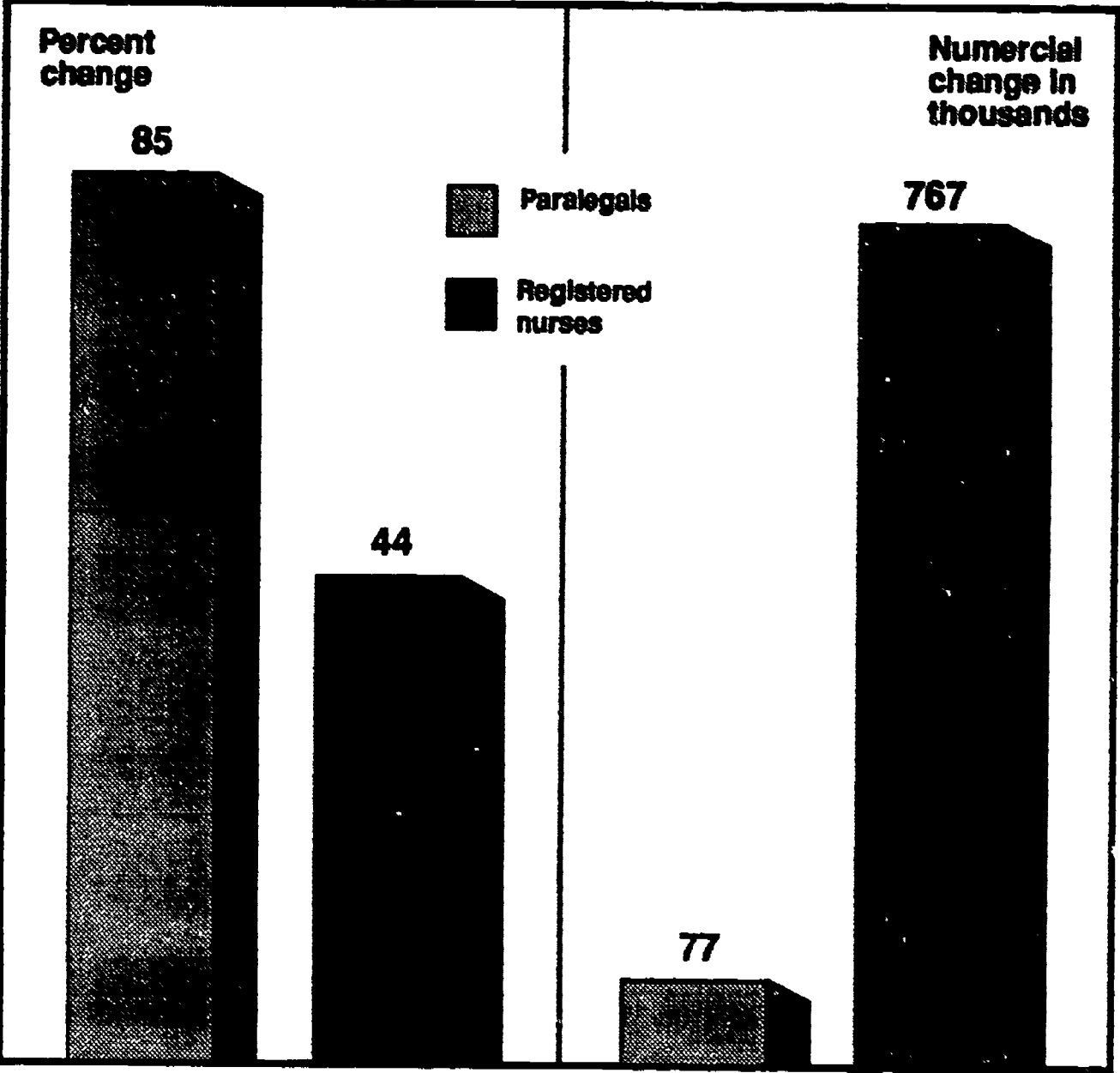
Fastest growing occupations generally requiring no more than a high school diploma, 1990-2005



SOURCE: Bureau of Labor Statistics

Figure 5.48

Job growth may be viewed in two ways: Changes, 1990-2005



8 3

SOURCE: Bureau of Labor Statistics

Figure 5.49

8 4

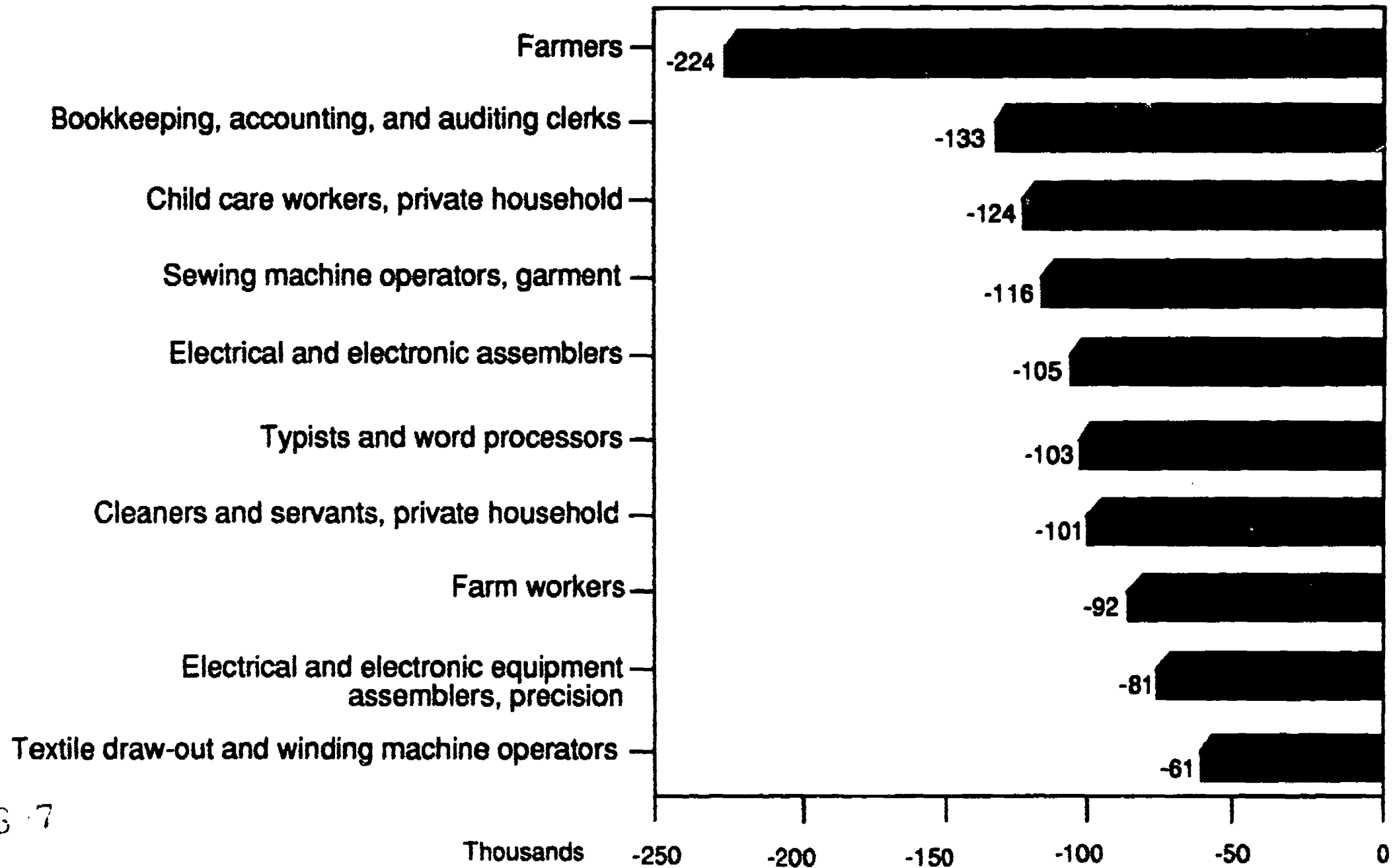
Occupations adding the most jobs, 1990-2005



SOURCE: Bureau of Labor Statistics

Figure 5.50

Employment change in declining occupations, 1990-2005



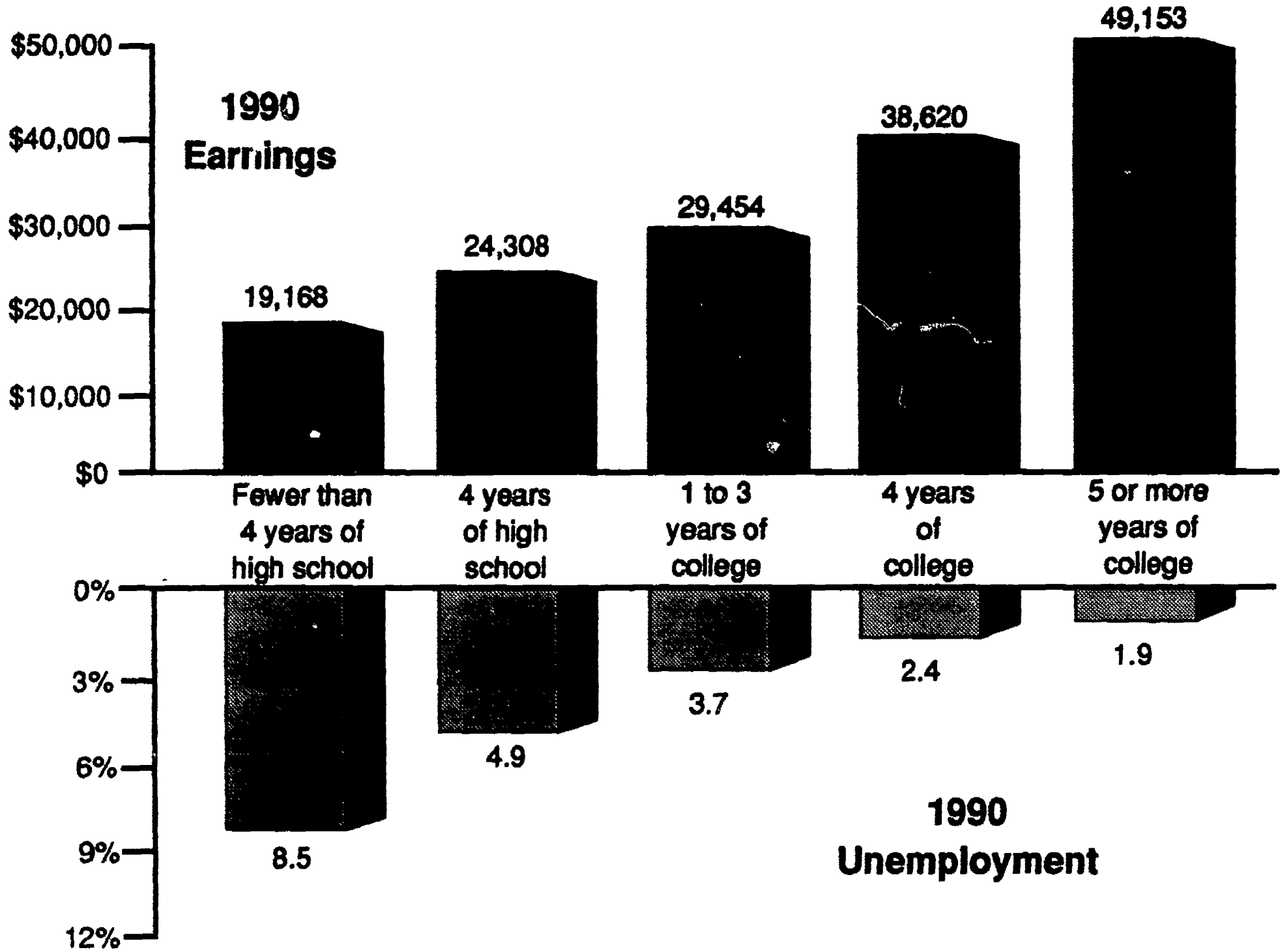
8-7

SOURCE: Bureau of Labor Statistics

8:5

Figure 5.51

Education pays



SOURCE: Bureau of Labor Statistics

Figure 5.52

Annual earnings of workers by highest level of educational attainment, 1987

Occupational group	Total	Less than high school	High School	1 to 3 years of college	4 years of college or more
Average, all occupations	\$21,543	\$15,249	\$18,902	\$21,975	\$31,029
Managerial	30,264	22,306	23,286	27,255	37,252
Professional speciality	30,116	19,177	23,233	27,458	31,311
Technicians	24,489	16,207	21,358	23,830	28,004
Marketing and sales	22,220	13,746	17,654	22,546	32,747
Administrative support	17,120	15,535	16,554	17,491	20,823
Service	13,443	10,764	13,093	16,937	21,381
Precision production	24,856	20,465	25,140	27,042	30,938
Operators	18,132	15,365	19,303	21,627	22,114
Agriculture-related	11,781	10,571	12,730	16,331	17,130

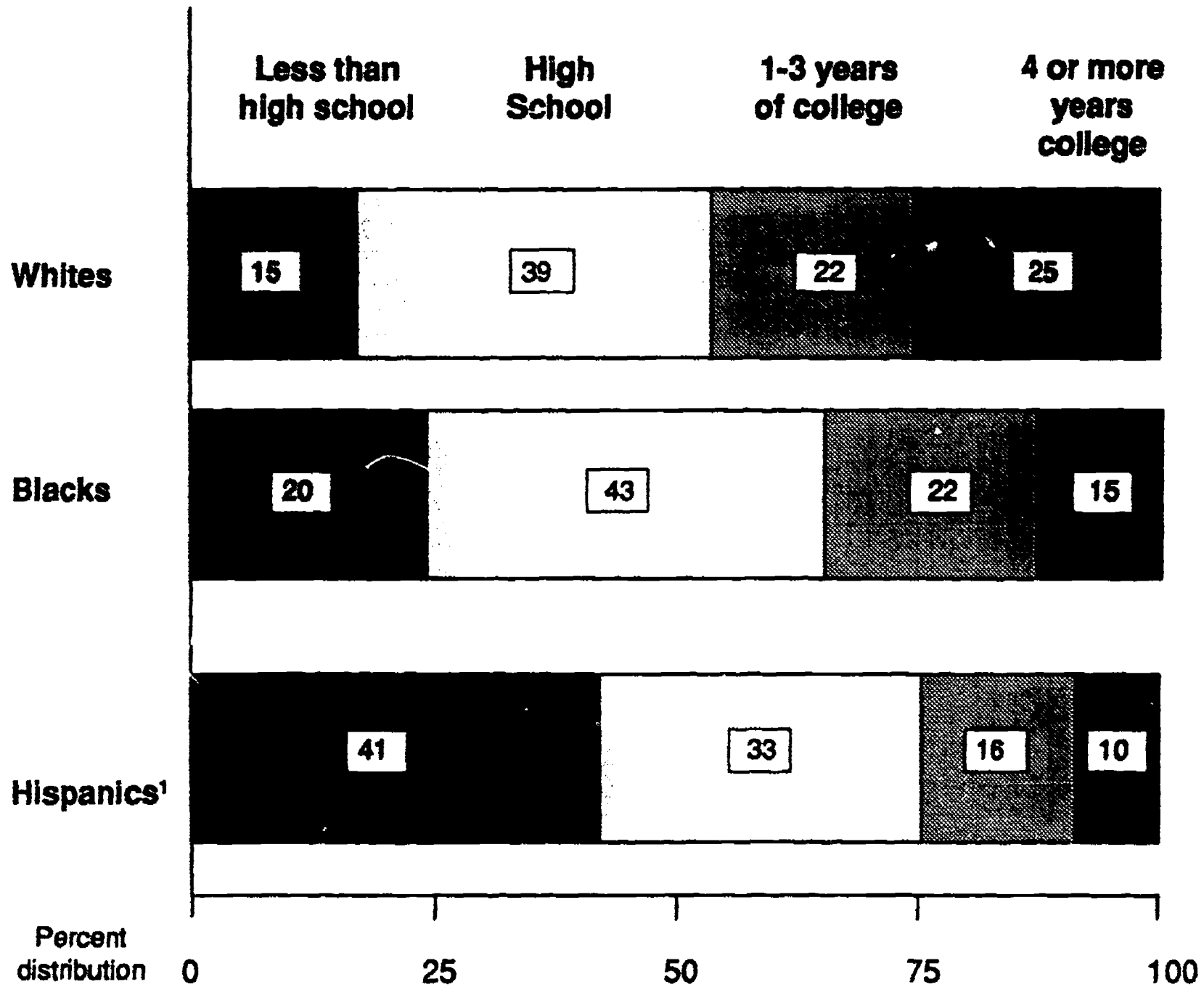
SOURCE: Bureau of Labor Statistics

Figure 5.53

811

812

Educational attainment of workers by race and Hispanic origin, 1990



SOURCE: Bureau of Labor Statistics
¹ Persons of Hispanic origin may be of any race

Figure 5.54

814

Concentration of blacks and Hispanics by major occupation group, 1990

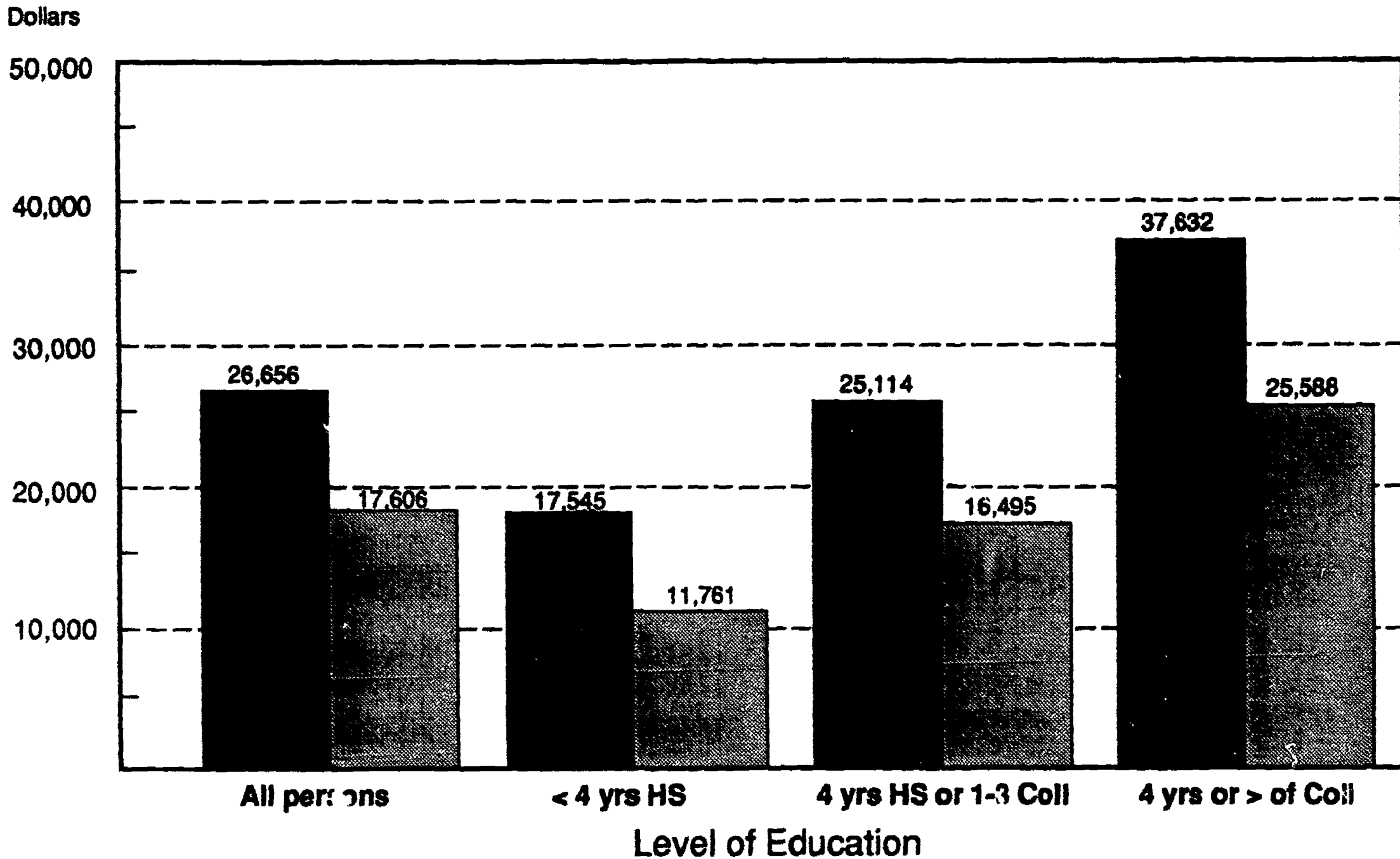
Occupation	Percent of total employment		Projected growth rate	Earnings	Unemployment rate
	Black	Hispanic			
Total	10.1	7.5			
Managers	6.2	3.6	H	H	L
Professional specialty	6.7	3.4	H	H	L
Technicians	9.1	4.3	H	High	L
Sales workers	6.4	5.3	H	Average	A
Administrative support	11.4	6.5	L	Low	L
Service workers	17.3	11.2	H	L	H
Precision production	7.8	8.5	L	H	A
Fabricators and laborers	15.0	12.2	L	L	H
Agriculture related	6.1	14.2	L	L	H

SOURCE: Bureau of Labor Statistics

Figure 5.55

Educational Attainment and Earnings

Male versus Female
Year round, full time workers

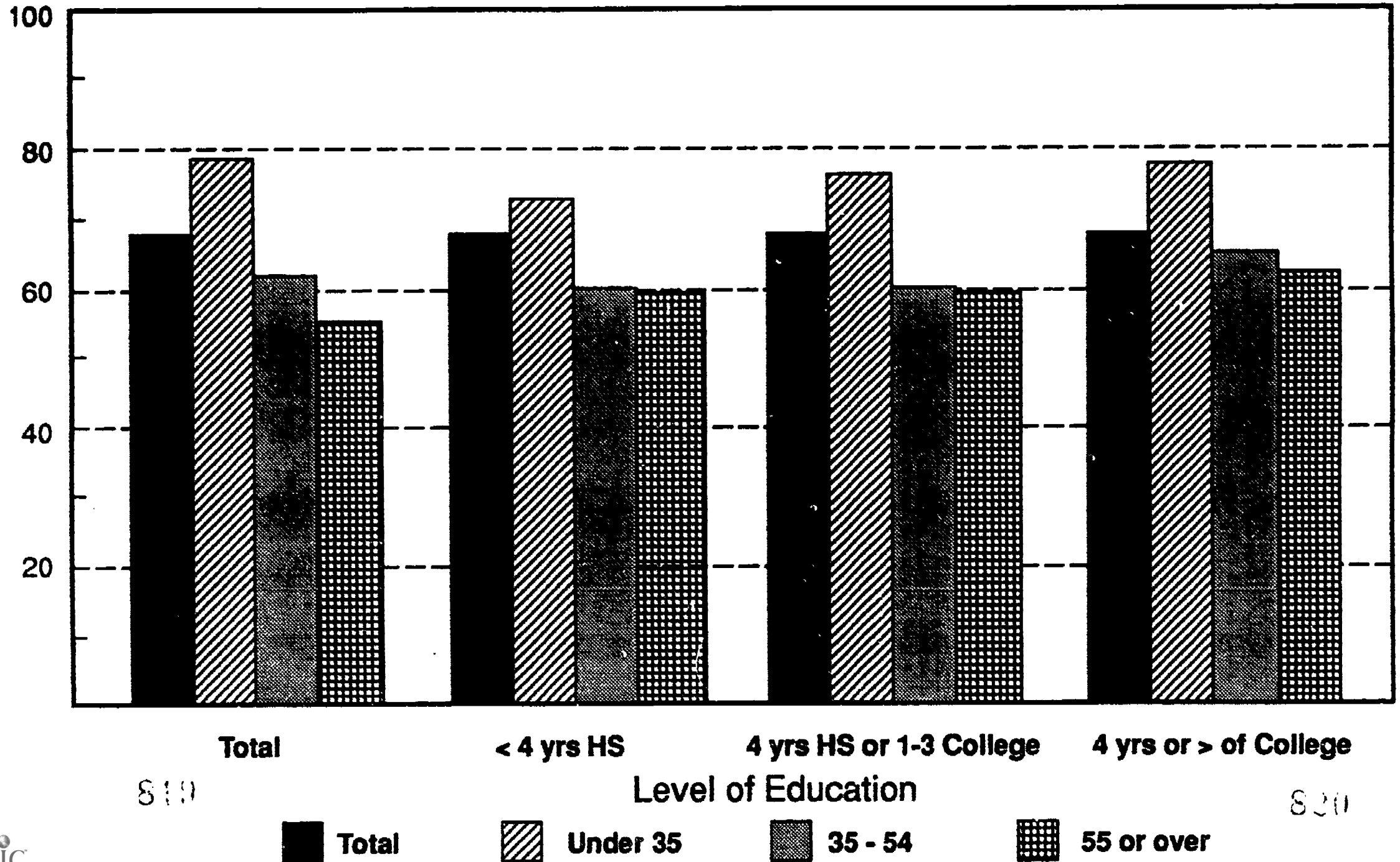


Source: US Bureau of the Census

Female Earnings as a Percent of Male Earnings

By age and education level
Year round, full time workers

Percent of Male Earnings



810

820



Sample of How Labor Market Information is Used

- When elementary school girls are asked to describe what they want to do when they grow up, they frequently identify only a few career options, and even these fit stereotypic patterns. The majority identify only two careers, teaching and nursing. Boys, on the other hand, are able to identify many more potential occupations.
- Many girls enter college without completing four years of high school mathematics. This lack of preparation in math serves as a "critical filter," inhibiting or preventing girls from many science, math, and technologically related careers.
- The preparation and counseling girls receive in school contributes to the economic penalties that they encounter in the workplace. Although *over 90 percent of the girls in our classrooms will work in the paid labor force for all or part of their lives*, the following statistics reveal the cost of the bias that they encounter.

Using Labor Market Information to
Promote Self-Awareness and Sex Equity

- More than a third of families headed by women live below the poverty level.
- A woman with a college degree will typically earn approximately the same amount as a male who is a high school graduate.
- The typical working woman will earn 59 cents for every dollar earned by a male worker.
- Minority women earn even less, averaging only 50 percent of the wages earned by white males.
- Women are 79 percent of all clerical workers, but only 5 percent of all craftworkers.
- Women must work nine days to earn what men get paid for five days of work.
- In contrast to the popular belief that things are getting better for female workers, since 1954 the gap between the wages earned by men and women has not gotten smaller.
- A majority of women work not for "extra" cash but because of economic necessity. Nearly two-thirds of all women in the labor force are single, widowed, divorced, or separated, or are married to spouse earning less than \$10,000 a year.

Developed by Myra and David Sadker
Mid-Atlantic Center for Sex Equity

Distributed by the Department of Public Instruction,
P.O. Box 7841, Madison, Wisconsin 53707

Barbara Bitters-Vocational Equity
Melissa Keyes-Sex Equity

Figure 5.58

Table 15. Educational Attainment of Persons—Percent Distribution and Median Earnings in 1988 of Persons With Earnings, by Occupation of Longest Job, Age, Work Experience, and Sex

(Persons 15 years old and over as of March 1989. For meaning of symbols, see text)

Age group	All workers				Year-round, full-time workers				
	Percent distribution		Median earnings (dollars)		Percent distribution		Median earnings (dollars)		
	Male	Female	Male	Female	Male	Female	Male	Female	
TOTAL									
All persons with earnings	79 487	80 258	29 812	11 086	48 233	31 237	29 836	17 806	
Percent	100.0	100.0	29 812	11 086	100.0	100.0	29 836	17 806	
Less than 4 years high school	33.2	18.0	9 829	4 243	14.1	8.9	17 545	11 781	
4 years high school or 1 to 3 years college	55.1	63.6	29 210	11 086	37.4	35.9	29 114	16 435	
4 years or more of college	23.7	20.5	34 645	29 419	29.8	24.8	27 628	25 288	
Under 35 years									
Total	48.8	48.8	14 708	9 087	48.8	48.1	21 487	18 818	
Less than 4 years high school	10.4	8.8	4 718	2 188	5.1	2.8	14 788	10 499	
4 years high school or 1 to 3 years college	28.2	30.8	15 961	9 853	25.7	23.8	20 618	15 217	
4 years or more of college	8.3	8.8	29 390	19 854	8.8	10.9	30 448	23 890	
35 to 54 years									
Total	38.8	36.0	28 239	14 230	46.6	46.3	31 435	19 939	
Less than 4 years high school	5.7	4.9	16 233	8 223	2.7	4.8	20 231	12 256	
4 years high school or 1 to 3 years college	27.1	24.9	26 808	13 811	28.4	29.7	29 894	17 843	
4 years or more of college	12.0	6.4	69 624	22 431	18.6	11.8	41 874	27 309	
55 years and over									
Total	14.4	12.7	29 892	9 288	12.1	11.6	29 253	16 913	
Less than 4 years high school	4.1	3.0	19 879	6 229	2.3	2.3	20 429	12 230	
4 years high school or 1 to 3 years college	8.8	7.7	21 287	19 311	6.4	7.3	27 848	16 843	
4 years or more of college	2.4	2.0	28 726	18 821	3.8	1.9	48 379	29 346	

Figure 5.59

Table 2. Four-Month Average Income, Earnings and Work Activity, and Educational Attainment, by Sex, Race, and Age: Spring 1987

Educational attainment	Monthly income		Monthly earnings		Months with work activity	
	Mean	Standard error	Mean	Standard error	Mean	Standard error
TOTAL 18 YEARS AND OVER						
Both sexes	\$1,325	\$14	\$1,075	\$14	2.55	0.02
Doctorate	4,118	555	3,837	557	3.40	0.14
Professional	4,323	350	4,003	369	3.45	0.11
Master's	2,776	81	2,376	73	3.38	0.05
Bachelor's	2,109	47	1,829	41	3.18	0.03
Associate	1,630	58	1,458	54	3.16	0.05
Vocational	1,417	91	1,088	85	2.84	0.07
Some college, no degree	1,283	30	1,088	23	2.81	0.03
High school graduate only	1,135	14	921	14	2.81	0.02
Not a high school graduate	751	13	452	15	1.58	0.04
Male	1,810	24	1,540	25	2.99	0.02
Doctorate	4,493	651	3,950	687	3.43	0.15
Professional	4,840	437	4,480	449	3.48	0.11
Master's	3,327	100	2,901	110	3.59	0.05
Bachelor's	2,777	78	2,471	71	3.49	0.04
Associate	2,133	99	1,877	94	3.60	0.06
Vocational	1,917	112	1,699	129	3.33	0.11
Some college, no degree	1,683	54	1,483	42	3.08	0.04
High school graduate only	1,578	23	1,350	23	3.08	0.03
Not a high school graduate	1,048	23	709	25	2.09	0.05
Female	883	12	652	10	2.18	0.02
Doctorate	(8)	(8)	(8)	(8)	(8)	(8)
Professional	2,494	335	2,311	346	3.34	0.24
Master's	2,088	104	1,733	91	3.12	0.09
Bachelor's	1,388	36	1,135	30	2.84	0.05
Associate	1,209	64	1,022	60	2.62	0.08
Vocational	1,159	114	773	49	2.58	0.10
Some college, no degree	892	18	710	18	2.55	0.04
High school graduate only	785	14	583	13	2.25	0.03
Not a high school graduate	489	9	297	9	1.09	0.04

Figure 5.60

Module 6

Developing An Awareness of Multicultural Issues



National Career Development Guidelines-Counselor Competencies

Knowledge of different cultures to interact effectively with all populations.

Skills to assist individuals in changing biased attitudes that stereotype others by gender, race, age, and culture.

Knowledge of basic concepts related to career counseling, such as career development, career progressions, and career patterns.

Knowledge of differing cultural values and their relationship to work values.

Knowledge of unique career planning needs of minorities, women, persons with disabilities, and older persons.

Knowledge of alternative approaches to career planning needs for individuals with specific needs.

BECOMING AWARE OF MULTICULTURAL ISSUES

MODULE 6

Outline Topic	Delivery Methods	Trainer's Notes
Introductory Scenarios to Illustrate Cultural Differences	Lecturette pp. 1-2	
Introduction	Lecturette p. 2	
Definitions	Lecturette pp. 2-3	
Why Multicultural Career Counseling?	Lecturette pp. 3-5 <i>Figure 6.1 Non-Whites Are A Growing Share of the Workforce Figure 6.2 Concentration of Blacks and Hispanics by Major Occupational Group</i>	
Cultural Awareness Questionnaire	Lecturette pp. 5-6	
Dynamics in Culturally Responsive Counseling	Lecturette pp. 6-8 <i>Figure 6.3 Sue's Model</i>	
The Role of Schools	Lecturette pp. 8-9	
The Role of Career and Labor Market Information	Lecturette p. 9	
Actions To Be Taken	Lecturette p. 10	
Summary	Lecturette p. 10	
Activities	11, 17, 19, 20, 21, 22, 23, and Case Studies	

DEVELOPING AN AWARENESS OF MULTICULTURAL ISSUES

MODULE 6

INTRODUCTORY SCENARIOS TO ILLUSTRATE CULTURAL DIFFERENCES

Situation #1.

You have planned a brainstorming activity to illustrate job clusters and career classifications. Why would this activity be difficult to use with some participants?

Situation #2.

You have planned an "ice breaker" activity that requires the participants to communicate nonverbally. What must be taken into consideration?

Situation #3.

During a group exercise, two participants begin to argue with one another quite loudly. What should you do--try to mediate their dispute, or stay out of it and hope that they can settle it? Why?

Situation #4.

You are introducing yourself to a new class. As you discuss your background with the students, you notice that some of them are not looking directly at you. Why not?

Situation #5.

Your students are working in groups to complete a 15 minute team building activity. They are very enthusiastic and involved. When you tell them that their discussion time is up, some students appear to be dismayed. Why?

Situation #6.

One of your students has provided you with some valuable materials for your course. You take some class time to recognize him/her with a special thanks for his/her efforts. The student appears to ignore your expression of gratitude. Why?

Answers to Cultural Awareness Exercise

1. Group decision making and brainstorming may not work as well in some cultures. Participants may feel that they will lose face if others do not agree with them; therefore they may be less likely to offer their ideas.
2. Contact between unmarried men and women is forbidden in some cultures. Men and women are not allowed to touch one another. Therefore, activities should not include any physical contact between the sexes.
3. Losing an argument is not always acceptable in some cultures; a win/win conclusion is preferred. Therefore, mediation is the approach to take in order that both sides win something in the argument.

Answers to Cultural Awareness Exercise

4. In some cultures, it is considered disrespectful to look someone directly in the eye. The students may be showing respect by looking away.
5. Time frames are not as important in some cultures; personal relationships are paramount. Students may resent being held to rigid schedules that interrupt productive discussions with classmates.
6. In some cultures, there is more emphasis on the group. Some people may feel uncomfortable being singled out for individual attention.

INTRODUCTION

To be effective, it is necessary to adopt counseling goals and strategies that are consistent with the client's cultural and ethnic orientation.

The purpose of this module is to introduce multicultural issues in career development.

DEFINITIONS

Ethnic Minority

Introduction

What accounts for these varied reactions? These scenarios illustrate a variety of cultural and ethnic backgrounds. This module will seek to develop an awareness of cultural and ethnic influences that are central to each individual's development.

Self-knowledge is essential in forming one's identity. Part of this self-knowledge comes from the values and beliefs derived from one's cultural and ethnic background. These values and beliefs often form the core of one's identity. Likewise, one's cultural and ethnic background is often the basis for how one evaluates the relative status and worth among careers and concomitantly how decisions are made.

To be effective, career development facilitators are encouraged to adopt counseling goals and strategies that are consistent with the client's cultural and ethnic orientation. To do that, it is important to develop an awareness of one's own cultural background and that of other cultures. The literature is full of popular stereotypes, both positive and negative, that tend to portray ethnic groups as homogeneous. In our opinion, this perspective serves to perpetuate cultural myths and makes it very difficult to become engaged in client-centered career counseling.

The purpose of this module is to introduce multicultural issues in career development and to complete activities that will help develop your awareness of differences between the cultures and ethnic groups. Specific barriers and solutions to meeting the career development needs of our multicultural society will then be examined.

Definitions

First, a few key terms and definitions will be presented.

Ethnic Minority

A person who identifies with a common and distinctive culture or language that is not of the majority population in a country. (Rifenbary, 1991)

Ethnocentrism

Ethnocentrism

A tendency to view cultures other than one's own with disfavor, which results in a sense of inherent cultural superiority. (Rifenburg, 1991)

Multiculturalism

Multiculturalism

Recognizing, understanding and appreciating cultures other than one's own. It stresses an appreciation of the impact of differences--race, class, age, sex, physical attributes, sexual/affective orientation and religion. A multicultural philosophy is one that promotes the acknowledgement, appreciation and usage of cultural differences as a critical factor in the development and implementation of any system, institution, program or curriculum. (Rifenburg, 1991)

Multicultural Counseling

Multicultural Counseling

An intervention process that places equal emphasis on the ethnic and cultural impressions of both counselor and client. The goal in multicultural counseling is to help clients empower themselves for environmental mastery and competence. (Lee, 1991)

WHY MULTICULTURAL CAREER COUNSELING?

Why Multicultural Career Counseling?

Over the next decade, people of color and ethnic minorities will make up a large share of those entering the labor force.

According to the 1990 Census, people of color and ethnic minorities will be a growing share of the work force. Blacks remain the largest minority but the dramatic increase in Hispanics and Asians indicate an increasingly diversified racial, ethnic and cultural mix in this country. In fact, between 1985 and 2000, people of color will comprise 29% of the net additions to the work force and will make up more than 15% of the work force in the year 2000.

**NON-WHITES ARE A GROWING SHARE
OF THE WORKFORCE**
(numbers in millions)

	1970	1985	2000
Working Age Population (16+)	137.1	184.1	213.7
Non-White Share	10.9%	13.6%	15.7%
Labor Force	82.8	115.5	140.4
Non-White Share	11.1%	13.1%	15.5%
Labor Force Increase (Over Previous Period)	X	32.7	25.0
Non-White Share	X	18.4%	29.0%

Source: Workforce 2000, 1987

Figure 6.1

**Concentration of Blacks and Hispanics
by Major Occupational Group, 1988**

Occupational Group	Percentage of Total		Relative Concentration		
	Blacks	Hispanics	Rate	Level	Rate
Total	10.1	7.2			
Managers	5.8	4.0	H	H	L
Professional specialty	8.7	4.0	H	H	L
Technicians	9.4	4.3	H	High	L
Sales workers	8.1	6.3	H	Average	L
Administrative support	11.3	8.8	L	Low	A
Service workers	17.8	10.2	H	L	L
Precision production	7.5	8.2	L	A	H
Fabricators and laborers	15.0	11.1	L	L	A
Agriculture related	8.8	13.0	L	L	H

Source: Bureau of Labor Statistics

Figure 6.2

In conjunction with these statistics, the authors of *Workforce 2000* (1987) note that:

- relative rates of unemployment and earnings among minorities have not improved during the past decade and may become worse;
- blacks and Hispanics are overrepresented among declining occupations; and
- blacks, Hispanics and other minority groups frequently are concentrated in a small number of central cities beset by severe economic and social problems.

Traditionally, our educational efforts have focused on the average student and have tended to overlook the special needs of students who are at a disadvantage in the white, middle class, physically able society. Also, we have frequently overlooked the needs of minority populations.

If we are to do our job effectively, it is essential that the educational and career needs of these individuals be addressed.

If we are to do our job effectively as career development facilitators, it is essential that the educational and career needs of these individuals be addressed. Given the state of the labor market and the declining birth rate, we are witnessing a rare opportunity to present better job prospects for historically disadvantaged people, many of whom are cultural and ethnic minority groups.

Some ethnic and cultural minorities see the counseling process as contrary to their own life experiences and inappropriate or insufficient for their needs. In particular, many career development theories are inherently ineffective because they do not

CULTURAL AWARENESS QUESTIONNAIRE

Cultural Awareness: A Self-Assessment Questionnaire

account for the effects of racism, sexism and classism on career development. The traditional theories frequently focus on the role of personality and neglect the influence of sociocultural, environmental and economic forces on individual choice, assuming people of all cultures have the same array of choices open to them.

Cultural Awareness Questionnaire

(To the Trainer: Read the following questions to the group. You can open this up for discussion or leave the participants with their personal thoughts and move onto the next topic.)

In order to become aware of your multicultural experiences, take a few minutes to think about the following questions.

Cultural Awareness: A Self-Assessment Questionnaire

1. Think back to your childhood days.

Did you have much contact with people of cultures different from your own? If yes, at what age? If no, when did you finally experience people of other cultures?

Did you benefit from your contact (i.e., spending time with families that had configurations different than your own or enjoying the experience of a friend's Bar Mitzvah celebration)? If yes, what were the benefits?

Were there customs or behaviors in the culture that you did not understand? Where there reaction from your parents or friends that you did not understand?

Did you react or interact with people from another culture the way you wanted to at the time, or the way others (peers, parents) wanted you to act? Why?

What messages did your family and friends give you about people from other cultures?

2. Think about the present.

Do you have much contact with students or peers of cultures unlike your own?

If yes, have you benefitted in some way from your contact with them? (i.e., learning about a different perspective on a political issue or hearing about a country unknown to you.) If no, why has there been little contact in your life with other cultures?

Do you feel that you interact with people from other cultures the way you want to, or the way others want you to act? Why?

How does the media affect your views of people from other cultures?

DYNAMICS IN CULTURALLY RESPONSIVE COUNSELING

These dynamics are based on the assumption that culturally responsive counselors must work with an understanding of culture.

The Client's Level of Ethnic Identity and Acculturation:

These stages of personal development cover a wide range of identification with the dominant culture and the group of origin.

What is different about your attitude and beliefs regarding cultural differences now, that did not exist when you were a child? Why?

(Adapted from: *An Introduction to Multicultural Issues in Career Development*)

Dynamics in Culturally Responsive Counseling

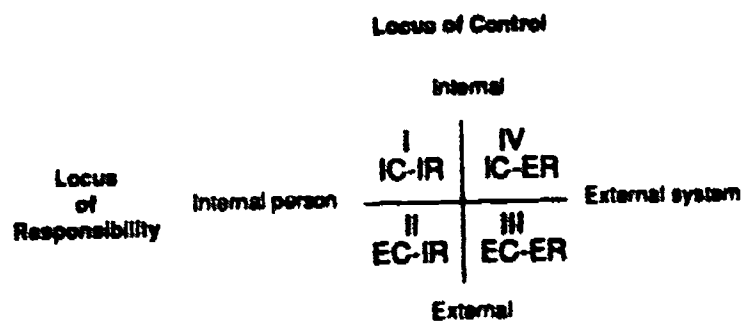
In the past, cultural differences have largely been ignored in the career development process. As our society becomes more diverse, the needs of other cultures can no longer be ignored. Lee and Richardson (1991) have identified dynamics that are especially important in culturally responsive counseling. These dynamics need to be considered during the helping process. They are built on the assumption that culturally responsive counselors must base their work on an understanding of cultures. The challenge to meet the diverse needs of clients can be addressed by considering the following:

The Client's Level of Ethnic Identity and Acculturation.

These stages of personal development can range from little or no identification with the dominant culture and complete identification with the group of origin to complete identification with the dominant culture and little identification with the ethnic group of origin. The status of ethnic identity and acculturation may be influenced by a variety of factors such as age, length of residence in the United States, level of education attained, extent of experience with racism and socioeconomic status.

Sue (1978) developed a framework for understanding clients who are culturally different than the counselor. Sue's framework responds to this challenge to understand the level of ethnic identity and acculturation that Lee and Richardson discuss. Sue's model incorporates the concepts of locus of control and locus of responsibility in a person's ethnic identity. First, a few definitions:

- Internally controlled people are those who believe that reinforcement is primarily a product of their own actions.
- Externally controlled people are those who believe that reinforcement is not entirely self-related, but can also result from luck, chance, fate or others.
- Internal locus of responsibility means that a person's success or failure can be attributed to personal qualities or skills.
- External locus of responsibility means that a person's environment is more powerful than personal qualities or skills.



Source: Sue, D.W. (1978). World view and counseling. *Personnel and Guidance Journal*, 26, 423-452.

Figure 6.3

Sue's Model is based on two interacting continuums: locus of control and locus of responsibility.

Other factors to be considered include family influences, sex-role socialization, religious and spiritual, and the immigrant experience.

As seen in Figure 6.3, these two concepts are put together to provide four different ways in which to view how individuals interact with their environment. Please note that there are differences within race and ethnic groups based on factors such as gender and class. Sue believes that Quadrant I typifies the American middle class culture. People in this quadrant believe they are responsible for what happens to them and have the power to change their fate. Sue believes that more minorities fit into one of the other quadrants. Members of minority groups frequently feel as though they have less power to change themselves or their environment. Counselors need to understand their own world view, as it exists on these interacting continuums, but also that of their clients. Most importantly, they need to accept the legitimacy of the other's point of view.

There are other factors to be considered by career development facilitators in multicultural counseling. These factors can either serve to limit or enhance career development. They are:

Family Influences. Understanding and appreciation of how the family of origin and current partner and/or children play a critical role as one's support system in the career decision making process.

Sex-Role Socialization. Different perceptions of the roles of men and women effect carer development and should be considered in culturally responsive counseling.

Religious and Spiritual Influences. Religious institutions are important sources of psychological support. Religious leadership is an important support system during decision making and problem resolution.

Immigration Experience. In addition to cultural beliefs and practices, immigrants bring with them the trauma and history of separation from their homelands. Some have been lured by

THE ROLE OF SCHOOLS

The school can play a major role in linking the many cultures within it.

the promise of economic opportunity and others have fled political unrest, wars, starvation, etc. The major challenge often is reconciling their wishes to maintain cultural customs while adapting to a new culture and new expectations.

The Role of Schools

Schools have often been seen as the support for all individuals in their educational and career pursuits. The school can play a major role in linking the many cultures within it and outside it. Some schools do an outstanding job of establishing these liaisons and celebrating cultural diversity; others do not. According to Axelson (1985), serious problems will arise in educational and training systems under the following conditions (Note: Although the following discussion focuses on the school, many of these concepts can be transferred to the work place):

- When formal segregation, isolation and alienation are present, this can lead to divisiveness and racial conflicts. The vicious and ugly race riots over enforced school busing to achieve a racial balance in Boston's public schools are an illustration of the effects of school segregation.
- When there is informal segregation in schools, i.e., castelike social separation, such as educational tracking systems that separate students according to past achievement records, situations that hinder cross cultural understanding and communication will continue to occur.
- When cultural diversity goes unrecognized, and acceptance is left to chance, enriched educational climate with multicultural learning will be wasted. experiences; others leave recognition and acceptance to chance.

In addition, there will be communication problems for people when the following conditions exist:

- When cultural differences are viewed only as deficiencies people will not be valued for their individual differences and their special heritages.
- When subcultures are viewed as a group, we tend to lump all minority groups together and depict them as having identical attributes and problems.
- When language differences are viewed only as deficits, bilingualism is no longer seen as an asset.
- When presumptions of intellectual inferiority are based on cultural group identity or membership, we can fall into the mental trap of thinking, for example, that all members of a particular racial group do poorly in particular disciplines.

THE ROLE OF CAREER AND LABOR MARKET INFORMATION

- **When individual potential goes undiscovered and unrecognized, every person's unique abilities and personal talents are not awakened and expanded.**
- **When individual personality traits are overgeneralized according to cultural group identity or membership, we see a person only as a member of a group rather than as an individual.**
(Axelson, 1985)

The Role of Career and Labor Market Information

Along with stress, language, class bound, and cultural barriers, the lack of career and labor market information and the limited knowledge that many ethnic and cultural minorities have about the world of work presents additional challenges to their career development. An individual's knowledge of the world of work partially depends upon past work experiences and the degree of exposure to people who work in a wide range of occupations (Martin, 1991).

Those providing educational and career planning services also need to:

- **learn to recognize and appreciate differences between themselves and the clients they serve;**
- **examine their own ethnocentric values of paternalism and maternalism and the language associated with these values;**
- **understand the importance of and need for positive role models who represent the client's racial and ethnic backgrounds;**
- **create a multicultural environment for clients and value the backgrounds from which they come;**
- **consider issues surrounding racism when they arise by addressing them directly and talking about them;**
- **read and research information about the historical, social, economic and political factors affecting the clients; including statistics related to work force participation rates;**
- **identify and promote full development of a client's potential;**
- **respect and value ethnic and racial diversity;**
- **recognize when cultural differences are affecting communication and make appropriate adjustments;**
- **promote responsible, critical thinking in clients to empower them to be their own advocates;**
- **awaken and expand each client's desire to strive for his/her full potential; and**
- **be open and accepting**
(Brown and Brooks, 1984).

ACTIONS TO BE TAKEN

Actions to Be Taken

There are specific actions that can be taken by career development facilitators to achieve these personal and professional goals:

- Career development facilitators need to recognize and eliminate the educational and career voids in disadvantaged clients.
- Career development facilitators need to get out of their offices and become change agents and facilitators who modify the effects of discriminatory political, social and economic forces on minority groups.
- Career development facilitators need to work toward increasing the participation rate of ethnic minorities in nontraditional careers and to develop strategies that encourage achievement in academic courses that are prerequisites for entering those careers.
- Techniques that broaden career options for clients should be mastered. This awareness of opportunity is critical.
- Strategies to strengthen self-concept must be included.

SUMMARY

Summary

American society is rapidly changing to a more diverse mix of cultures. In order to serve the many cultures in our communities, career development facilitators need to develop new theories and strategies for meeting multicultural needs as they assist their clients in career planning and development.

This module has introduced some of the multicultural issues in career development. In order to understand more about these topics, consult the resource list found in this module. It is now time to complete several activities that will help you to understand your cultural background better and the differences that exist between cultures and among individuals who have not been raised within the same cultural milieu.

In addressing the need to reach out to one another across cultures, the late Jawaharlal Nehru, the leader of India, advised:

"If we seek to understand a people, we have to try to put ourselves, as far as we can, in that particular historical background... If we wish to convince them, we have to use their language as far as we can, not language in the narrow sense of the word, but the language of the mind."

Developing An Awareness of Multicultural Issues
Module 6
References

- Atkinson, D. R., Marten, G. and Sue, D. W. (1979). *Counseling American minorities: Across cultural perspective*. Dubuque, IA: William C. Brown.
- Axelson, J. A. (1985). *Counseling and development in a multicultural society*. Monterey, CA: Brooks/Cole.
- Brown, D., & Brooks, L. (1984). *Career choice and development*. San Francisco: Jossey-Bass.
- Cheatham, H. E. (1990, June). Africentricity and Career Development of African Americans. *The Career Development Quarterly*, 38, pp. 334-344.
- Johnston, W. B., & Packer, A. H. (1987). *Workforce 2000*. Indianapolis, IN: Hudson Institute.
- Lee, C. (1991, January/February). Empowerment in counseling: A multicultural perspective. *Journal of Counseling and Development*, 69(3), 229-230.
- Lee, C. C., & Richardson, B. L. (eds.). (1991). *Multicultural issues in counseling: New approaches to diversity*. Alexandria, VA: American Association for Counseling and Development.
- Martin, W. E., (1991, March). Career development and American Indians living on reservations: Cross-cultural factors to consider. *Career Development Quarterly*, 39(3), 273-283.
- Rifenbary, D. (1991, Spring). *An introduction to multicultural issues in career development*. Available from the New Mexico Career Information System, University of New Mexico, College of Education, Department of Educational Administration.
- Sue, D. W., (1978). World views and counseling. *Personnel and Guidance Journal*, 56, 428-462.



Developing An Awareness of Multicultural Issues
Module 6
Resources

- Alderfer, C. P. (1982). Problems of changing white males' behavior and beliefs concerning race relations. In P. Goodman (ed.). *Change in Organizations* (pp. 122-165). San Francisco: Jossey-Bass.
- Arbona, C. (1989). Hispanic employment and the Holland typology of work. *Career Development Quarterly*, 37, 257-268.
- Arbona, C. (1990). Career counseling research and Hispanics: A review of the literature. *The Counseling Psychologist*, 18, 300-323.
- Atkinson, D. R., Morten, G., & Sue, D. W. (1983). *Counseling American Minorities*, Dubuque, IA: Wm. C. Brown.
- Attneave, C. L. (1985). Practical counseling with American Indian and Alaska Native clients. In P. Pedersen (ed.) (1985). *Handbook of Cross-Cultural Counseling and Therapy* (pp. 135-140). Westport, CT: Greenwood Press.
- Campbell, R. E. (1975). Special groups and career behavior: Implications for guidance. In J. Picou, & R. E. Campbell (eds.) *Career Behavior of Special Groups* (pp. 424-444). Columbus, OH: Merrill.
- Carney, C. G., & Kahn, K. B. (1984). Building competencies for effective cross-cultural counseling: A developmental view. *The Counseling Psychologist*, 12(1), 111-119.
- Carter, R. T., & Helms, J. E. (1987). Relationship of black value orientations to racial identity attitudes. *Measurement and Evaluation in Counseling and Development*, 19, 185-195.
- Casas, J. M., & Atkinson, D. R. (1981). The Mexican American in higher education: An example of subtle stereotyping. *Personal and Guidance Journal*, 59, 473-476.
- Christensen, E. W. (1983). Counseling Puerto Ricans: Some cultural considerations. In D. R. Atkinson, G. Morten, & D. W. Sue. *Counseling American Minorities* (pp. 204-212). Dubuque, IA: Wm. C. Brown.
- Chun, K. T. (1980). The myth of Asian Americans; success and its educational ramifications. *IRCD Bulletin*, 15, 1-2.
- Decker, W. H. (1986). Occupations and impressions: Stereotypes of males and females in three professions. *Social Behavior and Personality*, 14, 69-75.
- Dillard, J. M. (1985). *Multicultural Counseling*, Chicago: Nelson-Hall.
- Doughtie, E. B., Chang, W. N., Alston, H. L., Wakefield, J. A., Jr., and Yom, B. L. (1976). Black-white differences on the Vocational Preferences Inventory. *Journal of Vocational Behavior*, 8:41-44.
- England, P. (1981). Assessing trends in occupational sex segregation, 1900-1976. In I. Berg (Ed.), *Sociological perspectives on Labor Market* (pp. 273-295). New York: Academic Press.
- Fukuyama, M. A. (January 1990). Career Development and Asian-Americans: A response to the Gallup Survey. Paper presented at the National Conference of the National Career Development Association, Scottsdale, AZ.
- Garcia, F., Jr., & Ybarra-Garcia, M. (1988). Strategies for Counseling Hispanics: Effects of racial and cultural stereotypes. (Revised). ERIC reports, ED #300-687., U.S. Department of Education.
- Gettys, L. D., & Cann, A. (1981). Children's perceptions of occupational sex stereotypes. *Sex Roles*, 7, 301-308.
- Gottfredson, L. S. (1978). Providing black youth more access to enterprising work. *Vocational Guidance Quarterly*, 27, 114-123.
- Griffith, A. R. (1980). Justification for a black career development. *Counselor Education and Supervision*, 19, 301-309.
- Hageman, M. B., & Gladding, S. T. (1983). The art of career exploration: Occupational sex-role stereotyping among elementary school children. *Elementary School Guidance & Counseling*, 17, 280-287.
- Harmon, L. W. (1977). Career counseling for women. In E. Rawlings & D. Carter (eds.), *Psychotherapy for women* (pp. 197-206). Springfield, IL: Thomas.
- Helms, J. E. (1984). Toward a theoretical explanation of the effects of race on counseling: A black and white model. *The Counseling Psychologist*, 12(4), 153-165.

- Henton, W. A. (1985). Toward counseling the Japanese in America: A cross-cultural primer. *Journal of Counseling and Development*, 63, 500-503.
- Ibrahim, F. A. (1985). Effective cross-cultural counseling and psychotherapy: A framework. *The Counseling Psychologist*, 13, 625-638.
- Jackson, S. M. (1982). *Career Planning for Minority Women*. Washington, DC: Women's Educational Equity Act Program, U.S. Department of Education.
- Jones, A., & Seagull, A. A. (1983). Dimensions of the relationship between the Black client and the White therapist: A theoretical overview. In D. R. Atkinson, G. Morten, & D. W. Sue, *Counseling American Minorities* (pp. 156-166). Dubuque, IA: Wm. C. Brown.
- Kitano, H. H. L., & Matsushima, N. (1981). Counseling Asian Americans. In P.D. Pedersen, et al. (eds.) *Counseling Across Cultures* (pp. 163-230). Honolulu: University Press of Hawaii.
- La Fromboise, T. D. (1982). *Assertion Training with American Indians: Cultural Behavioral Issues for Trainers*. Las Cruces, NM: ERIC Clearinghouse on Rural Education and Small Schools.
- Lee, C. C. (1982). The school counselor and the black child: Critical roles and functions. *Journal of Non-White Concerns in Personnel and Guidance*, 10, 94-101.
- Leong, F. T. L. (1985). Career development of Asian Americans. *Journal of College Student Personnel*, 26, 539-546.
- Leong, F. T. L., & Hayes, T. J. (1990). Occupational Stereotyping of Asian Americans. *The Career Development Quarterly*, 39(2), 143-154.
- Lewis, R. G., & Ho, M. K. (1983). Social work with Native Americans. In D. R. Atkinson, G. Morten, & D. W. Sue. *Counseling American Minorities* (pp. 65-72). Dubuque, IA: Wm. C. Brown.
- Lonner, W. J. (1985). Issues in testing and assessment in cross-cultural counseling. *The Counseling Psychologist*, 13, 599-614.
- McDavis, R. J., & Parker, W. M. (1981). Strategies for helping ethnic minorities with career development. *Journal of Non-White Concerns in Personnel and Guidance*, 9, 130-136.
- O'Leary, V. E. (1974). Some attitudinal barriers to occupational aspirations in women. *Psychological Bulletin*, 81, 809-826.
- Oppenheimer, K. C., & Miller, M. D. (1988). Stereotypic views of medical educators toward students with a history of psychological counseling. *Journal of Counseling Psychology*, 35, 311-314.
- Osipow, S. H. (1975). The relevance of theories of career development to special groups: Problems, needed data, and implications. In J.S. Picou, & R.E. Campbell (eds.). *Career Behavior of Special Groups* (pp. 9-22). Columbus, OH: Merrill.
- Padilla, A. M., Ruiz, R. A., & Alvarez, R. (1983). Community mental health services for Spanish-speaking/surnamed population. In D. R. Atkinson, G. Morten, & D. W. Sue. *Counseling American Minorities* (pp. 181-203). Dubuque, IA: Wm. C. Brown.
- Panek, P. E., Rush, C. R., & Greenawalt, J. P. (1977). Current gender stereotypes of 25 occupations. *Psychological Reports*, 40, 212-214.
- Parham, T. A. (1989). Cycles of psychological nigrescence. *The Counseling Psychologist*, 17, 187-226.
- Parham, T. A., & Helms, J. E. (1981). The influence of Black students' racial identity attitudes on preference for counselor's race. *Journal of Counseling Psychology*, 28, 250-257.
- Parham, T. A., & Helms, J. E. (1985a). Relation of racial identity attitudes to self-actualization and affective states of Black students. *Journal of Counseling Psychology*, 32, 431-440.
- Parham, T. A., & Helms, J. E. (1985b). Attitudes of racial identity and self-esteem of Black students: An exploratory investigation. *Journal of College Student Personnel*, 26, 143-46.
- Pedersen, P. D., Draguns, J. G., Lonner, W. J., & Trimble, J. E. (1981). *Counseling Across Cultures*. Honolulu, University Press of Hawaii.
- Pomales, J., Claiborn, C. D., & La Fromboise, T. D. (1983). Effects of black students' racial identity on perceptions of white counselors varying in cultural sensitivity. *Journal of Counseling Psychology*, 33, 57-61.
- Ponterotto, J. G. (1987). Counseling Mexican Americans: A multimodal approach. *Journal of Counseling and Development*, 65, 308-312.
- Richardson, E. H. (1981). Cultural and historical perspectives in counseling American Indians. In D. W. Sue. *Counseling the Culturally Different* (pp. 216-255). New York: John Wiley.

- Rosenthal, R., & Jacobson, L. (1968). *Pygmalion in the classroom: Teacher expectations and pupils' intellectual development*. New York: Holt, Rinehart, and Winston.
- Ruiz, R. A. (1981). Cultural and historical perspectives in counseling Hispanics. In D.W. Sue. *Counseling the Culturally Different* (pp. 186-215). New York: John Wiley.
- Ruiz, R. A., & Casas, M. M. (1981). Culturally relevant and behavioristic counseling for Chicano college students. In P. D. Pedersen et al. *Counseling Across Cultures* (pp. 181-202). Honolulu: University Press of Hawaii.
- Ruiz, R. A., & Padilla, A. M. (1983). Counseling Latinos. In D. R. Atkinson, G. Morten, & D. W. Sue, *Counseling American Minorities* 213-231. Dubuque, IA: Wm. C. Brown.
- Shipp, P. L. (1983). Counseling blacks: A group approach. *Personnel and Guidance Journal*, 62, 108-111.
- Smith, E. J. (1975). Profile of the black individual in vocational literature. *Journal of Vocational Behavior*, 6, 41-59.
- Smith, E. J. (1980). Career development of minorities in nontraditional fields. *Journal of Non-White Concerns in Personnel and Guidance*, 8, 141-156.
- Smith, E. J. (1983). Cultural and historical perspectives in counseling Blacks. In D. W. Sue (1981). *Counseling the Culturally Different* (pp. 141-185). New York: John Wiley.
- Smith, E. J. (1983). Issues in racial minorities' career behavior. In W. B. Walsh, & S. H., Osipow (eds.). *Handbook of Vocational Psychology*, 1, 161-222. Hillsdale, NJ: Lawrence Erlbaum.
- Smith, E. J. (1985). Ethnic minorities: Life stress, social support, and mental health issues. *The Counseling Psychologist*, 13(4), 537-580.
- Spencer, B. G., Windham, G. O., Peterson, J. H., Jr. (1975). Occupational orientations of an American Indian group. In J. S. Picou, & R. E. Campbell (eds.), *Career Behavior of Special Groups* (pp. 199-223). Columbus, OH: Merrill.
- Stewart, E. C. (1981). Cultural sensitivities in counseling. In P. Pedersen et al (eds.), *Counseling Across Cultures* (pp. 61-86). Honolulu, HI: The University Press of Hawaii.
- Sue, D. W. (1975). Asian-Americans: Social psychological forces affecting their life styles. In J. S. Picou & R. E. Campbell (eds.), *Career Behavior of Special Groups: Theory, research and practice*. (pp. 97-121). Columbus, OH: Merrill.
- Sue, D. W. (1981). *Counseling the Culturally Different*. New York: John Wiley.
- Sue, D. W., Bernier, J. E., Feinberg, L., Pedersen, P., Smith, E. J., Vasquez-Nuttall, E. (1982). Position paper: Cross-cultural counseling competencies. *The Counseling Psychologist* 10(2): 45-52.
- Sue, D. W., & Kirk, B. A. (1972). Psychological characteristics of Chinese American students. *Journal of Counseling Psychology*, 19, 471-478.
- Sue, D. W., & Kirk, B. A. (1973). Differential characteristics of Japanese and Chinese American college students. *Journal of Counseling Psychology*, 20 142-148.
- Sue, D. W., & Sue, S. (1977). Barriers to effective cross-cultural counseling. *Journal of Counseling Psychology*, 24, 420-429.
- Sue, D. W., & Sue, D. (1985). Asian-Americans and Pacific Islanders. In P. Pedersen (ed.) *Handbook of Cross-cultural Counseling and Therapy* (pp. 141-146). Westport, CT: Greenwood Press.
- Sue, S., & Zane, N. (1987). The role of culture and cultural techniques in psychotherapy: A critique and reformulation. *American Psychologist*, 42, 37-45.
- Suinn, R. M., Rickard-Figueroa, K., Lew, S., & Vigil, P. (1987). The Suinn-Lew Asian Self-Identity Acculturation Scale: An initial report. *Educational and Psychological Measurement* 47: 401-07.
- Szapocznik, J., Scopetta, M. H., Kurtines, W., & Arnalde, M. A. (1978). Theory and measurement of acculturation. *Interamerican Journal of Psychology*, 12, 113-120.
- Toldson, I. L., & Pasteur, A. B. (1976). Therapeutic dimensions of the Black aesthetic. *Journal of Non-White Concerns in Personnel and Guidance*, 4, 105-117.
- Trimble, J. E. (1976). Value differences among American Indians: Concerns for the concerned counselor. In P. Pedersen, W. L. Conner, & J. G. Draguns (eds.). *Counseling Across Cultures*, 65-81. Honolulu: The University Press of Hawaii.
- Trimble, J. E., & La Fromboise, T. (1985). American Indians and the counseling process: Culture, adaptation, and style. In P. Pedersen (ed.) *Handbook of Cross-Cultural Counseling and Therapy*, 127-133. Westport, CT: Greenwood Press.

- Tucker, S. J. (1973). Action counseling: An accountability procedure for counseling the oppressed. *Journal of Non-White Concerns in Personnel and Guidance*, 2, 34-41.
- Tucker, C. M., Chemault, S. A., & Mulkerne, D. J. (1981). Barriers to effective counseling with blacks and therapeutic strategies for overcoming them. *Journal of Non-White Concerns in Personnel and Guidance*, 68-76.
- Vontress, C. E. (1981). Racial and ethnic barriers in counseling. In P. Pedersen, et al. (eds.). *Counseling Across Cultures* (pp. 87-107). Honolulu: University Press of Hawaii.
- Wood, P. S., & Mallinckrodt, B. (1990). Culturally sensitive assertiveness training for ethnic minority clients. *Professional Psychology: Research and Practice*, 21, 5-11.
- Yanico, B. J. (1978). Sex bias in career information: Effects of language on attitudes. *Journal of Vocational Behavior*, 13, 26-34.
- Youngman, G., & Sandongei, M. (1983). Counseling the American Indian child. In D. R. Atkinson, G. Morten, & D. W. Sue. *Counseling American Minorities* (pp. 73-80). Dubuque, IA: Wm. C. Brown.

**NON-WHITES ARE A GROWING SHARE
OF THE WORKFORCE**
(numbers in millions)

	1970	1985	2000
Working Age Population (16+)	137.1	184.1	213.7
Non-White Share	10.9%	13.6%	15.7%
Labor Force	82.8	115.5	140.4
Non-White Share	11.1%	13.1%	15.5%
Labor Force Increase (Over Previous Period)	X	32.7	25.0
Non-White Share	X	18.4%	29.0%

Source: Workforce 2000, 1987

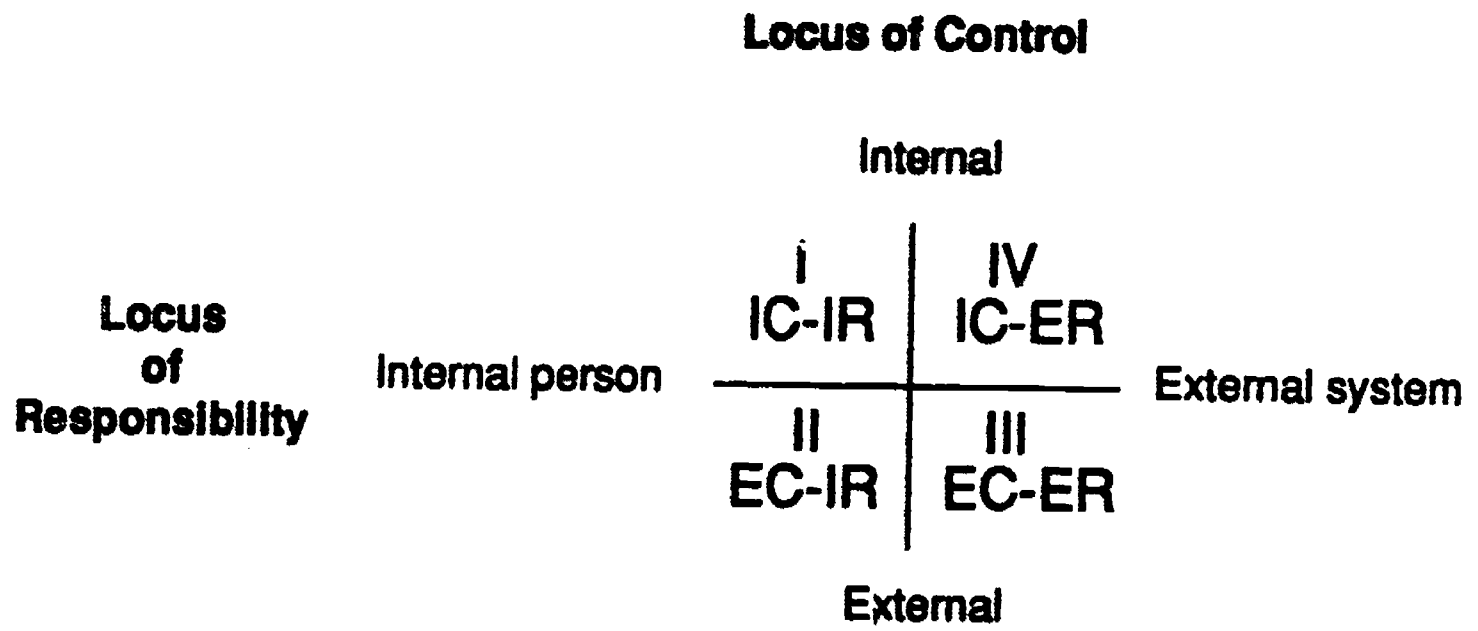
Figure 6.1

Concentration of Blacks and Hispanics by Major Occupational Group, 1988

Occupation	Percent of total employment		Relative concentration		
	Black	Hispanic	White	Hispanics	Black
Total	10.1	7.2			
Managers	5.6	4.0	H	H	L
Professional specialty	6.7	4.0	H	H	L
Technicians	9.4	4.3	H	High	L
Sales workers	6.1	5.3	H	Average	L
Administrative support	11.3	6.5	L	Low	A
Service workers	17.6	10.2	H	L	L
Precision production	7.5	8.2	L	A	H
Fabricators and laborers	15.0	11.1	L	L	A
Agriculture related	6.6	13.0	L	L	H

Source: Bureau of Labor Statistics

Figure 6.2

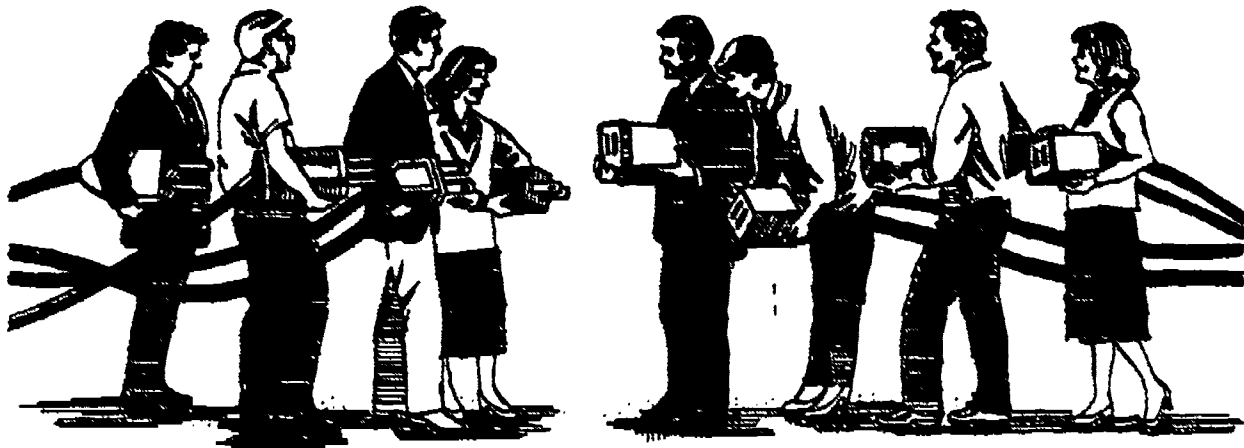


Source: Sue, D.W. (1978). World view and counseling.
Personnel and Guidance Journal. 56, 428-462.

Figure 6.3

Module 7

Specific Needs of Adults



National Career Development Guidelines-Counselor Competencies

Knowledge of developmental issues individuals address throughout the life span.

Knowledge of decision making and transition models.

Skills to assist individuals in changing biased attitudes that stereotype others by gender, race, age, and culture.

Knowledge of basic concepts related to career counseling, such as career development, career progressions, and career patterns.

Skills to use career development resources and techniques designed for specific groups.

Knowledge of unique career planning needs of minorities, women, persons with disabilities, and older persons.

SPECIFIC NEEDS OF ADULTS

MODULE 7

Outline Topic	Delivery Methods	Trainer's Notes
Introduction	Lecturette p. 1	
Assumptions That Direct Adult Career Development Interventions	Lecturette p. 1	
A Theoretical Framework	Lecturette pp. 2-3	
Subgroups of Adults With Career Development Needs	Lecturette pp. 3-6	
Components of a Successful Program	Lecturette pp. 6-8	
Summary	Lecturette pp. 8-9	
Activities	10, 11, 17, 20, 22, 29 and Case Studies	

SPECIFIC NEEDS OF ADULTS

MODULE 7

INTRODUCTION

It is predicted that each adult will have approximately seven jobs during their adult lives. This means that there will continue to be a large percentage of adults who will need current information to plan these changes.

There are many issues that distinguish the needs of an adult in career transition from those of a younger person.

ASSUMPTIONS THAT DIRECT ADULT CAREER DEVELOPMENT INTERVENTIONS

Introduction

It is predicted that each one of us will have approximately seven jobs during our adult lives. Given that level of change and movement within the work force, there are, and will continue to be, a large percentage of adults who will continually need current information to plan changes in their work lives. This means we need to think about not only providing information and career development services to school-aged youth who are preparing for their initial entry into the world of work, but also to adults, many of whom are changing jobs, moving into the work force for the first time, or choosing to work well beyond their 60s and 70s.

The issues that adults face are in many ways similar to those who enter the work force directly from school. Adults need information about themselves and the environment, as well as effective decision making skills. There are, however, many issues that distinguish the needs of an adult in career transition from those of a younger person. Of special merit are the adult's past work experiences, leisure time pursuits, family responsibilities and overall lifestyle. Another factor to consider for adults is the need for reassurance that career planning and midlife reassessments, both voluntary and involuntary, can be healthy moves for an individual to undertake. According to Zunker (1990) particular issues of concern for adults in career transition are:

- they are generally unaware of potential occupations and lack direction;
- they have not kept pace with changing job technologies, procedures and practices;
- many have a single career orientation and do not understand the benefits and problems that accompany a career change; and
- they are unfulfilled in their present career and are searching for challenge and meaning.

This module examines the career and labor market information needs of adults who are making career changes.

Assumptions That Direct Adult Career Development Interventions

The following assumptions should direct adult career development interventions (Minor, 1985).

Assumption 1.

Career development is a continuous process over the life span.

Assumption 2.

Career development involves both choice and adjustment issues.

Assumption 3.

Both career choice and adjustment involves content and process variables.

A THEORETICAL FRAMEWORK

A Theoretical Framework

Based on these assumptions, Minor (1985) developed a theoretical basis for adult career counseling programs.

- Individuals seldom regard their careers in the same way throughout their lives and they behave differently at various times in their lives.
- Choices of occupational fields and specific jobs at certain times are influenced by, and can be predicted from, certain individual characteristics, such as intelligence and achievement; special skills and talents; the ability to relate to people; individual needs, values and goals; and personality type.
- Choices of occupational fields and specific jobs also are influenced by factors external to the individual. These include the reinforcement received from parental and career related activities, community influences, family requirements and values, the economic and social conditions of the family and society, opportunities for learning, the availability of information and historical events.
- The process of making choices about occupational fields or specific jobs follows a general pattern of exploration, crystallization, choice and clarification.
- The process of making adjustments to new choices follows a pattern of induction and integration, or balance, between the needs of the individual and the needs of those around him/her, such as the family. For example, a person may aspire to a career as a concert pianist, but, as a result of personal abilities and environmental factors, he/she may become a piano teacher.
- Adjustment to the consequences of occupational or specific job choices depends on factors in the work environment and on the characteristics of the individual. The most difficult adjustment is related to the magnitude of the discrepancy between what the individual expects to find, in terms of requirements and rewards, and what the environment provides in those areas. In short, people do not always get what they hoped to get from a particular job. Information resources and services can be especially important in addressing these concerns.
- Satisfaction and success depends on how people fit into their work environment. Individuals must be able to express their values and interests, play roles, and perform activities that they feel are appropriate.
- Satisfaction in a specific job comes from receiving positive feedback on a successful performance and/or meeting an internally defined challenge and accomplishment.
- An individual's career is very much a part of one's life activities. The interaction of occupational and family life cycles, life style, leisure and other issues cannot be separated. They must be considered together in career planning.

SUBGROUPS OF ADULTS WITH CAREER DEVELOPMENT NEEDS

Midlife Career Changers

Midlife career change can take many forms. It can be voluntary or involuntary. It can result from external circumstances, such as a company moving from one part of the country to another, or from changes within an individual.

Displaced Workers

One of the major goals when working with displaced workers is to help them express their anger and then re-enter the career decision making process to explore new options and opportunities.

- Individuals can be assisted in making choices and planning their careers by:
 - helping them understand their own characteristics, making them aware of the work environment and other external forces;
 - providing access to information and appropriate training; and
 - considering the impact of occupational and job choices on other aspects of their lives.

Subgroups of Adults with Career Development Needs

The following section describes selected subgroups of adults and some of their specific needs. Goodman, Hoppin and Kent (1990), have identified the following groups:

Midlife Career Changers. Midlife career change is defined as a "process in which an adult, usually between the ages of 35 and 45, enters a new occupation that may require mild, moderate, or extreme adjustment in training or experience" (Brown and Brooks, 1984). Midlife career change takes various forms. It can be voluntary or involuntary; it may involve moving to a different work site, or beginning a new job in a familiar work site. Some changes are made because of external circumstances, such as a company moving from one part of the country to another. Others are due to internal changes in the work place, such as the incongruence between an individual's values or skills and the work that he/she is expected to complete.

The following questions should be considered when working with midlife career changers:

- How is midlife career change a part of the larger process of change and growth during adulthood?
- How is career change related to re-establishing self-definitions during middle life?
- How is career change related to satisfaction, or distress, in other adult roles?
- What is the meaning of work beyond providing a livelihood?
- When does your "career" reflect continued growth and development, and when might it minimize opportunities for personal self-actualization?

(Abrego and Brammer, 1985)

Displaced Workers. Employees who have lost their jobs through the actions of others are likely to experience anger, denial and depression towards the "system." One of the major goals in working with these individuals is to help them express their anger and then move beyond it to take action. It is important to note that many of these adults have not had to look for work before, so learning the process of how to do this is

critical. In addition, due to their lack of experience in looking for work, most displaced workers tend to have a negative and limited understanding of their skill level and available options.

One of the first decisions a displaced worker needs to make is whether or not to change his/her field of work. Is it a realistic option to continue the pursuit of a job that might be obsolete? Or is displacement from this line of work merely temporary? Labor market information can often provide answers to many of these questions. Another key component when working with a displaced worker is referral to other support systems, such as job training programs.

Bradley (1990) believes that a displaced worker goes through a grieving process somewhat similar to that of terminally ill patients. She explains the stages in the following way:

Denial

Responding with shock. "I can't believe it is true because I have been a good worker."

"I have been with this company for 27 years. They can't just get rid of me like that. The company won't be able to get along without me."

Anger

The individual suddenly realizes that he/she is actually going to lose their job and becomes angry at this reality. Often this anger is taken out on family members and other workers.

"Why me? There are other departments not making a profit and other workers who are less productive than me. I'll show them..."

Bargaining

The individual realizes the job is lost, but he/she bargains for more time.

"Just let me work until this project is finished."

"Just give me one more chance to make a profit for this department."

Depression

The worker realizes the job is lost and accepts the condition. He/she often does not want to see family or friends anymore. Sometimes the despair gets so bad, the individual does not bother to get dressed or go out of the house. He/she finally acknowledges the pain and sorrow.

Acceptance

The individual realizes the job is over and accepts the inevitable. He/she recognizes that losing the job is stressful and painful, but it is critical to muster up the courage and dignity to begin the career decision making process.

The Underemployed

These workers need to broaden their options by gathering information.

Adults Entering the Job Market for the First Time

Their barriers are both internal and external.

These adults have multiple needs regarding training, awareness of options, job seeking and retention skills and emotional support to cope with stress.

Women Entering or Reentering the Labor Market

Older Workers

These workers not only need to update their knowledge about the world of work, but also need to learn how to counter age-related stereotypes.

The Underemployed. This subgroup includes those adults who work part-time and wish to work full-time, or those employed at a job for which they are over qualified. Because they are employed they can involve themselves with a work place based network. However, they may not have the time, nor understand how to find a position outside their immediate sphere. It is usually necessary to help them gather more information in order to broaden their horizons so that they are aware of all the options outside their current work environment.

Adults Entering the Job Market for the First Time. These adults have no work history, so they are often viewed by employers with some skepticism. In addition, they often lack firsthand knowledge of the labor market, have minimal employability skills and little experience coping with employer expectations.

Some of the members of this group are the long-term unemployed, which includes high school dropouts, single parents and recent immigrants. These individuals are likely to be economically disadvantaged. Their employment barriers are both internal and external. An external barrier for this group is the wide range of institutions that provide career guidance. Unsophisticated job seekers often do not know where to turn for help. In addition, the cost of private employment services, inflexible hours at public employment offices, inaccessible offices and lack of comprehensive services make the job search even more challenging. Further, some training programs are unresponsive to the various learning styles of adults.

Often because of frustrating early employment experiences, long-term unemployed persons may have a unique set of career development needs. They need information with a particular emphasis on jobs, careers or educational opportunities. This need is often compounded by language or literacy problems and a generally low level of basic skills. These adults usually need more extensive training programs to learn appropriate skills and to understand job seeking and retention strategies. They need help in developing some practical ways to present their lack of work history to prospective employers. Once hired, they need emotional support and practical methods to cope with any criticism they might receive on the job.

Women Entering or Reentering the Labor Market. (See Module 8 - Specific Needs of Women)

Older Workers. Legally, older workers are those over 40. It is unfortunate, but many employers still maintain prejudices about older workers, even in light of research that claims that older workers do not have diminished intellectual capabilities, an inordinate amount of health problems, nor difficulty relating to younger coworkers or supervisors. When seeking to make a job

Adults with Limited English Proficiency (LEP)
Their primary need is frequently English as a second language and counseling to understand culturally appropriate behavior.

Adults with Disabilities

Adults Who Live in Rural Areas

Inaccessibility and a lack of support services often prevent these adults from fully participating in the labor market.

COMPONENTS OF A SUCCESSFUL PROGRAM

1. Identification of Key Work and Life Experiences

This type of activity can identify a partial list of "career satisfaction" variables.

change or entry into the labor force, it is necessary for older workers to take an active role in countering age-related stereotypes. Older workers need to learn how to express their advantages in terms of life experiences and maturity.

Adults with Limited English Proficiency (LEP). Many of these adults are immigrants, and, as a result of being newcomers both to the culture and the world of work, they face many barriers to employment despite the fact that they may have marketable skills. Their primary need frequently is English as a Second Language instruction and counseling to understand culturally appropriate behavior.

Adults with Disabilities. (See Module 9 - Specific Needs of Persons with Disabilities)

Adults Who Live in Rural Areas. Inaccessibility and a lack of support services often prevent these adults from fully participating in the labor market. The isolation created by distances separating adults in rural areas often complicates the delivery of human services. Nevertheless, many adults in rural America, almost one-third of them living in farm households, are quietly living in a state of poverty. The 1980s were a bad time for many farmers who went out of business due to low prices and the high debts that they were unable to pay. Consequently, almost one million small town residents moved to the big cities; that trend is expected to continue throughout the 1990s. This has resulted in a greater number of adults from rural backgrounds who will be seeking work, both in farm communities and in the larger cities.

Components of a Successful Program

There are differences and similarities among these groups of adults. Their career development needs are numerous and complex. Career development facilitators who work with adults can best serve them by examining components of successful programs for adults in transition. Zunker (1990) includes seven components for adults in career transition:

Component 1: Identification of Key Experiences

Work and life experiences are evaluated to determine how they can contribute to a career. This can be accomplished through an interview, autobiography, collection of background information or a work and leisure analysis. Some skills are easy to identify through work and life experiences, and others, such as communication, social, organizational and leadership skills, are only implied.

The goal of these activities is to identify specific work tasks, leisure experiences, family concerns associated with work, lifestyle needs and potential reasons for change. Using this information, it is possible to identify a partial list of "career satisfaction" variables.

2. Interest Identification

This will lead to the building of "interest clusters" of career options.

3. Skills Identification

Skills mastered from previous work experiences, hobbies, leisure interests, social activities and community volunteer work need to be identified and translated into the language of the market place.

4. Lifestyle Identification

The goal is to identify lifestyle needs and understand how these needs are part of career decision making.

5. Education and Training

Once an area of interest is identified, adults need resources that explain related educational and training programs.

Component 2: Interest Identification

Measured interests often are used to predict job satisfaction. Interest identification can serve to broaden and stimulate career options for adults. One way to broaden options is to identify interesting components of uninteresting jobs. This finding should lead to the building of "interest clusters," or patterns, as well as specific interest indicators.

Component 3: Skills Identification

The focus of this program component is on identifying skills mastered from previous work experiences, hobbies, leisure interests, social activities and community volunteer work. Many adults not only have trouble recognizing their skill , but they do not know how to relate them to occupational requirements. Adults often underestimate the value of their life experiences. They need to learn how to translate terms they use to describe their transferable skills into the language of the market place(s) they seek to enter.

Skills identification can be completed by understanding the adult's functional/transferable skills. This can be accomplished by a self-analysis of marketable skills, estimates of developed skills, or by the more traditional method of standardized testing. The critical factor in identification is to encourage the adult to consider skills mastered in a variety of experiences. The next step would be to cluster the identified skills in adaptive, functional and occupational categories so that a more precise relationship to occupational requirements is completed at the same time.

Component 4: Lifestyle Identification

It is important to focus on the adult's total lifestyle, not just their work. This concentration should include their values and needs in relation to work, their leisure time, peer relationships, and family ties. The goal is not only to identify these values and needs, but also to communicate that life is indeed multifaceted and that the process for making a satisfactory career choice should not be oversimplified.

Component 5: Education and Training

Once an area of interest is identified, adults frequently need assistance to find sources of information that will direct them to appropriate educational and training resources. They need to know about the sources and how to best use the information they contain. These resources might include printed materials, a computerized career delivery system that is both interactive and information oriented, local information resources and/or a microfiche system. Publications such as *The Wall Street Journal* and *USA Today* routinely present career focused information. Various sections of local newspapers and files containing the names of local resources persons can be extremely valuable resources. Adults need to be shown how to systematically make effective use of this information.

6. Occupational Planning

The information gathered should be more than work tasks. It should be processed so that lifestyle needs and values become integrated with career and labor market information.

7. Toward a Life Learning Plan

SUMMARY

Tasks to complete include:

- identify sources of information,
- identify continuing education programs,
- understand admission requirements,
- investigate how to obtain credit for past work experiences and completed training programs,
- evaluate accessibility and feasibility,
- identify and communicate with support systems such as financial aid offices, and
- relate skills needed and careers of interest to education training programs to evaluate the best use of one's time and money.

Component 6: Occupational Planning

This component also focuses on the need for career and labor market information in terms of access and effective integration into a plan of action. This information can be accessed at the same time as education and training information. Adults need a variety of information about job tasks, work availability, the training needed to enter the field and salary estimates. They must then reflect upon how their abilities and needs match with that information. They need the opportunity to access and evaluate all the variables that will affect their lifestyle. This can be accomplished with published materials, computer-based systems, microfiche and gathering of information from workers, organizations and personal contacts. The information gathered should be more than simply work tasks. It should be processed so that lifestyle needs and values become integrated with the occupational information. Tasks to complete might include:

- identify sources of occupational information,
- access and assess the information,
- relate skills, values and goals to specific careers,
- evaluate how needs will be met,
- relate family needs to career, and
- identify education and training needs for entry and advancement.

Component 7: Toward a Life Learning Plan

Throughout many career moves, it is important to use life planning and decision making skills. Because of rapid change, we all need periodic information updates and we must strive to upgrade our skills, thus minimizing the chances of becoming obsolete. We need to remain flexible. For this reason, life learning plans are cyclical and can be revised as changes are needed.

Summary

The average worker can expect to change jobs approximately seven times during his/her adult life. These movements are sometimes voluntary, but often they are not. The adults who make these changes often are in a state of personal crisis or transition.

Many of them, such as the displaced workers or homemakers, have specific needs due to their circumstances or position in life. They need career counseling services to:

- help them reassess their work records and life experiences;
- provide information about the occupations and opportunities available to them; and lastly,
- reassure them of their potential not only to cope with change, but to grow as a result of it.

Career and labor market information can help accomplish these goals. The process involved can be illustrated through the case studies and activities listed on the outline of Module 7.



SPECIFIC NEEDS OF ADULTS

BACKGROUND INFORMATION MODULE 7

Models of Adult Career Development

When working with adults, it is important to understand their developmental stage so that appropriate interventions can be used. Schlossberg (1985) has identified four major models of adult development. Each of these models has a different perspective on developmental stages.

Cultural Perspective This theory accepts the basic assumption that given a particular environment, individual life stories will be predictable and similar. According to this perspective, it is the structure of the work system and the resulting environment that are largely responsible for the behaviors people engage in, both at the work place and in their personal lives. According to this theory, for example, most school teachers behave in similar ways, both in the classrooms and in their homes.

Developmental Perspective From this perspective, adult behavior is explained in terms of ages and sequential stages of development. A list of stages might include:

- leaving the family (late adolescence to mid-20s);
- moving into the adult world (early to late 20s);
- settling down (early 30s to early 40s);
- becoming one's own person (ages 35-39);
- making a midlife transition (early 40s); and
- restabilizing and beginning middle adulthood (middle and late 40s).

Some claim that passage through these stages mirrors one's chronological age, while others believe that a person will pass through developmentally sequenced stages for reasons other than age. One individual may move through life's stages in a predictable pattern and schedule, while another may stop progressing at a particular stage of development.

Transitional Perspective Nearly all cultures celebrate rites of passage marking birth, puberty, marriage, death and other major life events. This perspective on adult development sees these adult experiences as major transitions. For example, proponents of this perspective might believe that a young man should be well into his career development by the time he marries. This perspective points to cultural norms as the dictators of age and stage appropriate behavior, rather than emphasizing the biological ages and stages of the adult. This is a sociological perspective of transitions, or rites of passage. Supporters of this perspective also deem it necessary to examine the individual's response to these transitions in order to understand the individual.

Life Span Perspective: Continuity and Change This perspective considers the continuous aspects of the adult experience including changes over the life span, variations in how groups experience adulthood, and socioeconomic, racial and ethnic differences among individuals. From this perspective, the developmental span has no chronological age categories. Most importantly, the stages are not unidirectional, hierarchical, sequenced in time, cumulative or irreversible. The life course is fluid and is marked by many role transitions with varying timetables for entries and exits that are not always age-related or predictable.

Conclusion

Schlossberg's conclusion regarding the developmental stages of adults is that there is not one process of aging but many. There is not one life course, but multiple courses. The variety is as rich as the individual and his/her experiences.

The Impact of Transitions

Schlossberg defines "transitions" to include both anticipated and unanticipated changes. "Anticipated transitions" are those that have a likelihood of occurrence and can be rehearsed, such as an expected promotion or a scheduled retirement. "Unanticipated transitions" involve a crisis, such as being laid off, becoming disabled or getting divorced.

It is necessary to look beyond the actual transition and focus on the "impact" of the event. Schlossberg then identifies factors that ease the assimilation of the transition by the individual.

The reader is cautioned against the natural tendency to glorify or dramatize one stage of adult development over another. A case in point is the frequent emphasis on the "midlife crisis." Crisis can occur at any time in one's life, and each person responds differently to the same stimulus. The setting and historical context of the transitions should always be considered, as well as the particular changes and individual experiences.

Implications for Practitioners

Schlossberg discusses the implications for those who work with adults as they cope with transitions, and in this case, career changes.

These implications are listed below according to the four perspectives previously identified.

- **Cultural Perspective:** According to this perspective, one would attempt to change or modify the "system" and its policies rather than the individual. Examples of system change might include instituting an employer policy that favors hiring and promoting older individuals, rather than hiring new younger candidates. Another system change might focus on changing the attitudes of employers so that they appreciate the concept of human resource development, emphasizing retraining workers, rather than relying on layoffs and new hires when they retool their work force. This means that, instead of counseling individuals to adjust to a system that is not workable, time would be better spent on reorganizing the system and improving its policies.
- **Developmental Perspective:** With this perspective, one would create developmentally appropriate programs tied directly to the participant's age and stage in life. For example, an adult in his/her early 20s who is leaving the family for the first time has different needs than the person in middle adulthood who has worked for a number of years and is looking for another career due to a layoff or desire for a career change. His/her needs for appropriate information to improve their decision making vary dramatically. The younger adult usually has not had exposure to varied life experiences nor access to a wide variety of information sources.

A middle-aged adult who has worked in several jobs, volunteer or paid, not only has life experiences to measure personal skills, values and interests, but probably has more access to information through formal and informal networks. For example, a younger adult might only be familiar with the occupations of his/her parents, friends and a few close relatives.

Without additional resources, this person's perceived options would be very limited. Middle-aged adults, on the other hand, would be able to actively consider more career options because of their increased knowledge about the careers of parents, friends and neighbors; and access to newspaper articles, magazines, radio, and other forms of communication. These resources usually are an integral part of a middle-aged adult life but not always of the adult who is just entering the work force.

- **Transitional Perspective:** Transitions seem to fall into three categories: a personal or professional crisis, a movement from one life stage to another, or a loss. Support can come in the form of others communicating empathy, and understanding and assisting clients to help themselves successfully through the transitions.

Adults can cope with transitions by changing the situation, modifying its meaning or managing stress. Counseling services should be designed to help people learn these three major coping strategies.

Movement from one transition stage into another is usually marked by a revised life organization and a renewed personal identity. While making these changes, people in transition often look for ways to manage and cope. To help them understand their situation and move forward in career planning, cognitive information, such as career and labor market information, might be helpful.

One survey of adults (Perrone, Wolleat, Lee and Davis, 1977) discovered that the five highest needs expressed by adults in transition were related to their career concerns. The participants in the survey reported a need for information about occupations. They were concerned about how their abilities would match with the demands of selected jobs. The researchers concluded that the dissemination of relevant labor market information is a critical service when working with adults.

In addition, these transitions often pose a sense of immediacy. Not having a job or knowing where one's career is headed can be cause for undue stress that only can be relieved when a direction is found. Therefore, the timeliness and the recognition that adults have finished with their "fooling around" time needs to direct a practitioner's actions. Such adults need to learn to manage the stress while moving to establish immediate short term and long term goals, plans and strategies.

- **Life Span Perspective:** This perspective supports the notion that individuals deal with issues, such as concerns about themselves or decision making, differently throughout their lives. From this perspective, the complex variety of individual needs and responses makes categorizing adults virtually impossible. Supporters of this perspective would conclude that varied, multi-strategy programs are needed. What works for one person might not work for another, and what works for an individual at one time in his/her life, might not be the most helpful strategy in another demanding situation. For example, merely providing information to one adult might be enough. Another might need strategies for integrating that information into life plans, while others might need help establishing goals and implementation strategies for goal attainment.

The Adult Learning Style

In our work with adults, it is not only important to understand their needs regarding career planning and development, but if we are to be truly effective, it is important also to discuss how adults learn. Although "adults" are a group with a vast amount of individual differences, the literature concludes that there are certain general characteristics that define the adult learning style. They include:

- **Adult life cycles influence learning.** Therefore, consider the developmental needs of adult learners. Adults in midlife have different needs than younger adults.
- **Adults learn what they consider important.** When they perceive a need to learn, they are capable of working very hard. On the other hand, they will drop out when their needs are not being met.
- **Adults are time-conscious learners.** They have many roles that put a demand on their time and energy. This means they want to meet their goals as directly, quickly and efficiently as possible.
- **Adults want to be treated as responsible and independent learners.** Learning situations should be designed to allow adults to retain as much autonomy as possible.

The literature goes on to talk about an "andragogical" perspective of the adult learner. According to Morris (1985), the key tenets of this perspective are:

- **Adult learners are self-directed.** They are more likely to understand their needs, what they want to do to meet those needs, and what they want to learn. They want to know "why" they are learning.
- **Adult learners proceed from a base of previous experience.** Their myriad of experiences serves as a framework into which current learning and future growth are combined. Past successes and failures color their attitudes towards learning and specific pedagogical strategies.
- **Adults have an orientation to learning that is life, or task and problem centered.** Merely acquiring new information is not as important as problem solving. "How" the information can be applied is really the critical issue.
- **Adults understand that as they pass through stages, they focus their attention on the knowledge, skills and attitudes that they need during that particular time.** This is sometimes referred to as a "teachable moment."

From these tenets, Morris concludes that any information or activities designed for adults, whether they are in career counseling or are enrolled in a career awareness course, should include the following:

- the learner, rather than the teacher, should be the key decision maker, or, at the very least, be involved in joint decision making;
- the techniques used to deliver the lesson should include discussions, problem solving cases, simulations and field experiences; and
- programs should either be focused on meeting real life needs or organized by the mastery of competencies that are sequenced to parallel the learner's readiness to learn.

In terms of career counseling this means that we need to be sure we are:

- helping adults broaden the competencies that they need to carry out their changing roles,
- designing our questions and answers to assist adults direct their own learning; and
- helping adults view career changes as a learning process, rather than an event.

Specific Needs of Adults
Module 7
References

- Abrego, P. & Brammer, L. (1985). Counseling adults for career change. In Z. Leibowitz & D. Lea (Eds.), *Adult Career Development* (pp. 17-39). Alexandria, VA: American Association for Counseling and Development.
- Bradley, L. (1990). *Counseling midlife career changers*. Washington DC: National Career Development Association.
- Brown, D. & Brooks, L. (1984). *Career choice and development*. San Francisco: Jossey-Bass.
- Goodman, J., Hoppin, J., & Kent, R. (1990). *A practical guide for job hunting*. Rochester, MI: Oakland University.
- Miller, J. V. (1982, June). Lifelong career development for disadvantaged youth and Adults. *The Vocational Guidance Quarterly*, 359-366.
- Minor, C. W. (1985). Career development theories and issues. In Z. Leibowitz & D. Lea (Eds.), *Adult career development* (pp. 17-39). Alexandria, VA: American Association for Counseling and Development.
- Morris, L. (1985). Adult learning: A brief overview. In Z. Leibowitz & D. Lea (Eds.), *Adult Career Development* (pp. 40-48). Alexandria, VA: American Association for Counseling and Development.
- Perrone, P. A., Wolleat, P. L., Lee, J. L., & Davis, S. A. (1977). Counseling needs of adult students. *Vocational Guidance Quarterly*, 28(1), 27-36.
- Schlossberg, N. K. (1985). Adult development theories: Ways to illuminate the adult experience. In Z. Leibowitz & D. Lea (Eds.), *Adult career development* (pp. 2-16). Alexandria, VA: American Association for Counseling and Development.
- Zunker, V. G. (1990). *Career counseling: Applied concepts of life planning*. Pacific Grove, CA: Brooks/Cole.

Module 8

Specific Needs of Women and Teen Parents



National Career Development Guidelines-Counselor Competencies

Skills to assist individuals in changing biased attitudes that stereotype others by gender, race, age, and culture.

Knowledge of changes taking place in the economy, society, and job market.

Knowledge of education, training, employment trends, labor market, and career resources.

Knowledge of basic concepts related to career counseling, such as career development, career progressions, and career patterns.

Knowledge of changing gender roles and how these impact on work, family, and leisure.

Knowledge of unique career planning needs of minorities, women, persons with disabilities, and older persons.

SPECIFIC NEEDS OF WOMEN AND TEEN PARENTS

MODULE 8

Outline Topic	Delivery Methods	Trainer's Notes
Introductory Scenarios	Lecturette pp. 1-2	
Issues Facing Women in the Work Force	Lecturette pp. 2-3	
Recognizing the Uniqueness of Women's Career Patterns	Lecturette pp. 3-4	
What is the Status of Women in the Work Place?	Lecturette pp. 4-6 <i>Figure 8.1</i> <i>Women's Share of Labor Force is Growing</i> <i>Figure 8.2</i> <i>Labor Force Entrants by Sex</i>	
Women Are In The Work Force Out of Necessity, Not For Pleasure	Lecturette p. 6	
Education Gives Women Access to Better Paying Jobs	Lecturette pp. 6-7 <i>Figure 8.3</i> <i>Educational Attainment and Earnings</i>	
Women are Heavily Concentrated in Low Paying Jobs and They Receive Less Pay than Men For Equal Work	Lecturette pp. 7-8 <i>Figure 8.4</i> <i>Percent Distribution and Median Earnings</i>	

Outline Topic	Delivery Methods	Trainer's Notes
Occupational Segregation of Women Continues to be a Problem	Lecturette pp. 8-9 <i>Figure 8.5</i> <i>Median Earnings of Males and Females by Occupation</i>	
Family and Career Can Cause Stress in Women in the Work Force	Lecturette pp. 9-10 <i>Figure 8.6</i> <i>Percent of Families with Children at Home in Which Both Spouses Work Outside the Home</i>	
The Lack of Basic Literacy Skills has Stifled Women's Work Force Participation	Lecturette p. 10	
The Feminization of Poverty Is One Result of These Barriers	Lecturette pp. 10-11	
Teen Parents	Lecturette pp. 11-14	
How Can Access to Information Lead to Women's Full Participation in the Work Force?	Lecturette pp. 14-16	
Summary	Lecturette p. 16	
Activities	11, 17, 20, 22, 24, 25, 26, 27, 29 and Case Studies	

SPECIFIC NEEDS OF WOMEN AND TEEN PARENTS

MODULE 8

(NOTE: This information has been summarized from a number of documents including Nash, M. Changing Roles of Men and Women: Educating for Equity, Vocational Studies Center, 1991. The charts and figures in this module will be updated as soon as the 1990 Census data becomes available.)

At the heart of the issues discussed in this module is a sex role system: a network of attitudes, feelings and behaviors that result from sex role stereotyping. Although stereotyping results in barriers to career development for both men and women, one difference appears to be that the male stereotype is more frequently connected to the values rewarded in our society (Hansen, 1978). Stereotyping and sexism result in male-dominated careers having much higher salaries. Further, the range of occupations stereotypically male is much larger than the ten or so occupations that are stereotypically female. Men have more career choices and get paid more. Freeing up both men and women from the sex role stereotypes that often direct career decisions is a critical role of career development facilitators. While the focus of this module is on girls and women, the participants need to appreciate the importance of these issues for all people.

INTRODUCTORY SCENARIOS

Introductory Scenarios

Select a few of the following scenarios to orient the participants to the issues.

- Scenario #1. A manager is at a meeting. Her boss, emphasizing a particular point says, "Damn!". Suddenly, he stops and turns to her and apologizes. The meeting grinds to a halt as everyone looks at her, the only woman present.
- Scenario #2. A woman securities analyst is interviewing for a job and the senior partner asks her what her husband does for a living. She tells him. Then he asks her what he did before that, and before that. She wanted to say, "Well, what does your little woman do?" But a job was at stake. "The senior partner thought the questions were relevant. He wanted to put me in a social and economic context," she says, "because I think somewhere inside him he still defines women by the men with whom they associate." She suppressed her anger and got the job.
- Scenario #3. At a company in the midst of a corporate takeover, the new male vice-president took his two male managers to lunch leaving the woman manager behind to wonder whether it was time to circulate her resume. She decided to ask the vice-president directly about the reason for her exclusion. He replied, "Oh, it has nothing to do with you or your performance. I'm just more comfortable with men."

ISSUES FACING WOMEN IN THE WORK FORCE

- Scenario #4.** The baby wakes up whimpering. His mother takes his temperature and finds that it is 102 degrees. The child obviously is ill and cannot be left at the child care provider. Mother has an important meeting scheduled this morning. She turns to the baby's father and asks, "Honey, could you please take the baby into the clinic this morning?" Father replies, "Gosh, sweetheart, I'm really sorry, but I have to deliver a report by noon that isn't finished yet."
- Scenario #5.** The newly appointed three-person committee sits down for its first meeting. "Well, I suppose we'd better have someone take minutes to make this official." The two males turn toward the one female.
- Scenario #6.** It's Friday afternoon and people are leaving the office. "Hey Frank, do you have any exciting plans for the weekend?" "Yeah, my brother and his family will be visiting and we hope to get out and play a little golf on Saturday." "What about you, Sue, any plans?" "Sure, I think I'll start with some laundry and try to take the kids to the pool."
- Scenario #7.** The Personnel Committee finished screening the candidates and was preparing to make its final recommendation for the engineering position. The chairperson was the first to speak. "I really liked the first woman that we interviewed. I feel that she's certainly the best candidate, but we just hired a woman last month."
- Scenario #8.** The young woman was delighted to get her first secretarial position after she graduated from high school. She was confused when her boss insisted on closing the door when he gave her dictation. She did not know how to respond to his lewd stares and sexual comments about her clothing.

Issues Facing Women in the Work Force

These scenarios are examples of the personal challenges, social barriers, job stresses and discriminatory practices that women in the work force often face. The issue is not so much sex differences and whether they exist or not. It is about what people believe about sex differences and how those beliefs influence attitudes and behaviors.

We may be unaware of situations which reflect discrimination because they are often couched in terms and masked in actions that denote sensitivity to women and deference to their needs. Although these actions may be well-meaning, they are unconscious displays of discrimination that are deeply rooted in tradition. Consequently, both sexes may fail to recognize these subtle signs of sex discrimination in the work place and the subtle ways in which they effect career decisions.

Women are full participants in the work force. This opens up new horizons but also presents new challenges.

Girls and women need to acquire knowledge about themselves and the full range of career opportunities.

RECOGNIZING THE UNIQUENESS OF WOMEN'S CAREER PATTERNS

- 1. Their career patterns are often interrupted because of family responsibilities.**
- 2. Career development facilitators need to become aware of all the stereotypes and myths that have influenced previous decisions and will continue to influence future decisions.**

Women have become and will continue to be full participants in the work force. This participation opens up new horizons for women but at the same time presents many new challenges. In the past decade we have seen a greater acceptance of different patterns of family and career involvement. Legislation and regulations have opened up new opportunities for women that enable them to develop their talents and abilities in the work force. There are still many barriers in the work place for women, however. They need to acquire knowledge about themselves and the range of career opportunities, both traditional and nontraditional, that are available to them. After acquiring this knowledge, they need to integrate this awareness and information into their career decisions (Hansen, 1978). We as career development facilitators can help girls and women overcome some of these barriers by providing information and strategies that will promote freedom of choice in both their personal and professional lives.

In summary, we need to be sure that as girls and women make decisions about their lives and their families, that they do so with an understanding of their full range of choices in the work place.

Recognizing the Uniqueness of Women's Career Patterns

Gender is an issue in all types of counseling and human development. It plays a particularly significant role in career development and decision making. Gender membership affects career development and decision making, life roles, and the ways in which work is integrated into other roles (Brown and Brooks, 1991). The realities of women's career development are quite different from those of men. In order to provide information that will be integrated into career decision making, we must recognize and understand those differences in life patterns and decision points if we are to be effective. Critical issues to consider are:

- 1. Career development facilitators need to understand the nature of continuous and discontinuous career patterns. The pressures to interrupt career involvement due to home and family responsibilities is greater for women than men. Also, it might be necessary to understand how the choice of their career is intertwined with their interest in continuity or reduced work involvement due to the presence of children.**
- 2. Career development facilitators will need to recognize the stereotypes and myths that have been taught and then determine how those myths have influenced previous career decisions and how they will influence future decisions. Typically, these myths lead to a lack of recognition of women's talents and abilities in the world of work and a limited understanding of the wide variety of career options. Women need an orientation to the labor force during choice periods that clarifies all job options.**
- 3. Women's choices are more complex by nature. Women have been socialized to believe that at some point they either should be homemakers, work in traditional careers, be**

3. Women's choices are complicated by others' expectations.

Some of the barriers and challenges can be overcome with information.

WHAT IS THE STATUS OF WOMEN IN THE WORK FORCE?

pioneers or try to combine all and be superwomen. Typically, women's decisions are not seen as only their own but actions that will directly impact on the lives of their children, spouses or significant others.

Women need information not only to make career choices but also to understand the networking, role models and support systems that can help them function to their fullest in the work place. Their consciousness needs to be raised about all alternatives.

The barriers to women are real: the lack of work orientation, lack of role models, lack of mathematics/science and athletic training, and lack of managerial experiences (Hansen, 1978). Another barrier is that women with these skills and education still are perceived as not having the skills. But they are also surmountable. During career decision making a sensitivity to these barriers, and strategies for coping with them, are critical parts of career development and decision making for women.

The next sections of this module will describe the status of women in the work place and how access to information can be used as one strategy to help women become full participants in the world of work.

What is the Status of Women in the Work Force?

Women's share of the labor force increased from 40% in 1976 to 45% in 1988. The increase is projected to continue, reaching 47% in 2000.

Women's share of labor force is growing in the U.S.

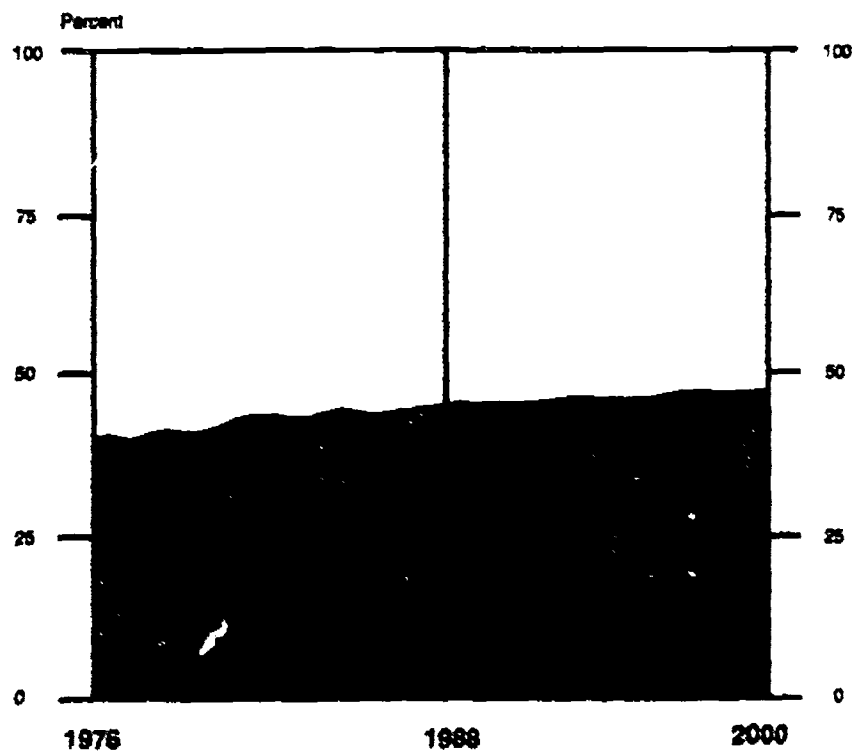


Figure 8.1

Women's participation has increased.

Participation was highest among women aged 35 to 44 years; 76% of women in this age group were in the labor force. Not only are more women working, but they also represent an increasing share of the labor force. Women will account for more than half of all entrants by the year 2000.

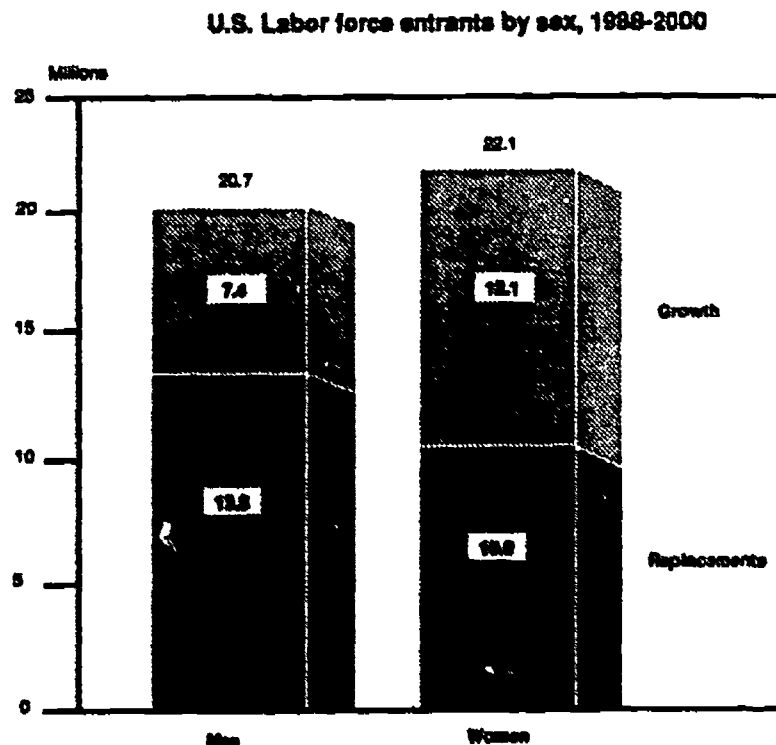


Figure 8.2

Women of all colors work for pay. There is nearly equal labor force participation rates among black women, white women, and women of Hispanic origin. In 1989, 58.7% of black women, 57.2% of white women and 53.5% of Hispanic women were in the labor force. Most female workers were employed full-time. About 26% (14 million) held part-time jobs.

Increased participation can lead to a wealth of opportunities, or a prolonged environment of stress.

In addition to their increased participation in the work force, women are working longer. The average woman will spend half of her lifetime in the work place. A married woman can expect to spend approximately 34 years in the labor force. If unmarried, she will spend approximately 41 years. Should present conditions continue, this could represent a wealth of challenges and opportunities for women, or it could result in a prolonged environment of stress, discrimination and harassment.

A number of issues effecting women need to be considered during career planning and decision making, including

- women are in the work force out of necessity, not for pleasure;
- education gives women access to better paying jobs;
- women are heavily concentrated in low paying jobs and they receive less pay than men for equal work;

WOMEN ARE IN THE WORK FORCE OUT OF NECESSITY; NOT FOR PLEASURE

- occupational segregation of women continues to be a problem;
- family plus a career can cause stress in women in the work force; and
- the lack of basic literacy skills has stifled women's work force participation.

Women Are in the Work Force Out of Necessity, Not for Pleasure

- **There is a myth that women are in the work force not out of necessity but for pleasure. That is not the case.** The majority of women in the labor force in 1988 were either single (25%), divorced (12%), widowed (4%), separated (4%) or had husbands whose 1987 earnings were less than \$15,000 (13.5%). The financial problems of single women who maintain families is a concern.

The myth of working for pleasure also is not true for married women who are in the work force. They contribute substantially to family income. In 1983, in 56% of married couple families the women were part of the paid labor force, as compared with 40% in 1972. In 1988, the median income of married couple families with the wife in the paid labor force was \$42,709, compared with \$27,220 for those without a wife in the paid labor force.

Education Gives Women Access to Better Paying Jobs

- **Educated women experience more success in finding employment.** The more education, the higher the median earnings for both men and women, although men consistently earn more than women at each level of educational attainment.

EDUCATION GIVES WOMEN ACCESS TO BETTER PAYING JOBS

Educational Attainment and Earnings
Male versus Female
Year round, full time workers, March 1989

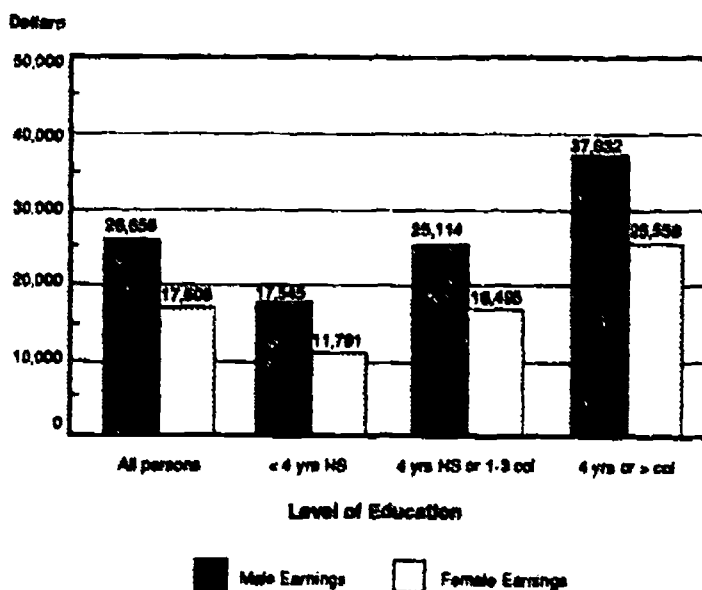


Figure 8.3

WOMEN ARE HEAVILY CONCENTRATED IN LOW PAYING JOBS AND THEY RECEIVE LESS PAY THAN MEN FOR EQUAL WORK

Women who do not have advanced degrees also are in the work force but most often in low paying jobs. One in eight women in the work force has less than a high school education. When we look to see who these women are with less than a high school diploma, we find that one-half of the single mothers are in this category, as well as over half of the displaced homemakers. This means that the women who need better paying jobs are not always qualified nor always prepared to obtain them.

Women Are Heavily Concentrated in Low Paying Jobs and They Receive Less Pay than Men for Equal Work

- Despite the educational achievements of many women, women are still heavily concentrated in low paying jobs. In addition, they receive less pay than men for equal work.

According to the U.S. Senate Budget Committee, 43% of women workers today are in jobs with below poverty level wages, compared to 27% of men.

Percent Distribution and Median Earnings of Males and Females aged 25-54 by Occupation Year round Full time Workers in the U.S.

	Percent Male	Percent Female	Median Earnings Male	Median Earnings Female
Total	48.6	49.3	31,433	19,509
Exec., Managerial and Professional Specialty	19.2	19.0	41,321	28,001
Technical, Sales, and Administrative Support	9.1	19.1	31,021	17,990
Service	3.1	6.1	21,912	11,524
Production, Craft, and Repair	9.2	1.4	20,688	16,742
Operators, Assemblers, Inspectors, Transportation, and Material Moving	7.7	4.5	25,001	13,906
Farm, Forestry, and Fisheries	1.2	.2	17,112	7,156

U.S. Bureau of Economic Analysis, Survey of Income and Participation in the Labor Force, 1989. Annual Report from Labor, 3rd QTR Edition, P. 22, Feb. 1990.

Figure 8.4

When the 1989 median weekly earnings of full-time wage and salary workers were contrasted it was found that the average woman earned 70 cents for every dollar earned by the average man.

Men with less academic preparation than women often earn more money. The median income of female high school graduates with no college and working year-round, full-time in 1988 was \$16,810. This is somewhat lower than the median income (\$17,190) of fully employed men who had completed less than eight years of elementary school. In 1988, women with four years of college

OCCUPATIONAL SEGREGATION OF WOMEN CONTINUES TO BE A PROBLEM

education had a median income of \$25,187. This figure is below the median income of men (\$26,045) who had only a high school diploma.

One positive result of wage discrimination is that many women are choosing to start their own businesses. The number of female-owned businesses in the United States rose from 2.5 million in 1980 to 4.1 million in 1986. Women see business ownership as one way to avoid the inequities they often face as employees.

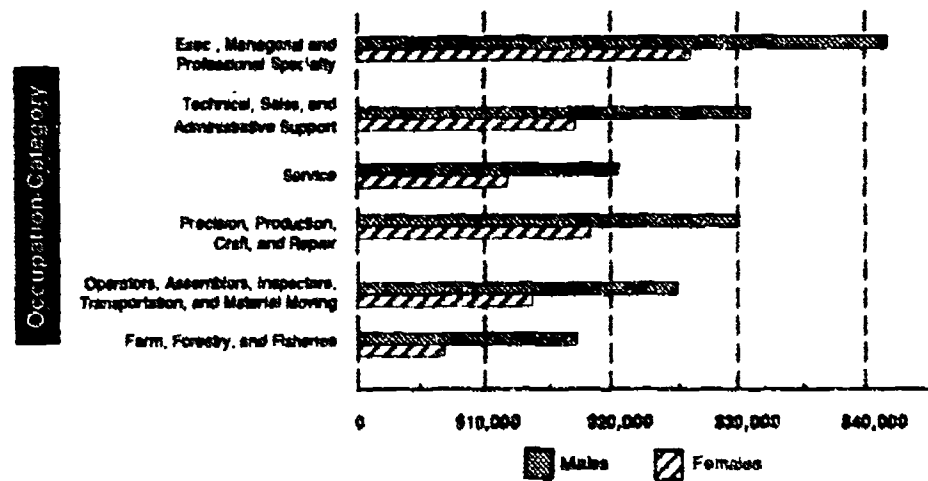
Occupational Segregation of Women Continues To Be a Problem

- A critical barrier in the career development of women is continued occupational segregation. Women continue to constitute large proportions of workers in traditionally female low-paying occupations. (Traditional female jobs are defined as those in which 75% or more of those employed are women. Nontraditional jobs for women are defined as those in which 75% or more of those employed are men.)

Between 1983 and 1988, the number of women in nontraditional jobs remained relatively unchanged.

Does this occupational segregation really hurt? In terms of wages, the answer is an unequivocal yes.

Median Earnings of Males and Females aged 35-54
by Occupation
Year round Full time Workers in the U.S.



U.S. Bureau of Economic Analysis, *Income, Expenditures, and Poverty in the U.S.* 1989
(Abstracted data from Mar. 89) CPSA Series P, 88 No. 1-62

Figure 8.5

FAMILY PLUS A CAREER CAN CAUSE STRESS IN WOMEN IN THE WORK FORCE

Women in nontraditional occupations earn 20% to 30% more than women in traditional occupations. This would lead one to believe that women can increase their earning power by gaining entry to nontraditional occupations. However, even when women work in the same occupations as men, they do not always earn equal pay.

Over the past five years, the greatest increase of women entering nontraditional jobs has been in the professional occupations. Despite the gains that women have made in business ownership and in the nontraditional professions, there are still relatively few women in top leadership or management positions. Although many women have risen to middle levels in the corporate world, women comprise only 5% of the top executives in U.S. corporations. Some observers charge that there is a "glass ceiling" that female executives are not allowed to rise above.

The limited number of female leaders and administrators is also evident in political and educational arenas. In 1991, women represented only 2% of the United States Senate and 6.6% of the House of Representatives. In education, where females have dominated the teaching profession, in 1990 less than 2% of school superintendents, 9% of college presidents, and 10% of full professors were women.

Family Plus Career Can Cause Stress in Women in the Work Force

- **Women in the work force, especially mothers, experience many conflicts between their career and family responsibilities.** That means that their stress is not felt only between nine and five but also goes home with them at the end of the work day. The percent of families with children at home in which both spouses work outside the home has continued to increase from 30% in 1950 to 60% in 1987.

Percent of families in the U.S. with children at home in which both spouses work outside the home

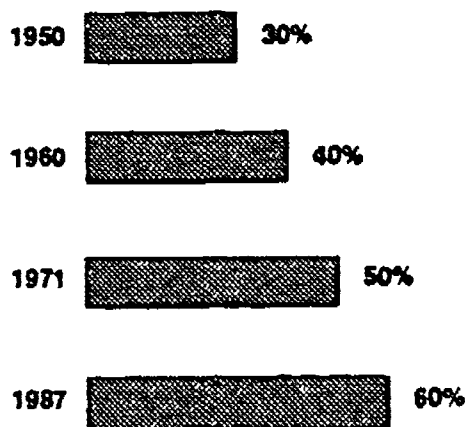


Figure 8.6

THE LACK OF BASIC LITERACY SKILLS HAS STIFLED WOMEN'S WORK FORCE PARTICIPATION

THE FEMINIZATION OF POVERTY IS ONE RESULT OF THESE BARRIERS

In 1988, 65% of the women in the work force had children under the age of 18, and 56% of the mothers with preschoolers under the age of six were labor force participants.

Many women in the work force feel pressured to be "super moms" in order to meet the demands of their work, husbands, children, relatives and household chores.

The Lack of Basic Literacy Skills Has Stifled Women's Work Force Participation

- **Another barrier to full participation in the work place is the lack of basic literacy skills of both men and women.**
- An estimated 23 million adults in the U.S. lack basic literacy skills.
- An estimated 23% of all adult females have severely limited skills, compared to 17% of all males.
- Of female heads of household with less than a high school diploma, 75% are living in poverty.
- Young women with below average skills and below poverty incomes are 5.5 times more likely to become teen parents.
- Nearly 40% of female single parents and 35% of displaced homemakers have an eighth grade education or less.
- The greatest predictor of a child's future academic success is the literacy of the child's mother.
- As the number of families headed by low literate women increase, the cycle of illiteracy is perpetuated.

The picture portrayed by these literacy statistics on the one hand, and the skill demands needed in the future work force on the other hand, are further cause for concern over the role of women in the work force. Low literacy levels are a major barrier to the full participation of women in the work force. Linking literacy education to employment and training programs should be a focus for any program that intends to increase women's employability.

The Feminization of Poverty Is One Result of These Barriers
Although women have made gains in business ownership and in some professions, the majority of women in the work force remain in low paying and low status jobs. In 1988, women represented 62% of all persons 16 years old and over with poverty level incomes. The poverty rate of all families maintained by women with no husband present was 33.5%; for those families maintained by women with children under 18, it was 44.7%. This means that in 1988, there were 3.6 million families maintained by women with no husband present that had incomes below the poverty level. This state of poverty endured by many single parents and older women in the work force has been called the "Feminization of Poverty."

Actions taken by our government, such as legislation to create public policy, support but do not ensure the entrance of women into nontraditional employment and training. For example, the Job

Government actions support, but do not ensure, improvement in the status of women in the work force.

TEEN PARENTS

One group of women who need special attention are teen parents. The poverty status among single young mothers is staggering.

They face significant challenges and bonus in completing high school, pursuing postsecondary education and entering the work force.

Training Partnership Act of 1982 (JTPA), The Carl D. Perkins Vocational Education Act of 1984, The Carl D. Perkins Vocational and Applied Technology Education Act of 1990, Title VII of the Civil Rights Act of 1964, Equal Employment Opportunity Commission Guidelines of 1980, Title IX of the Educational Act Amendment of 1972, Equal Pay Act of 1973 and Executive Order 11246 all protect the rights of women to work, but they do not guarantee women the training that they may often need. (See Appendix M for more details.)

Teen Parents

(Many of the comments about the special needs of teen parents were taken from Lindner, F. Career Survival Kit for Teen Education and Employment, 1987.)

One group of women who need special attention are teen parents. Regrettably, the rates of adolescent pregnancy and childbearing are higher in the United States than in most Western countries. Over 500,000 teenage girls in America have babies each year. Most of these young women are not married. They often remain single and become the head of their household. The poverty status among these young single mother households is staggering.

For many teenage mothers, their babies are not their first children, but their second or third. As a result of premature parenthood, they face significant challenges in completing high school, pursuing postsecondary education and entering the work force. Without the appropriate interventions, such as career development programs, their educational and employment opportunities remain very limited.

There are many barriers that can affect the chances of achieving positive outcomes for teen parents. They include the following:

- low self concept and self-esteem;
- lack of information about academic planning and occupational choices;
- lack of role models;
- lack of educational skills;
- lack of self-awareness;
- lack of assertiveness;
- low aspirations, motivation and expectations of themselves;
- low level of trust in others;
- poor communication and decision making skills;
- unrealistic goals and ambitions;
- defensive attitudes;
- limited emotional resources for support and maintenance;
- immature behavior;
- need for immediate gratification; and
- low socio-economic status.

In addition to these social and economic problems, there are other factors that compound the above obstacles for teen parents. They include:

- need for child care and transportation;
- need for housing;
- need for a strong support system;
- need to establish paternity for child support;
- need for family planning and pregnancy prevention resources;
- poverty level living conditions;
- noncompletion of high school and a lack of comprehensive academic planning;
- lack of employability skills and job readiness; and
- lack of knowledge about resources and how to gain access to them.

The special employment needs for teen parents include:

- difficulties with role identity--Am I a carefree teenager or a responsible adult?
- feeling a social stigma because of the way they have chosen to begin a family
- the inability to support their family financially
- a strain from attempting to balance their duties as a wage earner with their educational and/or parental responsibilities
- a lack of formal education and job skills limitations
- being hindered by socialization into traditionally female occupations
- paying child care costs with little or no wages.

Teen parents need multiple services to make the transition from adolescence to parenthood.

Teen parents need multiple services to make the transition from adolescence to parenthood. Most importantly, the majority of pregnant and parenting teens are at risk of not completing high school. These teens face double jeopardy; they have the needs common to all at-risk students, with the additional burden of being a parent of a small child. This means that their needs also include child care, transportation and referral to other community services that may provide support for the mother and child as they pursue their educational or training plan. Many of the programs designed to meet the needs of teen parents should share the same characteristics as dropout prevention or children at-risk programs.

Programs for teen parents also need to include life skills, such as:

- parenting and nutrition;
- learning how to give and receive emotional support;
- learning how to access available child care, transportation services and other support services necessary to one's survival;
- self-concept building;
- learning how to meet the challenge of combining work and family roles;

- building support systems;
- networking for work opportunities and connections;
- enhancing interpersonal communication and relationships; and
- avoiding the role of a victim.

For teen parents to achieve financial independence and ward off a lifetime of poverty, they will need to be exposed to career exploration activities that focus on expanding career options, planning, and vocational training that is free of gender bias. Teen parent programs need to have explicit equity goals. One of the objectives of gender equity is to assist students in exploring and participating in a broader range of educational programs and activities leading to higher paying, and more satisfying, careers.

In addition, teen parents need to focus on finding jobs that will challenge them and provide opportunities for advancement in a chosen career, rather than temporary or dead-end positions. They need jobs that offer good benefits, such as health insurance, vacation and sick leave. Because of their child care responsibilities, they should seek work that allows for flexible schedules and employers that give consideration for child care arrangements and the unexpected demands of parenting.

It is imperative that teen parents consider better paying occupations because it is likely that they will be the sole provider for their child(ren).

It is imperative that teen parents consider better paying occupations because it is likely that they will be the primary, or sole, provider for their child(ren). Encouraging teen parents to break traditional occupational patterns is not easy to do, however. Many young people need assistance in exploring the myths about gender roles. Many young women, in particular, may be reluctant to visualize themselves in occupations that have been dominated by men. However, by increasing their employment options, they may find economic independence for themselves and their child(ren).

Career and labor market information can introduce teen parents a wide range of higher wage occupations.

Career and labor market information can help direct teen parents to higher wage occupations and introduce them to a wide range of options. Information can show women that jobs traditionally held by men, such as those in the building trades, offer higher pay. By comparing and contrasting several occupations, teen parents can see the advantages and disadvantages of pursuing and planning for a particular career interest. This information can be used, for example, to direct young people toward the apprenticeship and training programs that are available to them in order to develop the skills they need for better paying jobs.

In summary, the United States has an alarming rate of teenage pregnancy; it is the highest in the Western world. Teen parents need a great deal of support in order to continue their education and care for their children. Because they often come from disadvantaged backgrounds, they face many social and economic barriers to becoming self-sufficient. Teen parents have the additional challenge of caring for their children. Many schools and community agencies have set up programs to help teenage parents to develop the

HOW CAN ACCESS TO INFORMATION LEAD TO WOMEN'S FULL PARTICIPATION IN THE WORK FORCE?

The first tradition that limits a woman's ability to reach their full potential in the work force is pay discrepancies between men and women.

Providing information about higher wage occupations is one way to expand horizons and challenge stereotypes and myths.

personal, educational and career skills that are needed in order make them economically independent. For women, this emancipation may require that they consider working in a nontraditional occupation in order to make the higher wages that they need to support their family.

How Can Access to Career and Labor Market Information Lead to Women's Full Participation in the Work Force?

Knowing these concerns and barriers, how can we provide solutions through improved access to career and labor market information?

As noted, there are two traditions that limit a woman's ability to reach their full potential in the work force. The first tradition is the discrepancy in pay between males and females in nearly every occupational area, even when experience and educational preparation are held constant. This not only contributes to the growing feminization of poverty but it also devalues the contributions of women.

The national and local data indicate that the problem of pay discrepancies has overwhelmed many of us. As career development facilitators, however, we can help girls and women make choices that will lead to careers that not only value their contribution but also provide them with a wage that is commensurate with their contributions.

One way to do that is to provide information about higher wage occupations. This is one way of expanding options for females. In addition to communicating general information about occupations, we need to know and communicate wage and benefit information that can direct a women to careers that will provide the salary and benefits to support oneself and family. This dollar figure, which can be found in national, state and local career and labor market information, should play a role in the decision making process if we want to change the occupational segregation and reduce the number of poor women in the work force.

The opportunities for increased earnings have not been attracting women partly because many girls and women do not understand the implications of their choices during the process of career decision making. We need to provide the information so that the girls and women will take the time to explore less traditional higher wage occupations that utilize the same skills and abilities as more traditional low wage jobs. The information that we present must be used to clarify the myths and realities of the work place. This can be done by showing the fallacies in sex role myths such as:

- women lack the temperament to do "men's" work;
- women cause additional expense to their employers;
- women do not have the physical stamina and strength for "men's work."

Examples of higher wage opportunities for women might include:

Professional

**Engineering
Law
Medicine
Environmental Science
Accounting**

Marketing

**Commission Sales
Advertising
Transportation
Shipping**

Technical

**Airplane Pilot
Air Traffic Controller
Chemical Technician
Computer Programmer
Engineering Technician**

Skilled Crafts and Trades

**Auto Mechanics
Drywall Finisher
Painter
Construction
Telephone Repairer**

Increasing dissemination efforts of existing resources is another tactic.

Another tactic to ensure that women are aware of all their options is to focus on expanding our services to women who do not have easy access to information because they are female. An example is the void of information directed to women on apprenticeships. Many women do not have female role models who have been apprentices, nor are they usually invited to information sharing sessions in schools, because the apprenticeship option is not a traditional one for women. As a result, most women have no knowledge about occupations in the trades nor an idea of how to train for them. Getting into an apprenticeship involves a series of planned steps that women need to know as they consider higher wage occupations.

The information that we disseminate must be directed to girls and women so that we can tear down the following barriers:

- sexism;
- a lack of information about the options available to women and the procedures for seriously exploring these occupational options; and
- the myth that some jobs are unfeminine and masculine and inappropriate for women.

The second tradition that holds women back is occupational segregation.

Some of this segregation can be minimized by:

- **recognizing, communicating, and challenging inequities and stereotypes;**
- **illustrating the economic realities of specific career options;**
- **pointing out stereotypes about women workers and the careers they choose;**
- **raising expectations; and**
- **monitoring activities.**

SUMMARY

Eliminating Occupational Segregation

The second tradition that holds women back is occupational segregation. Three out of four employed adult women work full-time. They participate heavily in occupations that are growing, but unfortunately these same occupations are also low paying and often dead-end type jobs in areas such as retail sales, service, clerical and factory/assembly occupations.

Once again, we can combat some of this segregation by providing appropriate information during career decision making. Specifically, this information needs to:

- **Recognize inequities in the labor force and explain to clients that past traditions do not need to limit their options. In doing so, we also need to talk about ways to cope with being a "pioneer" in a nontraditional career.**
- **Provide content that will open up career planning and allow the girls/women to explore both traditional and nontraditional options with direct information about the wages and benefits of all types of careers. The instruction should focus on economic realities of all career options.**
- **Make a concerted effort to point out stereotypes that exist about women workers and the careers they choose. Do not leave this to chance. Be sure that sex role stereotypes have not limited the options open to girls and women.**
- **Raise a client's/student's expectation about her rights and responsibilities in choosing a career.**
- **Be sure that all materials and assessment instruments are gender free and contain role models and examples that are both male and female.**
- **Monitor the occupational exploration activities that are completed on a computerized information delivery systems, such as a CIDS, and be sure to program in a component that directs the user to higher wage occupations that use the same skills and abilities as lower wage, traditional occupations.**

Summary

There are a number of trends that indicate women have and will continue to achieve greater equality of opportunity in the work place and greater freedom of choice. Important strides have been made through legislation, affirmative action and an increased consciousness of the contributions that women can make. Yet, there are still many barriers to women's full participation in the work place. There is a continuing need to examine life role choices.

In particular, we must help female clients consider a wide range of alternatives. We must make sure all those making a career decision have accurate information about women in the labor force, both present and projected. Encourage women to explore new and emerging occupations and expose them not only to information sources but to the process of gathering and disseminating information from all women in the work force.

SPECIFIC NEEDS OF WOMEN AND TEEN PARENTS

MODULE 8 BACKGROUND INFORMATION

Gender Equity

Gender Equity is:

- 1. Freedom from favoritism based on gender.**
- 2. Equal treatment that frees men and women to expand and develop according to their needs.**
- 3. A mutual trust as persons of both genders are unrestricted in their roles.**

Behaviors that Limit Gender Equity:

- 1. Gender Discrimination: Any action that intentionally limits or denies a person's or group of person's opportunities, privileges, roles, or rewards on the basis of gender.**
- 2. Gender Bias: Behaviors resulting from the assumption that one gender is superior to the other.**
- 3. Gender Role Stereotyping: Attributing behaviors, abilities, interests, values and roles to a person, or group of persons, on the basis of their gender.**

A Sample Model for Sex Equity in Career and Vocational Education: An Overview of the Wisconsin Model

An educational tool to promote gender equity has been developed by the State of Wisconsin. The goal of this model is to create a school environment that promotes educational equity and supports expanded choices for all. It addresses staff development as well as six other major strategies, from affirmative guidance to parent and community involvement. It is unique in that it places attention on student competencies throughout the entire program. (For more information on the model, contact Melissa Keyes at the Wisconsin Department of Public Instruction.)

There are five distinct phases in the model. They are:

- Phase I: Building Commitment and Direction**
- Phase II: Assessment**
- Phase III: Planning**
- Phase IV: Action**
- Phase V: Evaluation**

Gender equity is an important developmental guidance issue. To really understand the impact of gender equity problems, it is necessary to analyze career exploration as it occurs in the K-12 and postsecondary system, course enrollment patterns, recruitment and retention of students, counseling materials, tests, and other resources. For example, major discrepancies between males and females are often found in the classes they choose and the career counseling that they receive.

Following are some conditions which raise concerns about the equity issue:

- Women work for pay for the same reasons as men i.e., to meet financial responsibilities, to feel that they are contributing to society, and to achieve a sense of personal fulfillment.**

- Opportunities for women to meet financial responsibilities and achieve societal and personal goals have been limited by the fact that women have been concentrated in a relatively few, low-paying occupational fields in the labor force. By expanding career choices and emphasizing the reality of job futures, both males and females can plan work more realistically.
- Nationwide, only 13.1% of female students are enrolled in nontraditional vocational courses.

Counselors can promote equity in several ways:

- Use career information that expands occupational choices, such as materials that promote gender fairness and use bias free language. Display posters and other educational supplies that expand career ideas and illustrate both female and minority role models.
- Reprogram computer career information systems to prompt students to explore nontraditional or higher wage and benefit occupations.
- Recognize equity as an important issue that needs to be promoted through a concerted effort by all educators.
- Incorporate equity concepts and action into the K-12 and postsecondary guidance program.
- Provide support materials to staff to promote equitable career plans.
- When students are selecting courses and programs in which to enroll, encourage them to consider their options realistically. Remind them that:

most men and women will hold paying jobs for most of their lives,
most men and women work out of economic need, and
traditionally female jobs pay less than traditionally male jobs.

- Encourage students to select challenging course work that promotes their future academic and career development. Even though academic choices are available, many students do not enroll in the more difficult courses, such as math and science, which in turn, limits their choices in future coursework, educational opportunities and employment.
- Review interest inventories, assessment instruments and interpretation of results for gender bias.
- Be aware of legislation that promotes career development. There are federal and state laws that provide opportunities to women that might not be available without the legislation.

Legislation That Affects The Career Development of Women

The historical sequence of federal laws that have had an impact on the career development of women follows.

Equal Pay Act of 1963 - This is the first federal legislation that forbids sex discrimination in employment. Essentially, it provides for equal pay for equal work.

Title VI of the Civil Rights Act of 1964 - This section of the Civil Rights Act prohibits discrimination against students on the grounds of race, sex, color or national origin in programs receiving federal funds. Any institution or agency receiving federal funds is covered by Title VI, including most educational agencies.

Title VII of the Civil Rights Act of 1964 - This Act makes it illegal for private employers, labor unions, employment agencies, state and local governments, and employees of educational institutions to discriminate on the basis of race, color, religion, sex or national origin including:

recruitment, hiring, firing, layoff, recall
wages, conditions or privileges of employment
classification, assignment or promotion
use of facilities
apprenticeship training or retraining
application of referral procedures
sick leave and pay
overtime work and pay
insurance coverage
retirement privileges
printing, publishing, or circulating any advertisement relating to employment
promotion opportunities

Executive Order 11246 (1968) - This order prohibits employment discrimination based on sex, as well as on race, color, religion, or national origin by federal contractors or subcontractors. The order covers employers with a federal contract of more than \$10,000 and does not exempt specific kinds of employment or employees. This order also includes regulations that require hiring women on all construction craft jobs.

Revised Order No. 4 - This order requires contractors with 50 or more employees and a contract of \$50,000 or more to take affirmative action in the employment of minorities in job categories where they have been underutilized. The order requires similar goals and timetables for women as well as minorities.

Titles VII and VIII of the Public Health Services Act - These titles forbid schools and training programs in the health professions from discriminating against students on the basis of sex.

Title VII of the Civil Rights Act of 1964 - As amended by the Equal Employment Opportunity Act of 1972, this title prohibits discrimination in the employment of personnel on the basis of race, color, religion, national origin or sex. All institutions or agencies with 15 or more employees, including state and local governments and labor organizations, are covered under the Act.

Equal Pay Act of 1963, Amended by the Education Amendments of 1972 - This amendment prohibits sex discrimination in salaries and fringe benefits. It covers all employees of educational institutions, including professional, executive, and administrative positions.

Title IX of the Education Amendments Act - This Title of the Education Amendments Act prohibits discrimination on the basis of sex in any educational program or activity receiving federal financial assistance. It states that "No person in the United States shall on the basis of sex be excluded from participation in, be denied the benefits or be subjected to discrimination under any education program or activity receiving Federal financial assistance..."

Women's Educational Equity Act of 1974 - This Act was passed to provide educational equity for women in the United States. Under this Act, the Commissioner is authorized to give grants to or to enter into contracts with agencies, organizations or individuals for activities designed to carry out the purposes of the law at all levels of education. Activities included are the development, evaluation, and dissemination of curriculum, textbooks, and other materials concerning educational equity; preservice and inservice training for personnel with special emphasis on programs to provide education equity; research and development activities

designed to advance educational equity; and guidance and counseling designed to assure educational equity.

Section 504 of the 1973 Rehabilitation Act - Section 504 prohibits discrimination on the basis of a handicap in employment and programming by all recipients of federal financial assistance.

Age Discrimination in Employment Act of 1967 - The Age Discrimination in Employment Act of 1967 prohibits employment discrimination against persons between the ages of 40 and 70. It also prohibits mandatory retirement prior to the age of 70.

Age Discrimination Act of 1975 - This Act prohibits unreasonable discrimination on the basis of age in programs or activities receiving Federal financial assistance.

Title VII (section 789A) and Title VIII (Section 845) of the Public Health Service Act as Amended by the Comprehensive Health Manpower Training Act and the Nurse Training Amendment Act of 1971 - These titles state that institutions receiving federal funds for their health personnel training programs may not discriminate on the basis of sex in admissions or in employment practices related to employees working directly with applicants or students.

Carl D. Perkins Vocational and Applied Technology Education Act of 1990 - This Act and its predecessor, promotes sex equity in vocational education by creating an educational environment which helps students free themselves from limiting sex role expectation by insisting that all students can and should participate in all programs regardless of gender.

20 FACTS ON WOMEN WORKERS

U.S. Department of Labor, Women's Bureau
Fact Sheet No. 90-2, 1990

1. 56 million women 16 years of age and over were working or looking for work in 1989. Ten years earlier, about 44 million women were in the civilian labor force. Women accounted for more than three-fifths (62 percent) of the increase in the civilian labor force since 1979--11.8 million women compared with 7.1 million men.
2. In 1989, 69 percent of all women 18 to 64 years of age, or 53.1 million women, were in the civilian labor force compared with 88 percent of all men in this age group. Fifty-seven percent of all women 16 years of age and over were labor force participants. Participation was highest among women 35 to 44 years of age; 76 percent of women in this age group were in the labor force.
3. Most women workers are employed full-time. About 14 million or 26 percent of all women workers held part-time jobs (less than 35 hours a week) in 1989. Eighty-six percent of part-time women workers were employed on a voluntary basis. Just over two-thirds (68 percent) of all part-time workers were women.
4. The average woman worker 16 years of age between 1970-80 could expect to spend 29.3 years of her life in the labor force, compared with 39.1 years for a 16-year-old man. White and black women could expect to spend 29.6 and 27.8 years, respectively, of their lives in the labor force.
5. Women accounted for 45 percent of all persons in the civilian labor force in 1989. Among these, half of all black workers were women; 45 percent of all white workers were women; and 40 percent of all Hispanic origin workers were women.
6. The influx of women into the labor force during the 1970's and early 1980's has resulted in nearly equal labor force participation rates among black women, white women, and women of Hispanic origin. In 1989, 58.7 percent of black women (6.8 million), 57.2 percent of white women (47.4 million), and 53.5 percent of Hispanic origin women (3.7 million) were in the labor force. In 1986, for the first time, 50 percent of working age Hispanic origin women were in the labor force.
7. Women continue to constitute large proportions of workers in traditionally female occupations. In 1989 women represented 80 percent of all administrative support (including clerical) workers, but only about 9 percent of all precision production, craft, and repair workers. Women were 68 percent of all retail and personal services sales workers but only 40 percent of all executives, managers, and administrators. There were 18,983 women working as apprentices at the end of 1989, representing 7.2 percent of all apprentices.
8. The unemployment rate for all women in the labor force was 5.4 percent in 1989; for women 20 years of age and over, it was 4.7 percent. Despite reduced population, teenagers, especially blacks and Hispanics, experienced very high unemployment rates.

20 FACTS ON WOMEN WORKERS (page two)

1989 Unemployment Rates

<i>Teenagers (16-19 years)</i>	<i>Rate</i>	<i>Adults (20 years of age and over)</i>	<i>Rate</i>
Black women	33.0	Black women	9.8
Black men	31.9	Black men	10.0
Hispanic women	18.2	Hispanic women	8.0
Hispanic men	20.2	Hispanic men	6.6
White women	11.5	White women	4.0
White men	13.7	White men	3.9

Source: U.S. Department of Labor: Bureau of Labor Statistics, Employment and Earnings, January 1990.

9. Most women work because of economic need. The majority of women in the labor force (58.5 percent) in March 1988 were either single (25 percent), divorced (12 percent), widowed (4 percent), separated (4 percent), or had husbands whose 1987 earnings were less than \$15,000 (13.5 percent).
10. Wives in the labor force contribute substantially to family income. In March 1988, 56 percent of married couple families had wives in the paid labor force as compared with 40 percent in March 1972. In 1988 the median income of married couple families with the wife in the paid labor force was \$42,709 compared with \$27,220 for those without the wife in the paid labor force. Women who maintain families have the lowest median family income (\$15,346).
11. The more education a woman has, the greater the likelihood she will seek employment. Among women 25 to 54 years of age with 4 or more years of college in March 1988, 81 percent were in the labor force. Among women of the same age group with less than 4 years of high school, only 51 percent were in the labor force.
12. Median earnings for women who worked year round, full time in 1988 was \$17,606. The comparable figure for men was \$26,656. White women earned \$17,819, black women earned \$16,538, and women of Hispanic origin earned \$14,845.

1988 Median Earnings: Year-Round, Full-Time Workers

<i>All women</i>	\$17,606	<i>All men</i>	\$26,656
White women	17,819	White men	27,228
Black women	16,538	Black men	20,371
Hispanic women	14,845	Hispanic men	17,851

Source: U.S. Department of Commerce: Bureau of the Census, Money Income and Poverty Status of Families and Persons in the United States: 1988 (Advance data from the March 1989 Current Population Survey).

13. The median income of female high school graduates (with no college) working year round, full time in 1988 was somewhat lower than that of fully employed men who had completed less than 8 years of elementary school--\$16,810 and \$17,190, respectively. In 1988, women with 4 years of college education had a median income below that of men who had only a high school diploma--\$25,187 and \$26,045, respectively.

20 FACTS ON WOMEN WORKERS (page three)

14. Women are still heavily concentrated in low paying jobs. Thus, the average woman earns 70 cents for every dollar earned by the average man when 1989 median weekly earnings of full-time wage and salary workers are compared. The five most lucrative occupations for women are: lawyers; engineers; mathematical and computer scientists; physicians; and operations and systems researchers and analysts (1).
15. More women are choosing to be entrepreneurs--starting their own businesses. The number of women-owned businesses in the United States rose from 2.5 million in 1980 to 4.1 million in 1986. Women's share of all nonfarm sole proprietorships rose from nearly 26 percent in 1980 to 30 percent in 1986.
16. The 33 million women with children under the age of 18 had a labor force participation rate of 65.0 percent in March 1988. Fifty-six percent or 8.9 million mothers with preschoolers (children under age 6) were labor force participants in March 1988.
17. Of the 58 million children under age 18 in the United States in March 1988, nearly 33 million (56.2 percent) had working mothers. About 9.5 million children under age 6 (47.5 percent of 19.8 million) had working mothers.
18. In 1988 women represented 62 percent of all persons 16 years old and over with poverty level incomes. The poverty rate of all families maintained by women with no husband present was 33.5 percent; for those families maintained by women with children under age 18, the poverty rate was 44.7 percent. There were 3.6 million families maintained by women (no husband present) that had incomes below the poverty level.
19. Women maintained 53 percent of all poor families in 1988. They maintained 76 percent of poor black families, about 48 percent of poor Hispanic origin families, and 44 percent of poor white families.
20. Women are maintaining an increasing proportion of all families (16.9 percent in 1989). In black families, women maintained 45 percent; in Hispanic origin families, 23 percent; and in white families, 13 percent. Nearly two-fifths (39 percent) of the 14 million increase in family households between 1969 and 1989 was attributable to families maintained by women. In contrast, between 1940 and 1960, families maintained by women accounted for only 8 percent of the increase in the number of families.

Families Maintained by Women, 1989

	<i>Number of Families</i>	<i>Percent of Families</i>	<i>Median Weekly Earnings</i>
Total (2)	10,997,000	16.9	\$347
White	7,425,000	13.3	363
Black	3,254,000	44.6	303
Hispanic	1,095,000	22.8	337

Source: U.S. Department of Labor: Bureau of Labor Statistics, Employment and Earnings, January 1988.

(1) Excludes any occupation where the female base is less than 50,000.

(2) Components will not sum to total because data for the "other races" group are not presented separately and Hispanics are included in both the white and black population groups.

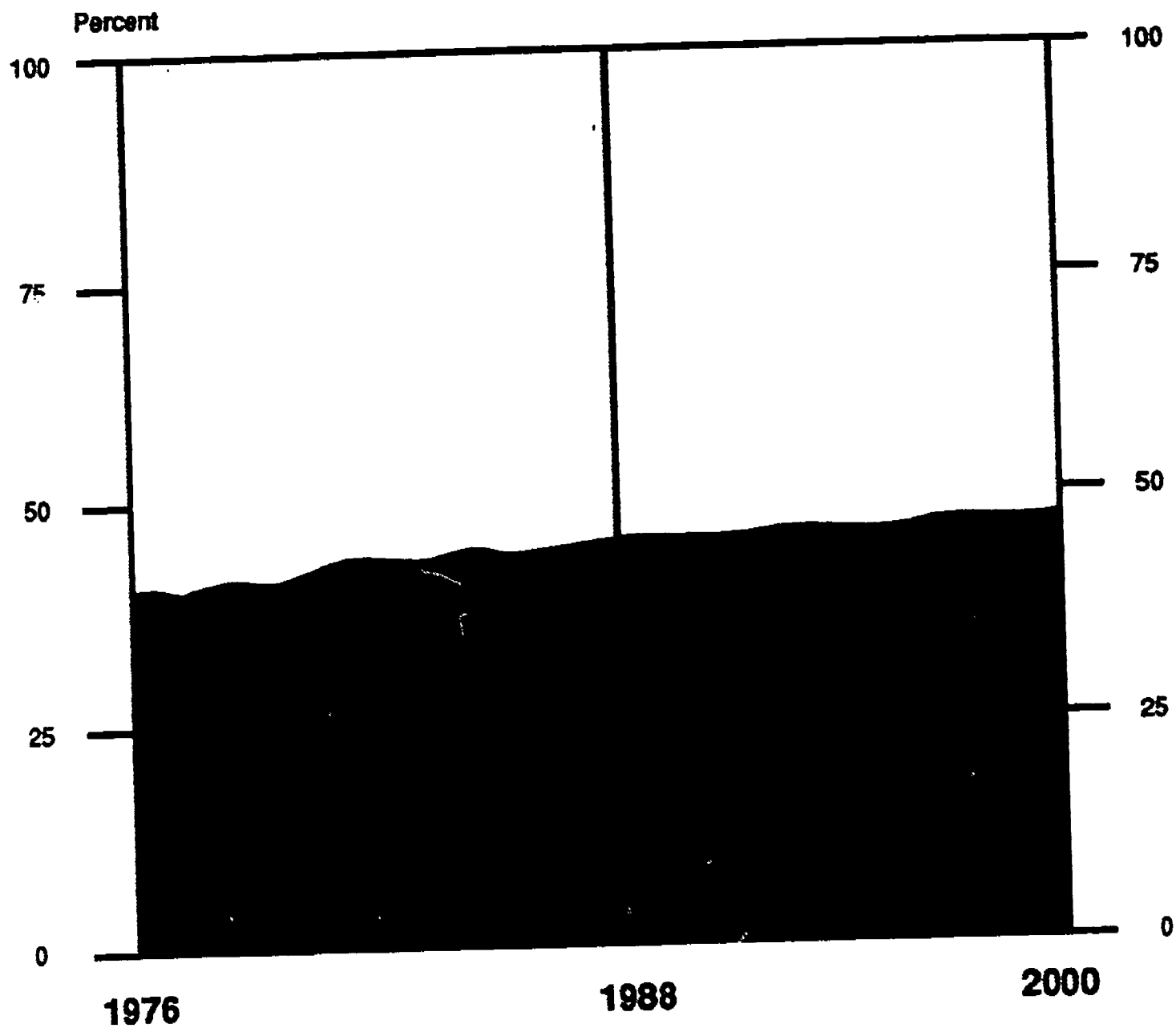
Specific Needs of Women and Teen Parents
Module 8
References

- Brown, D., & Brooks, L. (1991).** *Career counseling techniques*. Needham Heights, MA: Allyn and Bacon.
- Hansen, L. S. (1978).** Promoting female growth through a career development curriculum. In L. S. Hansen and R. S. Ropoza (eds.). *Career development and counseling women*. Springfield, IL: Charles C. Thomas.
- Lindner, F.** *Career survival kit for teen educational employment*.
- Nash, M. A. (1991).** *The changing roles of men and women: Educating for equity in the work place*. Available from the Vocational Studies Center, 1025 West Johnson Street, Madison, WI 53706.

Specific Needs of Women and Teen Parents
Module 8
Resources

- American Psychological Association. (1985). Report of the task force on sex bias and sex-role stereotyping in psychotherapeutic practice. *American Psychologist*, 30, 1169-1175.
- Astin, H. S. (1984). The meaning of work in women's lives: A sociopsychological model of career choice and work behavior. *The Counseling Psychologist*, 12, 117-126.
- Bem, S. L. (1977). Beyond androgyny: Some presumptuous prescriptions for a liberated sexual identity. In C. G. Carney & S. L. McMahon (eds.), *Exploring Contemporary Male / Female Roles: A Facilitator's Guide*, 209-29. San Diego: University Associates.
- Berger, M., & Wright, L. (1980). Divided allegiance: Men, work, and family life. In T.M. Skovholt, P.G. Schauble, & R. Davis (eds.), *Counseling Men*, 157-63. Monterey, CA: Brooks/Cole.
- Betz, N. E., & Fitzgerald, L. F. (1987). *The Career Psychology of Women*. Orlando, FL: Academic Press.
- Birk, J. M., Tanney, M. F., & Cooper, J. F. (1979). A case of blurred vision: Stereotyping in career information illustrations. *Journal of Vocational Behavior*, 15, 247-57.
- Brooks, L. (1988). Encouraging women's motivation for non-traditional career and lifestyle options: A model for assessment and intervention. *Journal of Career Development*, 4, 223-41.
- Brooks, L. & Haring-Hidore, M. (1988). Career interventions with women. *Journal of Career Development*, 14(4): (entire issue).
- Broverman, I. K., Broverman, D. M., Clarkson, F. E., Rosenkrantz, P. S., & Vogel, S. R. (1970). Sex-role stereotypes and clinical judgments of mental health. *Journal of Consulting and Clinical Psychology*, 34, 1-7.
- Brown, L. S. (1990). Taking account of gender in the clinical assessment interview. *Professional Psychology: Research and Practice*, 21, 12-17.
- Carter, B. (1989). Gender sensitive therapy: Moving from theory to practice. *Family Therapy Networker*, 13, 57-60.
- Coombs, L. C. (1979). The measurement of commitment to work. *Journal of Population*, 2, 203-23.
- Diamond, E. E. (ed.) (1975). *Issues of sex bias and sex fairness in career interest measurement*. Washington, DC: National Institute of Education.
- DiBenedetto, B., & Tittle, C. K. (1990). Gender and adult roles: Role commitment of women and men in a job family trade-off context. *Journal of Counseling Psychology*, 37, 41-8.
- Fitzgerald, L. F. (1986). Career counseling women: Principles, procedure, and problems. In Z.B. Leibowitz & H. D. Lea (eds.) *Adult Career Development: Concepts, Issues and Practices*, 116-31. Washington, DC: National Career Development Association.
- Fitzgerald, L. F. (1980). Nontraditional occupations: Not for women only. *Journal of Counseling Psychology*, 27, 252-59.
- Gilbert, L. H. (1987). Dual-career families in perspective. *The Counseling Psychologist*, 15, (1): (entire issue).
- Good, G. E., Gilbert, L. A., & Scher, M. (1990). Gender aware therapy: A synthesis of feminist therapy and knowledge about gender. *Journal of Counseling and Development*, 68, 376-80.
- Hansen, L. S. (1984). Interrelationships of gender and career. In N.C. Gysbers and Associates, *Designing Careers*, 216-47. San Francisco: Jossey-Bass.
- Mintz, L. B., & O'Neill, J. M. (1990). Gender roles, sex, and the process of psychotherapy: Many questions and few answers. *Journal of Counseling and Development*, 67, 381-87.
- Osipow, S. H. (1982). Research in career counseling: An analysis of issues and problems. *The Counseling Psychologist*, 282, 77-90.
- Thomas, A. H., & Stewart, N. R. (1971). Counselor response to female clients with deviate and conforming career goals. *Journal of Counseling Psychology*, 18, 352-57.
- Tittle, C. K., & Zytowski, D. G. (eds.) (1978). *Sex-fair Interest Measurement: Research and Implications*. Washington, DC: National Institute of Education.

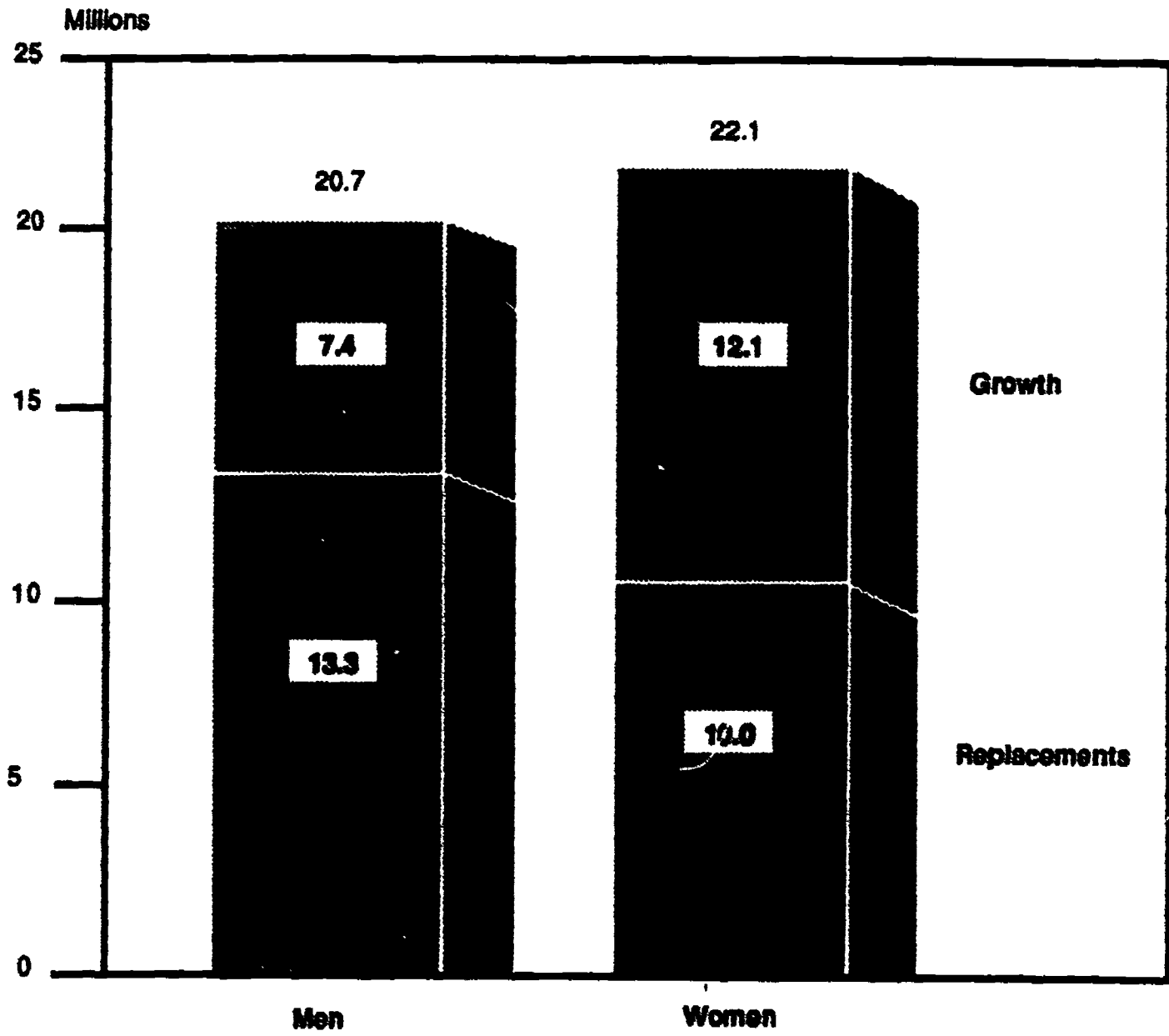
Women's share of labor force is growing in the U.S.



SOURCE: Bureau of Labor Statistics

Figure 8.1

U.S. Labor force entrants by sex, 1988-2000



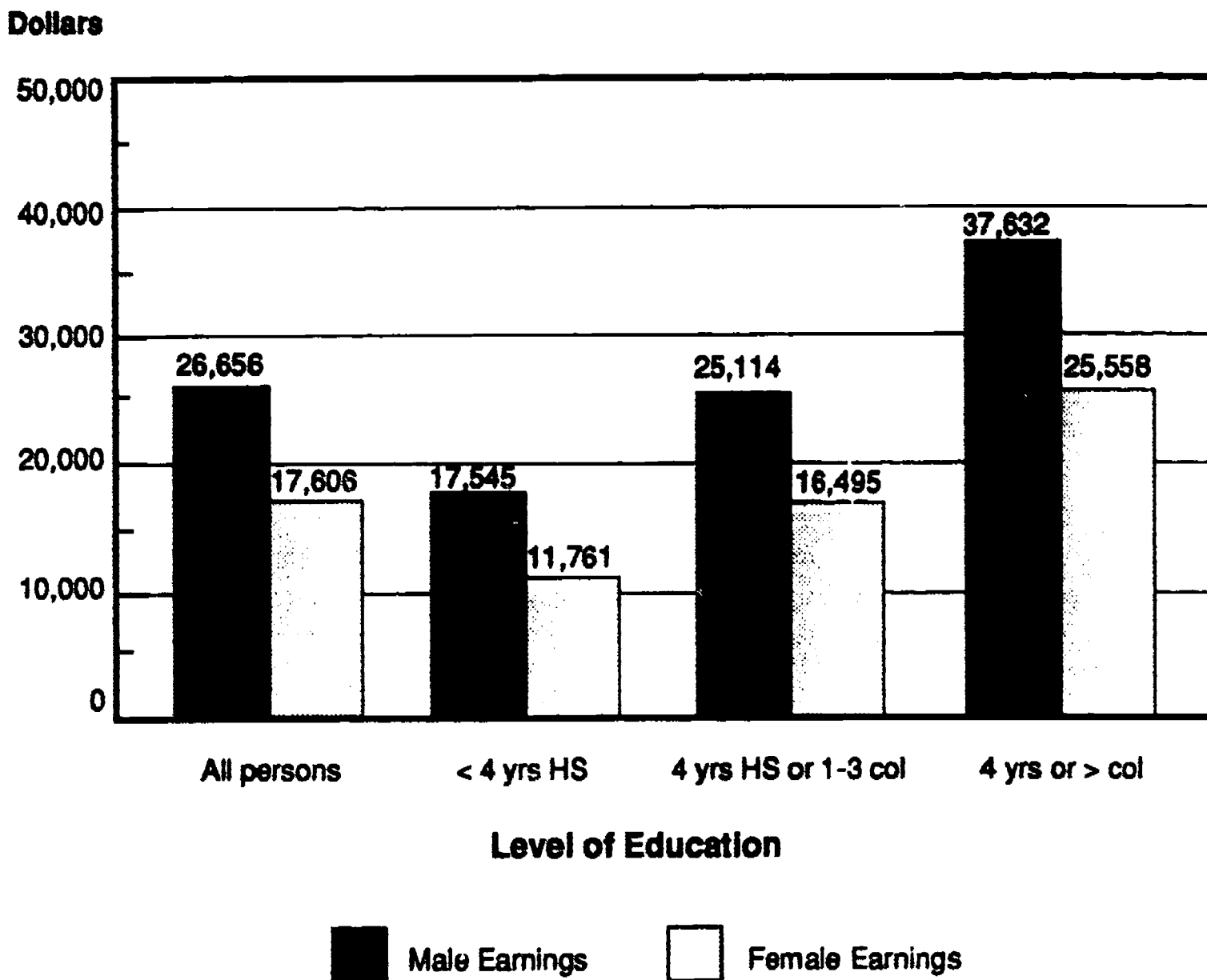
SOURCE: Bureau of Labor Statistics

Figure 8.2

Educational Attainment and Earnings

Male versus Female

Year round, full time workers, March 1989



Source: U.S. Bureau of the Census

Figure 8.3

**Percent Distribution and Median Earnings
of Males and Females aged 35-54 by Occupation
Year round Full time Workers in the U.S.**

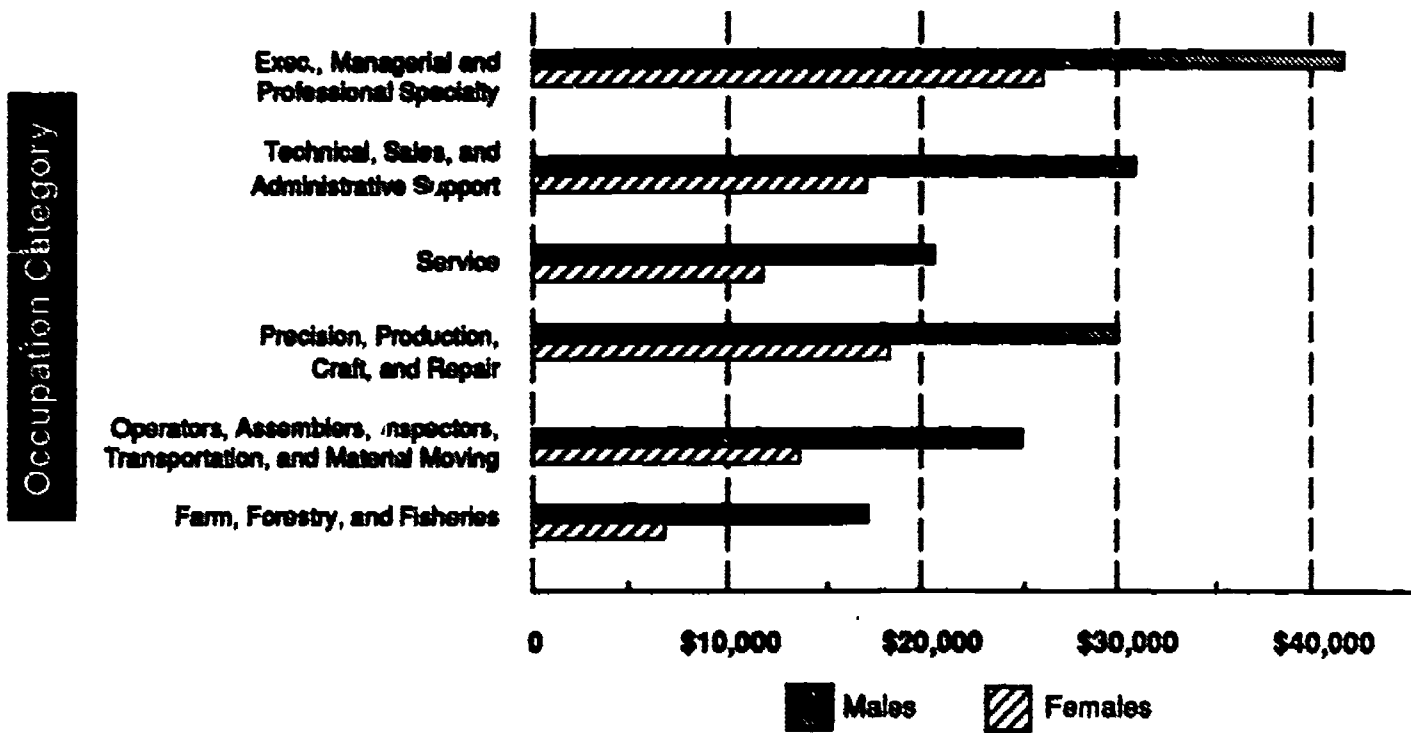
Occupational Category

	<i>Percent Male</i>	<i>Percent Female</i>	<i>Median Earnings Male</i>	<i>Median Earnings Female</i>
Total	46.6	46.3	31,435	19,599
Exec., Managerial and Professional Specialty	16.2	16.0	41,321	26,601
Technical, Sales, and Administrative Support	9.1	19.1	31,021	17,917
Service	3.1	5.1	21,612	11,524
Precision, Production, Craft, and Repair	9.2	1.4	29,696	18,742
Operators, Assemblers, Inspectors, Transportation, and Material Moving	7.7	4.5	25,031	13,906
Farm, Forestry, and Fisheries	1.2	.2	17,112	7,188

U.S. Bureau of the Census, "Money Income and Poverty in the US: 1988:
(Advanced data from Mar. 89) CPRI Series P, 89 No. 105.

Figure 8.4

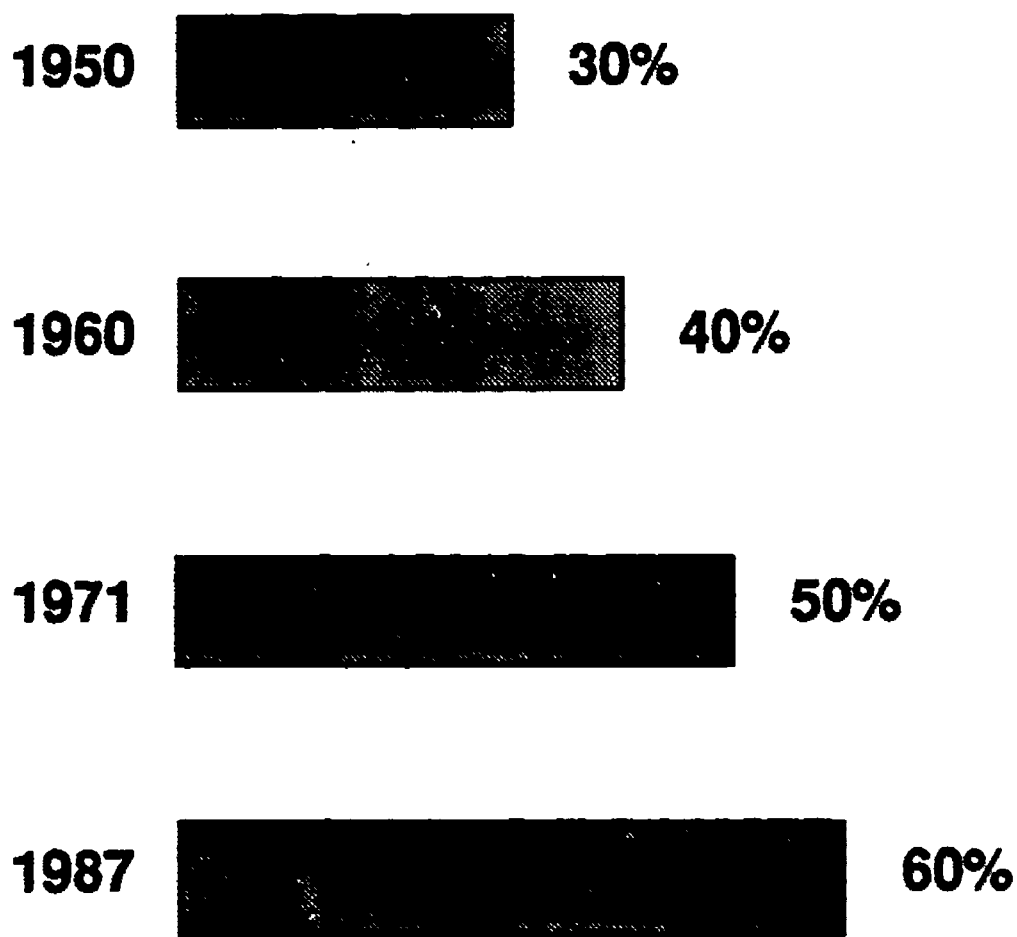
**Median Earnings of Males and Females aged 35-54
by Occupation**
Year round Full time Workers in the U.S.



U.S. Bureau of the Census, "Money Income and Poverty in the US: 1988;
(Advanced data from Mar. 89) CPR Series P, 80 No. 198.

Figure 8.5

Percent of families in the U.S. with children at home in which both spouses work outside the home



Source: U.S. Census Bureau

Figure 8.6

Module 9

Specific Needs of Persons with Disabilities



National Career Development Guidelines-Counselor Competencies

Knowledge of decision making and transition models.

Skills to assist individuals in setting goals and identifying strategies for reaching goals.

Knowledge of basic concepts related to career counseling, such as career development, career progressions, and career patterns.

Skills to use career development resources and techniques designed for specific groups.

Knowledge of unique career planning needs of minorities, women, persons with disabilities, and older persons.

Knowledge of alternative approaches to career planning needs for individuals with specific needs.

SPECIFIC NEEDS OF PERSONS WITH DISABILITIES

MODULE 9

Outline Topic	Delivery Methods	Trainer's Notes
Introduction	Lecturette p. 1	
What Is A Disability?	Lecturette pp. 1-2	
Career Counseling Persons With Disabilities	Lecturette pp. 2-5 <i>Figure 9.1</i> <i>U.S. Secondary School Special Education Students, 1987</i>	
Special Counseling Considerations	Lecturette pp. 5-7	
Making the School to Work Transition	Lecturette pp. 7-10 <i>Figure 9.2</i> <i>Life-Centered Career Education Curriculum</i>	
The Impact of Federal Legislation	Lecturette pp. 11-15	
The Train-Place-Train Transition Process	Lecturette pp. 15-18 <i>Figure 9.3</i> <i>The Train-Place-Train Model</i>	
The Americans with Disabilities Act of 1990	Lecturette pp. 19-22	
Summary	Lecturette pp. 22-23	
Activities	10, 11, 17, 20, 22, 28, 29	

SPECIFIC NEEDS OF PERSONS WITH DISABILITIES

MODULE 9

INTRODUCTION

The process of enabling persons with disabilities to enter the mainstream of life may be long and arduous, but the rewards are great.

WHAT IS A DISABILITY?

When referring to persons with disabilities, it is important to emphasize their abilities, not limitations.

"Today, America welcomes into the mainstream of life people with disabilities. Let the shameful wall of exclusion finally come tumbling down." President George Bush upon the signing of the Americans with Disabilities Act, July 25, 1990.

Introduction

Federal legislation enacted during the past two decades has aimed at ending discrimination against persons with disabilities in education, employment and public services. The process of enabling persons with disabilities to enter the mainstream of life may be a long and sometimes arduous one, but the rewards to our society are enormous. Consider the contributions of just a few persons with disabilities: Helen Keller, Franklin Delano Roosevelt, Sarah Bernhardt, Thomas Edison, Harriet Tubman, Vincent Van Gogh, Ludwig von Beethoven and Abraham Lincoln.

These are some of the people with disabilities whose lives have enriched our own. They all had different physical or mental conditions; some of their disabilities were more challenging than others. Despite limitations, these distinguished people developed their artistic talents, scientific interests and leadership abilities. There are people with disabilities today who may share ^{at} potential; our society cannot afford to shut them out. This module will discuss the career counseling needs of persons with disabilities, review some of the federal legislation that supports their career development, and describe the components of a school-to-work transition program.

What Is a Disability?

What is a disability? It is important to remember that the term "disability" has a broad interpretation. Title I of the Americans with Disabilities Act defines "disability" as a physical or mental impairment that substantially limits one or more of the major life activities of an individual, a record of such an impairment, or being regarded as having such an impairment. Therefore, people with disabilities cannot be strictly defined or categorized; they are all individuals.

How should we refer to persons with disabilities? The cardinal rule is to emphasize their abilities, not limitations. In the past, some writers have made a distinction between the terms "disabled" and "handicapped." More recently, there has been less use of the term "handicapped," because many people feel that it has a negative connotation, and a wider acceptance of the term "disabled." The Research and Training Center on Independent Living has published

CAREER COUNSELING PERSONS WITH DISABILITIES

A "can do" attitude needs to direct the preparation of individuals with disabilities for the world of work.

Serving students and clients with disabilities needs to be a concern of all career counselors.

a widely endorsed pamphlet titled, *Guidelines for Reporting and Writing About People with Disabilities* (1990), that discusses the appropriate terminology. The highly preferred language is that which upholds the dignity of the person. For our purposes, we will use the phrase "persons with disabilities," to describe those individuals who have physical, mental, emotional, learning, hearing or visual disabilities that limit or interfere with their ability to achieve in school or work settings.

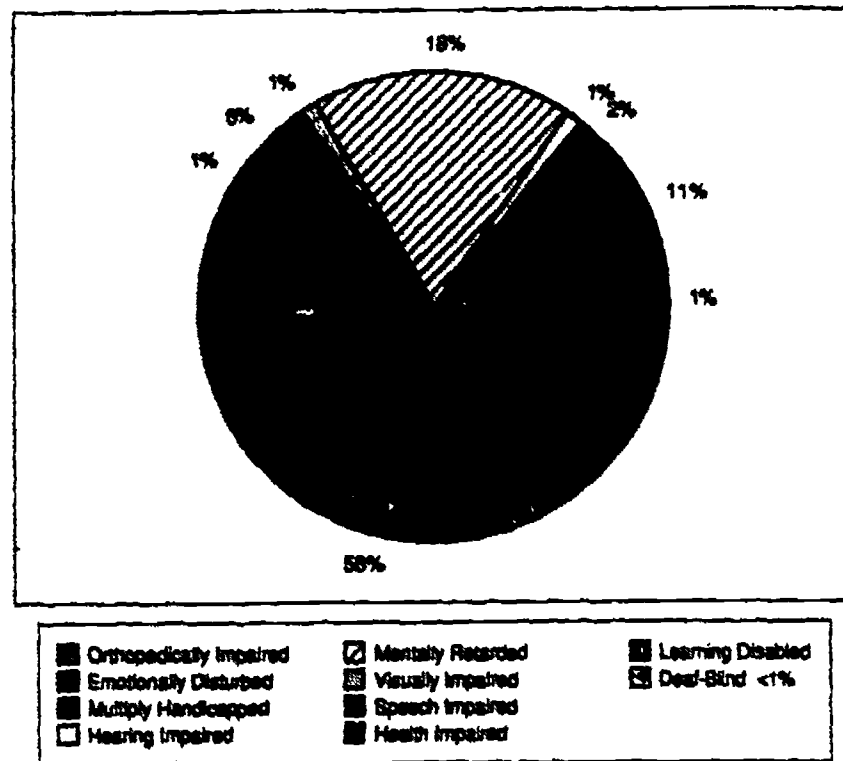
Career Counseling Persons with Disabilities

The career counselor can play a key role in helping persons with disabilities enter the mainstream of life. In order to do so, the individual's disabilities must be recognized by both parties, counselor and client. Persons with disabilities prefer that their conditions be dealt with honestly and directly. Nevertheless, the focus of counseling should always be on the abilities of the client, not the disabilities. A positive outlook is paramount; counselor and client must have a "can do" attitude when faced with the challenge of preparing individuals with disabilities for the world of work, placing them in the appropriate positions, and documenting their strengths and weaknesses on the job.

Is serving students with disabilities a concern for educators and career counselors? The answer is a resounding YES. As the legal interpretations of a "disability" are expanded, more students fall under that broad umbrella. The extension of federal legislation to serve persons with disabilities has had a major impact on our schools and the work place. Educational budgets have had to reflect the costs of hiring personnel and the establishment of programs to serve persons with disabilities.

Today, students with disabling conditions comprise approximately 10% of our school-age population. Ninety percent of these students are diagnosed as having learning, speech, mental and emotional disabilities.

U.S. Secondary School Special Education Students, 1987



National Longitudinal Transition Study of Special Education Students, 1987
SPD International, Menlo Park, CA

Figure 9.1

In addition to the expanded legal interpretations of the definition of a "disability," the number of students with disabilities has increased; this is partially due to improved and more efficient educational screening procedures. According to Fagan and Jenkins (1989), the total number of students served increased approximately 18% during the 1980's. This trend will continue as services for persons with disabilities are offered from infancy to retirement age in the schools, work place and community.

Persons with disabilities often have been isolated. Therefore they have a greater need for information to become aware of all options.

The increased number of students with disabilities requires that counselors have skills in using labor market information, such as occupational projections, to meet their specific needs in career development. Because persons with disabilities often have been isolated from society, they have a great need for career information and counseling. Moreover, it is especially critical that students with disabilities be well equipped for the world of work in order that they may live as independently as possible as adults.

Many of these students move from high school graduation to chronic unemployment.

Unfortunately, many students with disabilities are not receiving the preparation they need. Only 50% of the students with disabilities graduated from high school in 1985 (Fagan and Jenkins, 1989). Those who do graduate often face personal, physical and academic barriers to finding work or pursuing postsecondary education or training. As a result of these obstacles, many students with disabilities move from school to chronic unemployment. In a 1986 nationwide Harris telephone survey of 1000 persons with disabilities between the ages of 16 and 64, it was found that 66% were unemployed.

There are many barriers to better paying jobs.

Providing labor market information can be part of the solution.

Individual skills, strengths and abilities need to be emphasized. Other factors, such as the physical accommodations, can be worked out with an employer.

Information about the local labor market develops an awareness of opportunities.

There are many reasons why it is hard for persons with disabilities to find work, especially in better paying jobs. Many do not have an employment history, nor have they participated in work experience programs. Therefore, they lack marketable skills. In many cases, they are not aware of the careers that are open to them due to limited educational and social experiences. Because of this isolation, they have not been exposed to successful role models with similar conditions. Due to a lack of information, many individuals with disabilities are unaware of the physical modifications that are available to them that could enhance their performance in the work place. Many need to develop confidence in themselves; they have lived in a protected environment wherein decisions have been made for them. As a result, they need to develop independent living skills. In addition, persons with disabilities have faced physical barriers to employment and discrimination in hiring practices.

The directions for career development facilitators are quite clear. Students with disabilities need:

- an assessment of their abilities and limitations;
- an individualized educational program to develop their strengths;
- career information, education and exploration;
- supervised work experience programs or on-the-job training;
- independent living skills;
- a knowledge of the federal and state legislation affecting them; and
- effective school to work transition services.

In planning their careers, persons with disabilities should be encouraged to seriously consider their aptitudes and skills. Many students may be unaware of the abilities they possess; these skills need to be emphasized in counseling. They need to be assured that their attributes can be assets to them. Educational and training programs can develop these abilities. Students with disabilities should be aware that when individuals possess the right qualifications, other factors, such as the physical accommodations to do the job, may be worked out. They need to realize that aptitudes, skills and positive attitudes are the foremost qualifications needed for any job.

When counseling clients with disabilities, it is important for the counselor and client to be aware of labor market information, especially as it pertains to the local job picture. Because they have often led a more sheltered life, persons with disabilities have not had opportunities to observe other people in their work roles. Therefore, a concerted effort must be made by the counselor to communicate information that may be considered common knowledge. Persons with disabilities have an even greater need for up-to-date, realistic and accurate career information, such as that provided by a Career Information Delivery System (CIDS), in order to make their occupational plans.

Relocation is an important consideration.

Career counseling needs to focus on a number of issues. The National Career Development Guidelines can help structure the services and support needed.

SPECIAL COUNSELING CONSIDERATIONS

Local information is particularly important because persons with disabilities relocate less often. For example, in some regional industries, the need for workers with a particular skill may be increasing, while other jobs may be dwindling. This information is critical to the person with disabilities. In choosing a career, counselors may have to advise their clients with disabilities that they would have to relocate to find work in a particular occupation. This is an important consideration; a move is always difficult, but it may be even more so for persons who depend on support services, medical care, accessible housing and transportation.

Adult adjustment must be a primary objective in career planning for youth with disabilities. In secondary schools, federal law mandates that transition services to work or postsecondary education be a component of the student's Individualized Education Program (IEP), in order to develop the skills necessary for participation in the work place. In developing IEP's for students with disabilities, the competencies in National Career Development Guidelines should be used.

At the postsecondary level, some institutions work cooperatively with the high schools to offer a transitional program that provides individualized physical, academic and counseling services to the student with disabilities. Wherever the counseling takes place, its focus should include exploring and making decisions about the client's:

- attitudes toward work;
- personal interests;
- financial needs: salary, job location, employee benefits, etc.;
- abilities, aptitudes and skills;
- possible jobs, occupations, related duties and tasks;
- career goals and plans;
- education/training opportunities available and accessible;
- potential job/equipment modifications and adaptations;
- ability to use public/private transportation and communication systems;
- job seeking and job keeping skills; and
- working with labor unions and professional organizations.

(Dougherty, Novak and Reschke, 1986)

Special Counseling Considerations

When counseling persons with disabilities who are planning, or making a transition to work or postsecondary education, the counselor needs to accumulate as much personal information as possible to assist persons in determining or choosing optimal work environments. What adaptations must persons with disabilities be able to make in certain work environments? What adjustments must be made within the work place to accommodate persons with disabilities?

The attitudes clients have towards their disabilities also plays a role in career decision making.

Family relations and personal self-image also play an important role.

Personal problems often hinder development of post high school plans.

Coping skills may need to be developed and reinforced.

Independent living skills need to be part of career development programs.

Like the rest of the population, some people with disabilities are more flexible than others. Many individuals who are disabled seem to adapt to their condition, while others may, quite understandably, have some anger or bitterness. Therefore, the attitudes that people have toward their disability and the circumstances surrounding it are of concern to counselors.

Family relations and personal self-image also play an important role in counseling. Some persons with disabilities may be part of closely knit family structures and receive support from friends and relatives, while others may lack these underpinnings. Those who have lived under undesirable environmental conditions may have a poor self-concept and limited self-esteem because of their upbringing. As a result, many persons with disabilities need to work on developing their social skills.

When personal problems are coupled with unsupportive educational programs, students often become discouraged and leave school. According to Fagan and Jenkins (1989), almost one-half (44%) of the students with disabilities dropped out in 1985. This is unfortunate, because research has shown that students with disabilities who participated in work experience programs in school were more likely to stay in school and find employment after graduation (SRI International, 1987).

Therefore, one of the first tasks of the counselor is to help the person with disabilities develop a positive mental attitudes toward himself/herself, others, and his/her potential in school and the work place. The counselor can better serve a client by developing an understanding of the nature of the disability. For example, if the client is hearing impaired, the counselor must acknowledge the disability and its effects, so that both parties can work around it by planning adjustments to the school or work environment.

In some cases, the abilities of clients may have to be developed or strongly reinforced. Some persons with disabilities have been isolated from society; they may have been over-protected by well-intentioned family members. Until recent legislation, persons with disabilities have been restricted from traveling and fully participating in society, due to a lack of public accommodations. As a result, some individuals with disabilities have had little practice in adjusting to strange locations and unfamiliar people or conditions. Therefore, their education should focus on these areas in order to develop the necessary coping skills.

Independent living skills need to be part of career development programs. Individuals with disabilities may require assistance in learning such tasks as personal care and shopping, using public transportation systems and effectively communicating their needs. The development of these skills is critical in providing employment for persons with disabilities. According to many employers, good work habits and social skills were very important, but independent living abilities were also critical in making a successful transition to the work place.

Major areas of career planning include:

Career Information

Learning Strategies

Prevocational Skills

Social Skills

MAKING THE SCHOOL TO WORK TRANSITION

The IDEA defines transition services.

The transition period includes high school, post secondary education or training, and the first years of employment.

Career counseling is one of the ways to bridge the gap between school and the work place.

Harrington (1982) states that research suggests four major areas that should be included in the career development plans of persons with disabilities:

- **career information, such as an understanding of the roles, responsibilities and the realities of the work place;**
- **learning strategies to enable individuals to master the information they need to know;**
- **prevocational skills, such as responsibility, initiative, punctuality, care of materials and task completion; and**
- **social skills, with an emphasis on job interviewing, accepting and providing criticism, and relating to authority figures.**

Making the School to Work Transition

One of the most important aspects of the career planning process, the transition from school to work or postsecondary education or training, has often been ignored. The term "transition" has been defined as "...an outcome-oriented process encompassing a broad array of services and experiences that lead to employment," (Will, 1984). The importance of these services has been underscored by the Individuals with Disabilities Education Act of 1990 (IDEA), which mandates that transitional planning be done for all students with disabilities. The IDEA defines transition services as:

"a coordinated set of activities for a student, designed within an outcome-oriented process, which promotes movement from school to postschool activities, including postsecondary education, vocational training, integrated employment (including supported employment), continuing and adult education, adult services, independent living, or community participation. The coordinated set of activities shall be based upon the individual student's needs, taking into account the student's preferences and interests, and shall include instruction, community experiences, the development of employment and other postschool adult living objectives, and when appropriate, acquisition of daily living skills and functional vocational evaluation." Sec. 602(a)(19).

The educational process begins with career awareness at the elementary level, career exploration in the middle school and career preparation from grades nine to twelve. The transition period includes high school, postsecondary education or training, and the first years of employment. The transition concept involves a cooperative agreement among the student, the family, the school, the community and the employer. All of these groups work together to facilitate the transition from school to the work place or postsecondary institution.

The need for transition services for students with disabilities has been illustrated in the unemployment statistics. It is clear that most students with disabilities have a great deal of difficulty finding work that can enable them to become independent. Persons with disabilities who are unemployed have been unable to bridge the gap between school and the work place.

Career development facilitators are part of the network that assists students in making the transition. Recent literature to help counselors with transition planning for students with disabilities has illustrated the following points to consider:

- Due to a lack of information, persons with disabilities do not always perceive the same possibilities or obstacles that others may see for them. Therefore, their goals may need to be established and clarified. Labor market information will enhance this process.
- Adolescence is a difficult period of life when children want to be accepted by their peers. It can be further complicated by a disability that may set them apart from others.
- Transition involves preparation for a change in environment, from school to work, and a change in roles, from student to employee.
- Transition services must focus on enabling self-determination, independence, and participation in society.
(Humes, Szymanski & Hohenshil, 1989).

Ingredients of a successful school-to-work transition are:

- career information
- an effective school
- absence of tracking
- hands on experiences
- business and community involvement
- performance standards.

Competencies of the Life Centered Career Education Curriculum should direct transition programs. Career and labor market information is a critical component of the curriculum.

What are the ingredients in a successful school-to-work transition program? The following components have been suggested:

- career information and career guidance programs are consolidated;
- counselors have established systems for career information, delivery, placement and a method of teacher/business exchange;
- an effective school that has a strong leader, clear goals and a safe climate for learning is critical;
- a vocational and academic secondary to postsecondary program, with no tracking, that includes science and technology courses with hands-on experiences and on-the-job training must be included;
- the school needs to maintain extensive business and community involvement; and
- the school operates with performance standards.
(*Vocational Education Weekly*, 1991)

Many schools throughout the United States have adopted the Life Centered Career Education Curriculum, which was first published by the Council for Exceptional Children in 1978. This curriculum prepares students to make the transition from school to the work place (Brolin and Gysbers, 1989). Its career areas and competencies are as follows:

Curriculum Areas: Occupational Guidance and Preparation Competencies:

- knowing and exploring occupational possibilities,
- selecting and planning occupational choices,
- exhibiting appropriate work habits and behavior,

- seeking, securing, and maintaining employment,
- exhibiting sufficient physical-manual skills, and
- obtaining a specific occupational skills.

Life-Centered Career Education (LCCe) Curriculum

Competency: Subcompetency: The student will be able to:

Curriculum Area	Assessing & Exploring Occupational Possibilities	Identify occupational aspects of each	List occupational capabilities & testing information	Identify personal interests through self	Identify suitable occupations through self	Classify jobs into occupational categories	Investigate/analyze potential & testing opportunities	
	Examining & Planning Occupational Choices	Identify suitable occupational choices	Identify occupational opportunities & job	Identify occupational opportunities	Identify relevant occupational interests	Identify relevant occupational needs		
Occupational Guidance and Preparation	Establishing Appropriate Work Habits & Behaviors	Follow directions & observe responses	Recognize importance of persistence & punctuality	Recognize/understand expectations	Develop/apply knowledge of occupational tasks	Work with others	Meet demands for quality work	Work in satisfactory way
	Seeking, Securing & Accepting Employment	Search for a job	Apply for a job	Interview for a job	Identify/prepare occupational information	Develop/apply knowledge of occupational standards	Identify/prepare responses to employer needs	
	Establishing Sufficient Physical Manual Skills	Communicate/interact & understand	Communicate/interact with others & understand	Communicate/interact with others	Communicate/interact with others	Communicate/interact with others		
	Obtaining Specific Occupational Skills		There are no specific subcompetencies as they depend on skill being taught					

Source: Brodin, Dims. (1978, 1983, 1989) Reston, VA: The Council for Exceptional Children

Figure 9.11

Figure 9.2

All of these skills, for both students and counselors, should be achieved with the use of current and accurate labor market information. According to Brodin and Gysbers (1989), the following counselor competencies are necessary to carry out this curriculum:

- Counsel students with disabilities;
- counsel with parents regarding the career development of their children;
- conduct or arrange for a career assessment for students with disabilities;
- consult with other educators concerning the development of self-awareness and decision making competencies in students with disabilities;
- contribute to the development and monitoring of individual learning programs in cooperation with other educators and parents;
- work with students with disabilities in the selection of training opportunities and the selection of job possibilities;
- develop and use community resources, particularly for referral purposes; and
- become an advocate for students with disabilities.

Obviously, there is a great need for expanded career development programs and services in the schools. If employment and independent living are priorities for students graduating from high school, a curriculum must be offered to all students that can enable them to achieve these goals. Many believe that there should be fundamental changes in the secondary school programs for students

The most successful programs provide skill training in an employment setting.

Job developers should provide leadership to enable transitions of persons with disabilities into the work place. This can be completed only with accurate and current career and labor market information.

The job developer must also be an advocate.

with disabilities to give them the competencies and skills that they need to become independent (Brolin and Gysbers, 1989). Otherwise, students will continue to drop out of educational programs that have little meaning for them.

Many schools have developed programs that offer community based vocational training to students with disabilities. In a study of vocational education programs for students with disabilities conducted by the Vocational Studies Center of the University of Wisconsin (Tindall, Gugerty, Heffron and Godar, 1988), it was found that the most successful plans provided actual skill training in an employment setting--not just "work experience." For these programs to be effective, the school and the community must be involved in a cooperative transitional effort. The IEPs reflect this emphasis on post school goals and lay out specific plans to reach them.

The leadership, however, must come from the schools or associated agencies to enable the transition of persons with disabilities to the work place. One component of many effective programs is a "job developer," a person who devotes his/her efforts into identifying potential employment opportunities for persons with disabilities. A job developer must be alert to local labor market information and trends. He/she should make on-site visits to businesses and industries in order to determine what jobs might be performed by persons with disabilities, and to analyze the functions of those jobs.

The job developer must also be an advocate for persons with disabilities, reassuring employers of their worth as valuable employees. The job developer may point out that a DuPont Study of its workers with disabilities found out that 90% of them were rated average or above in job performance (*WorkAmerica*, 1991). Similar findings were reported in a 1986 Harris Survey that noted the following:

- employees with disabilities were positive assets to employers; the majority of managers gave them a good to excellent rating on their overall job performance;
- nearly all the employees with disabilities did their jobs as well, or better, than other employees in similar jobs; and
- eighty percent of the department heads and line managers felt that employees with disabilities were no harder to supervise than non-disabled.

The job developer also may identify some exemplary employees with disabilities and/or cite the successful experiences of other firms that have hired persons with disabilities. According to Levine (1984), employees with disabilities have some attributes that are very valuable to employers:

- punctuality and dependability in getting to work;
- carefully listening to instructions and carrying them out accurately; and,
- displaying pride and enthusiasm in doing their work well.

THE IMPACT OF FEDERAL LEGISLATION

Federal legislation includes:

Rehabilitation Act of 1973

Education for all Handicapped Children Act of 1975

Job Training Partnership Act of 1982

Carl D. Perkins Vocational Education Act of 1984

Amendments to the Perkins Act, 1990

Individuals with Disabilities Education Act (IDEA)

The Education for All Handicapped Children Act of 1975 established special educational services for students with disabilities.

The mission is to keep students with disabilities in the appropriate educational or vocational program until graduation.

The Impact of Federal Legislation

The counseling needs of persons with disabilities have become more urgent since recent legislation has enabled them to take their rightful place in our schools and the work force. Before these laws, persons with disabilities were largely excluded, due to discrimination and a lack of physical accommodations. A study of special education students in 1923 listed them as comprising only .10% of the pupil population. In 1948, the number increased to 1%, and in 1968 it reached 4% (Dunn, 1973). It took federal action to get persons with disabilities into our schools; it has required more government action, such as special education programs and physical accommodations in public buildings, to meet their needs upon arrival.

The initial federal mandate that formally outlined the civil rights of persons with disabilities was the Rehabilitation Act of 1973, which prohibited discrimination in hiring practices. This law was followed by the Education for All Handicapped Children Act of 1975, which provided special educational services in the least restrictive environment. This legislation was supplemented by the Job Training Partnership Act (JTPA) of 1982, which promoted school and business partnerships to better serve disadvantaged youth with disabilities.

Over time, there have been amendments and court rulings that have strengthened and extended these Acts. Most notably, the Carl D. Perkins Vocational Education Act of 1984 targeted persons with disabilities as one of the groups in our society needing increased vocational education opportunities. Amendments to the Act, The Carl D. Perkins Vocational and Applied Technology Education Act of 1990, authorize the federal funding of state and local programs that teach "skill competencies necessary to work in a technologically advanced society." In 1990, there also were amendments made to the Education for all Handicapped Children Act of 1975 that changed its title to the Individuals with Disabilities Education Act (IDEA), which mandates transitional services for all students with disabilities ages 16-21.

The Education for All Handicapped Children Act of 1975 established special educational services for students with disabilities. Since that time, an Individualized Educational Program (IEP) has been the cornerstone of all the services for persons with disabilities. In public schools, these services generally are grouped under the heading of "Special Education." Students in special education programs are assigned to teachers who have had training and experience in meeting their specific needs. In cooperation with students, their parents, other teachers and care providers, these special teachers develop an individualized educational plan for their students, the IEP. School counselors are involved in the IEP because the plan includes career development services.

The educational mission is to keep students with disabilities in the appropriate educational or vocational program until graduation, help students make the transition from school to the work place, and to provide them with the necessary support once they are employed. To

The objective is to equip students with the skills to live as independently as possible.

Students need to be equipped with the skills they will need to find work. Local labor market information can help direct them.

Rehabilitation counselors develop an individualized plan, the IWRP.

reach this goal, special education teachers must work in cooperation with other teachers and outside resources, such as rehabilitation counselors, to design and implement the IEPs of their students.

The objective of the IEP is to equip students with the skills to live as independently as possible. The IEP is an educational/vocational team effort in concert with students and their families. The IEP also must be designed to prepare students for a transition from school to a position in the work force or a postsecondary institution. Despite the pressing need for transition services, the majority of students with disabilities aged seventeen and over did not have transition plans as part of their IEPs in 1989 (Harris and Associates). This need was addressed in the Individuals with Disabilities Education Act of 1990 (IDEA), which mandates transitional services as part of the IEPs for students.

Many observers feel that schools need to become more flexible in meeting the needs of students with disabilities. According to Harrington (1982), "The major problem seems to lie in the assumption that it is the responsibility of the handicapped (sic) student to adjust to the traditional structures of the secondary school. If handicapped (sic) students are to be adequately prepared for adult adjustment, there will have to be adjustment on the part of the institution as well as the student." In short, schools must offer an array of work-related education programs that are accessible and useful to students with disabilities. Resources such as the National Career Development Guidelines can be used in curriculum planning and implementation. Career Information Delivery Services, such as CIDS are also valuable along with local labor market information.

More programs need to be offered to equip students with the skills they will need to find work. These skills may vary from one region of the country to another. In some places, computer training is desirable; in others, some training in factory work may be the wisest choice. A combination of technical and vocational skills may be the most marketable. Here it is very important that local labor market information be used as a basis for determining appropriate educational or training programs for students with disabilities.

An effective transition from school to the work place involves the cooperation of many individuals and agencies; a rehabilitation counselor is often part of the transitional team. Rehabilitation counselors are specialists who are required to have coursework in the medical and psychological aspects of disabilities. They also are trained in the job preparation and placement of persons with disabilities and other related concerns. Rehabilitation counselors, like special education teachers develop an individualized program for their clients; it is called the Individualized Written Rehabilitation Plan (IWRP). In the school setting, the IWRP can be a part of the student's IEP.

In most states, students are not served until they are 16.

The services improve the transition from school to work.

The Job Training Partnership Act of 1982 (JTPA) is another valuable resource.

Disabled youths from 16-21 must be economically disadvantaged to participate.

The services of vocational rehabilitation counselors are not always available to persons with disabilities, even though they have participated in special educational programs. Vocational rehabilitation programs are supported by federal legislation and administered at the state level. Most Vocational Rehabilitation (VR) agencies will consider serving a student at the age of 16. VR counselors determine eligibility for services based upon:

- the presence of a physical or mental disability;
- the existence of a substantial handicap to employment; and
- reasonable expectation that vocational rehabilitation services will enable the individual to become employable.

When an individual qualifies for vocational rehabilitation services, he/she is better equipped to make the transition from school to work. In many cases, the rehabilitation counselor works with the school specialists as the student with disabilities makes the transition from school to work. Based on the student's eligibility and financial status, the VR counselor can provide the following services:

- vocational evaluation, counseling, planning and training;
- job placement and job coaching assistance; and
- room and board and transportation costs for training or evaluation.

Another valuable resource in making the transition for students with disabilities may be a Job Training Partnership Act (JTPA) program. JTPA is federal legislation that provides funds for employment and training programs for specially targeted groups of the population that face serious barriers to employment; persons with disabilities are included. The partnership concept of the act mandates a cooperative agreement between federal government agencies and private businesses to determine what job training is needed in their geographic service delivery area. Each JTPA service delivery area must have a Private Industry Council (PIC) with representatives from education, business and industry and government.

Disabled youths aged 16 to 21 are eligible for JTPA benefits if they are economically disadvantaged. Some states determine JTPA eligibility by the "family of one" rule. This means that only individual student income is considered, not that of the family, in determining economic status.

Schools wishing to use JTPA services must be aware of the composition of the PIC because the PICs develop local or regional job training plans. Do these job training plans offer opportunities for students with disabilities? If not, why not? When schools work with the PIC, they can cooperatively develop on-the-job training programs for students with disabilities.

The Perkins Acts of 1984 and 1990 established mandatory career development services for students with disabilities at the secondary and postsecondary levels.

The Perkins Act resulted in an expansion of vocational, educational and physical services.

Common characteristics in exemplary programs have been identified.

The Carl D. Perkins Vocational and Applied Technology Education Act of 1990 was designed to strengthen the original act.

In order to assist the school to work transition, the Perkins Act of 1984 established mandatory career development services for students with disabilities at the secondary and postsecondary levels including:

- information to parents and students on vocational education opportunities; guidance, counseling and career development;
- an assessment of each student's interests, abilities, and special needs; and
- coordinated educational planning and counseling to facilitate the student's transition to employment and career opportunities.

As a result of the Perkins Act of 1984, there has been an expansion of vocational, educational and physical services to persons with disabilities. In addition, there is a legislative mandate to facilitate the transition of students with disabilities from school to the work place. Consequently, students with disabilities now receive more comprehensive counseling services to enable their transition. In school settings, students with disabilities are served not only by school and rehabilitation counselors, but by psychologists, speech and occupational therapists, social workers, nurses and teachers. The trend is toward a transdisciplinary approach in providing services to students with disabilities.

Due to federal legislation and educational programs with a transdisciplinary approach, opportunities for persons with disabilities have greatly increased. Many educational programs have been established to prepare youth with disabilities for employment. In a recent study (Gugerty, Tindall and Heffron, 1988), it was found that twelve exemplary school programs shared some common characteristics:

- the staff, administrators, school board and community supported the program;
- specified staff members were assigned to provide educational services, inside and outside of the school setting;
- the results of individualized student assessments were shared with students and their parents; these results were used to plan career options and future programming; that became part of the students' IEPs;
- the programs provided skill training in an employment setting; and
- the transition from school to work was an important element of the educational programming.

The Carl D. Perkins Vocational and Applied Technology Education Act of 1990 was designed to strengthen the original Act and to provide even greater vocational-technical education opportunities to disadvantaged people, with an emphasis on program accountability and technical preparation. In addition to the basic state grants, the Perkins Act funds the following programs:

- Tech Prep: commonly known as 2+2 programs that combine two years of technology-oriented high school education with

An emphasis is on program accountability and technical preparation.

THE TRAIN-PLACE-TRAIN TRANSITION PROCESS

two years of advanced technology studies at a community college.

- **Grants for facilities and equipment to improve vocational education sites in economically depressed areas.**
- **Consumer/homemaking education: to improve instruction in nutrition, health, consumer and family living education.**
- **Career guidance and counseling: career development programs to help students make the transition from school to work.**
- **Community-based organizations: to fund local non-profit groups providing vocational education services to disadvantaged people.**
- **Bilingual vocational education: to fund programs for English language instruction.**
- **Business/labor/education partnerships: to team schools, local agencies or state departments with these groups.**
- **State Councils on Vocational Education: to advise and make recommendations to state agencies that set vocational education policy.**
- **Vocational-technical education programs in tribally controlled postsecondary institutions to be operated by Native American tribes.**

(Wilcox, 1991)

The Train-Place-Train Transition Process

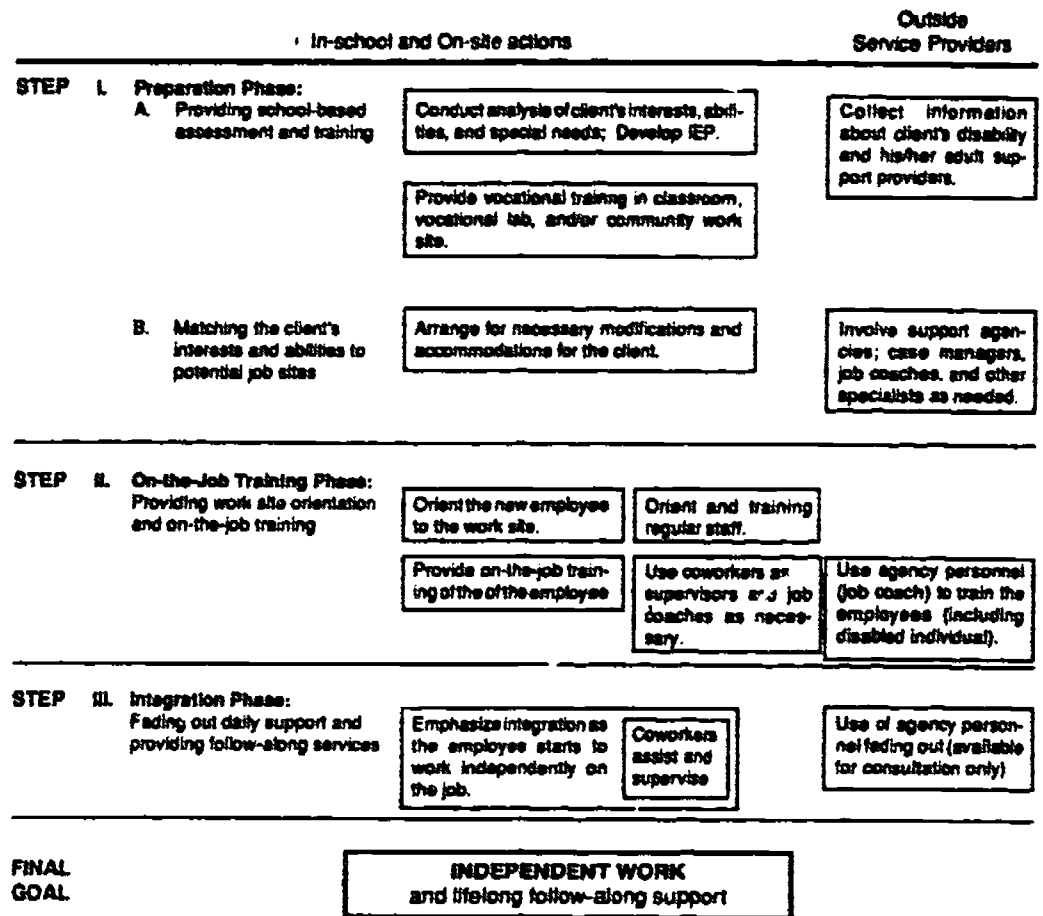
Because transition services are required under the law, career counselors are directly involved as providers. Many counselor/educators are unsure of how to effectively provide these services. The Perkins Act of 1990 authorizes some of the model programs that will be developed to serve as "lighthouses" for other schools to emulate. To illustrate the transition concept more clearly, an overview of the Train-Place-Train model is included in this module. It describes the concerns that must be addressed for students with disabilities.



Integrating an employee with a disability in the work place: The Train-Place-Train Model

The first day on the job is always difficult. Having a disability increases those initial anxieties.

Support that begins off the job site and continues on the job site ensures a smoother transition into the work environment.



Adapted from: Ehrsten and Vreeburg Izzo. *Journal of Career Development*. Vol. 15(1) Fall, 1988. Human Sciences Press.

Figure 9.3

Most of us can recall some of our "first days on the job." We were anxious to please our employers; we wanted to make a good impression on our coworkers; we were unsure of what was expected of us; we worried about making glaring mistakes. We were generally nervous and apprehensive. We were glad when we successfully survived those first days on the job; we appreciated those coworkers who made us feel welcome and extended their helping hands.

Imagine how a person with disabilities feels; he/she has all of those fears in addition to dealing with their disability in the work place. The person with disabilities may need more consideration and support from his/her supervisor and coworkers. Ehrsten and Vreeburg Izzo (1988) describe a simple, three phase model for integrating persons with disabilities into the labor force, the Train-Place-Train transition process. This model describes a sequence of training that begins off the job site and continues on the job site in order to ensure a smooth, orderly and effective transition for the

Step I. The Preparation Phase

Assessment and evaluation should continue throughout the school years.

Results should lead to appropriate goals. Labor market information is critical in this phase.

The final step in the Preparation Phase is to match the student's work skills with an employer.

Step II. On-the-Job Training Phase

Sharing information with coworkers dispels misconceptions.

Step I. The Preparation Phase

The Preparation Phase begins in the school, wherein the student with disabilities is evaluated and an Individualized Educational Program (IEP) is planned. At the elementary level, the focus is on career awareness; at the middle school it is career exploration. The emphases in grades nine to twelve are on career preparation and the transition to the work place or postsecondary education. Ideally, the assessment and evaluation process is a continuing one throughout the student's school years. By the eighth or ninth grade, some states require an assessment for future educational planning. Another comprehensive evaluation of the student's interests, abilities and special needs is completed during the student's sophomore or junior year as career preparation becomes more specified. The assessment instruments are individualized; the materials chosen are on the basis of the student's needs and ability level.

Throughout the student's educational career, the results of these assessments are shared in team meetings involving the student, his/her parents, special education instructors and any other support personnel. The purpose of these meetings is to outline the appropriate educational/vocational options for the student and to make plans for career development and goals. When the assessment process is completed, vocational training is provided in a classroom, vocational lab and/or community work site. The training that is given should develop the student's abilities that have the most potential in the work place. The National Career Development Guidelines provide direction. This is where it is critical that labor market information such as CIDS be used by counselor and teachers to determine the skills that are needed in the local work force. The desired outcomes of the training are work skills and competencies that can be transferred to an occupation that is in demand.

The final step in the Preparation Phase is to match the student's work skills with an employer. During this step, a placement person, such as a job developer, works closely with any other professionals who may be involved, such as a rehabilitation counselor. It is important that the right match be found between the student and the employer in terms of skills and personality, the geographic location of the job and the requirements of the job. Again, a knowledge of local labor market information is necessary to find the best employment opportunity for the student.

Step II. On-the-Job Training Phase

The On-the-Job Training Phase begins when a good match is made between the employer and student/employee. At this time the other employees, the student's coworkers, must also be prepared. Some employees might be apprehensive about having a person with disabilities in the office. These fears are most often laid to rest by providing information about the student's disability, particularly as it affects the performance of job-related tasks. Sharing information dispels rumors and misconceptions that can lead to prejudice, which prevents the person with disabilities from being accepted on the job.

Off site training in job duties should be completed before the job begins.

The new employee is oriented to coworkers and the work site.

Step III. Integration Phase

The job coach instructs the employee how to complete the work.

The role of the job coach will be gradually phased out and taken over by coworkers and/or supervisors.

Final Phase The employee is integrated into the organization.

Before the student begins work, he/she should receive off site training in the duties that will be expected on the job. Any physical adjustments in the work environment should be completed, such as work space modifications, ramps, or bathroom facilities. The new employee should outline his/her personal needs that must be met in order to do the job. If the student has a rehabilitation counselor or other service provider, these individuals can be very helpful.

The next step in this phase is to provide a complete orientation to the new employee and all other parties at the work site, including coworkers, supervisors and managers. It is important that the employees understand that the company is committed to hiring workers with disabilities and integrating them into the work force. Each employee should be aware of his/her relationship with the new employee. The orientation should provide information to the following employees.

- **The new employee: whom to ask for help, the location of the bathroom and break area, the formal and informal employee rules, the job benefits, pay schedule, etc.**
- **The coworkers: how they can assist the new employee, what accommodations are necessary and job safety concerns.**
- **Supervisors and job coaches: become familiar with the new employee's functioning level; be prepared to guide him/her toward the desired work skills and behaviors**
(Ehrsten and Vreeburg Izzo, 1988)

Step III. Integration Phase

When the employees have shared the above information, the Integration Phase, or the last step of the train (off site), place (on the job) train (on the job) model begins. The new employee may be trained by a job coach, who has expertise in this field. If a job coach is not available or necessary, coworkers may assume this role. During training, the instruction is highly individualized; the job is usually broken down into parts for the new employee and each step is taught as a separate unit. Once each step is learned, a sequence is developed and a job pattern results. The length of the training will vary, depending on the job and the ability level of the new employee. The role of the job coach will be gradually phased out as the new employee becomes an independent worker. Once this level is achieved, any ongoing assistance should be taken over by coworkers and/or supervisors.

Final Phase

The last and most rewarding phase of this process is when the new employee becomes integrated into the organization. This means that the student is accepted and supported by his/her coworkers. The coworkers have become advocates for the person with disabilities. The person with disabilities has been welcomed integrated into "the mainstream of life."

THE AMERICANS WITH DISABILITIES ACT of 1990

Clients with disabilities should be informed of their rights under the law.

Employment

Transportation

Public Accommodations

The Americans with Disabilities Act of 1990

The outlook for persons with disabilities in the work place has been greatly enhanced by the Americans with Disabilities Act of 1990 (ADA). The ADA is a piece of landmark legislation that is aimed at ending discrimination against persons with disabilities in employment, public transportation and accommodations, and telecommunications. The ADA mandates specific public services for persons with disabilities and requires employers to make accommodations for them in the work place. The ADA also gives a broad definition of disability. Title I of the ADA defines "disability" to mean a physical or mental impairment that substantially limits one or more of the major life activities of an individual, a record of such an impairment, or, being regarded as having such an impairment.

It is important that career counselors be familiar with the terms of the ADA. Counselors should inform clients with disabilities and their families of their rights under the law. Information regarding the ADA should be included in the instructional program of special education students. By familiarizing themselves with the ADA, counselors can become a valuable resource, not only to their clients, but to other teachers and the community. Some of the key provisions in the ADA are as follows:

Employment

- By 1994, employers with 15 or more employees may not refuse to hire or promote qualified persons with disabilities.
- By 1992, employers with 25 employees or more must make reasonable accommodations for persons with disabilities to perform the functions of the job.
- Employers must modify the job requirements to enable persons with disabilities to do the work, unless the changes impose undue hardships upon the employers.

Transportation

- All new vehicles for public transportation must be made accessible for persons with disabilities.
- Paratransit services for persons with disabilities who cannot use the mainline system must be provided, unless this service is an undue financial burden.
- All new buses ordered by private carriers, such as Greyhound, must be accessible after 1990.

Public Accommodations

- New buildings must be accessible; barriers must be removed in older facilities if economically possible.
- Auxiliary aids and services, such as large print materials and tape recordings, are to be provided to enable persons with disabilities to enjoy the goods and services offered to the general public.

Telecommunications

Firms that hire persons with disabilities must expect to make accommodations for them.

Telecommunications

- **Hotels that offer transportation generally must also provide services to persons with disabilities.**

- **Telephone companies must offer telephone relay services to individuals who use telecommunications devices for the deaf (TTDs) at regular rates.**

In short, the ADA will make the work place, public accommodations and services more accessible to persons with disabilities. In terms of career counseling, this means that many of the barriers to the employment of persons with disabilities will come down, such as the lack of job opportunities, discrimination in hiring practices, the physical demands of the work place and limited public transportation services.

According to the Americans with Disabilities Act (ADA), firms that hire persons with disabilities must expect to make accommodations for them. According to the Equal Employment Opportunity Commission (EEOC) in 1991, recent estimates for the cost of making "reasonable accommodations" range from \$100 to \$380 for each worker with a disability. In some cases, tax credits may be available to small businesses for expenses incurred in complying with the ADA. The Internal Revenue Service (IRS) should be contacted for information regarding tax credits. Some of the more common adaptations that have been made are as follows (Gugerty, Phelps and Tindall, 1991):

Accommodations for Persons with Learning Disability

- **Make fewer demands for paperwork**
- **Allow for flexible scheduling and additional time to accomplish tasks**
- **Provide supervision designed to reduce stress**
- **Have staff and coworkers help employees in scheduling their time**
- **Have staff and coworkers provide guidance and instruction; repeated directions for retention**
- **Supervisors spent more time explaining rules and procedures**

Accommodations for Persons with Mental Disabilities

- **Provide closer supervision during initial training period**
- **Provide employee with drawings of correct techniques and examples of finished products**
- **Have supervisors demonstrate procedures instead of giving verbal instructions**
- **Provide minimal constant supervision to avoid quality and quantity problems**
- **Use photographs to show correct items to process, e.g., shelving**
- **Use jigs to facilitate production and maintain quality**

Accommodations for Persons with Emotional Disabilities

- Provide postemployment follow-up by job placement personnel
- Monitor work more closely
- Provide postemployment support by an individual or a group of coworkers
- Supply written work schedules of tasks to be accomplished
- Have supervisors provide support to overcome or control job stress

Accommodations for Persons with Visual Disabilities

- Use taxis or a driver to help employees attend meetings
- Provide speech synthesizer, Braille, tape recorders etc.
- Have the job placement agency provide postemployment counseling as needed
- Modify work schedules to accommodate public transportation schedules, e.g., reduced schedules at night and on weekends
- Assign employees to physical facilities that accommodated communication devices and Braille storage
- Restructure the job to have coworkers do proofreading, typing of forms, etc.

Accommodations for Persons with Hearing Disabilities

- Adjust work tasks to decrease employees need to communicate by hearing
- Use interpreters for meetings, for communication with supervisors, coworkers or the general public
- Add volume controls to telephones
- Install communication devices where needed
- Have employees carry notebooks and pencils
- Assign employees to work with a coworker who knew sign language

Accommodations for Persons with Physical Disabilities

- Raise employees' desks to accommodate wheelchairs
- Make facilities accessible; this included:
 - office facilities
 - bathrooms
 - meeting and eating area
 - entrance ramps
 - parking areas
 - electric door openers
- Provide assistance in moving supplies and equipment
- Modify building evacuation procedures

SUMMARY

- Provide accessible transportation, e.g., vans, cars, chairlifts, etc.
- Provide accessible equipment, e.g., computers, calculators, and telephones

In short, there are many physical changes that can be made in the work place to accommodate persons with disabilities in order to provide them with jobs that can help them achieve independence.

Summary

Recent legislation removes many physical barriers to employment and prohibits discrimination against persons with disabilities. Under the Americans with Disabilities Act (ADA), both the public and the private sector will make adjustments to accommodate persons with disabilities. Our educational system has been given the responsibility of removing other barriers to employment by offering academic and vocational preparation to students with disabilities at the secondary and postsecondary levels.

The career counselor is instrumental in the process of fulfilling the vocational needs of individuals with disabilities. To do so, the counselor must first get to know the person who is disabled and his/her background and family situation. Second, the counselor should assist in career vocational planning, along with teachers and representatives from other private and public agencies that serve persons with disabilities. In some cases, the person with disabilities may have a rehabilitation counselor--a public agency employee who is charged with serving the needs of those determined to be eligible for rehabilitation services.

In addition, the counselor will need to work closely with local businesses to promote the employment of persons with disabilities. More persons with disabilities will find employment due to recent legislation to protect their civil rights. In providing job placement services, the counselor becomes an advocate for individuals with disabilities and has responsibilities beyond the school setting. Job placement may involve working with local employers to help arrange training or physical accommodations for persons with disabilities for jobs in their businesses or industries. It could require assisting persons in finding the best postsecondary education or job placements and/or independent living situations. In all cases, the career counselor must be aware of the legal rights of persons with disabilities. In addition, the counselor needs to be in contact with federal, state and local resources to provide the best opportunities for vocational education, further training and employment.

The supportive role of the career counselor continues beyond school boundaries to work placement sites, where persons with disabilities often require more assistance, evaluation and reinforcement. The

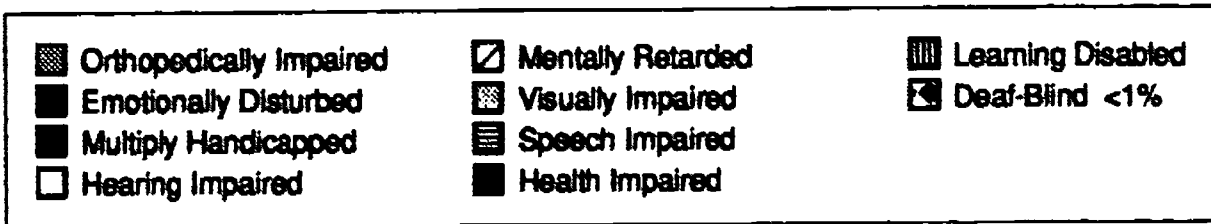
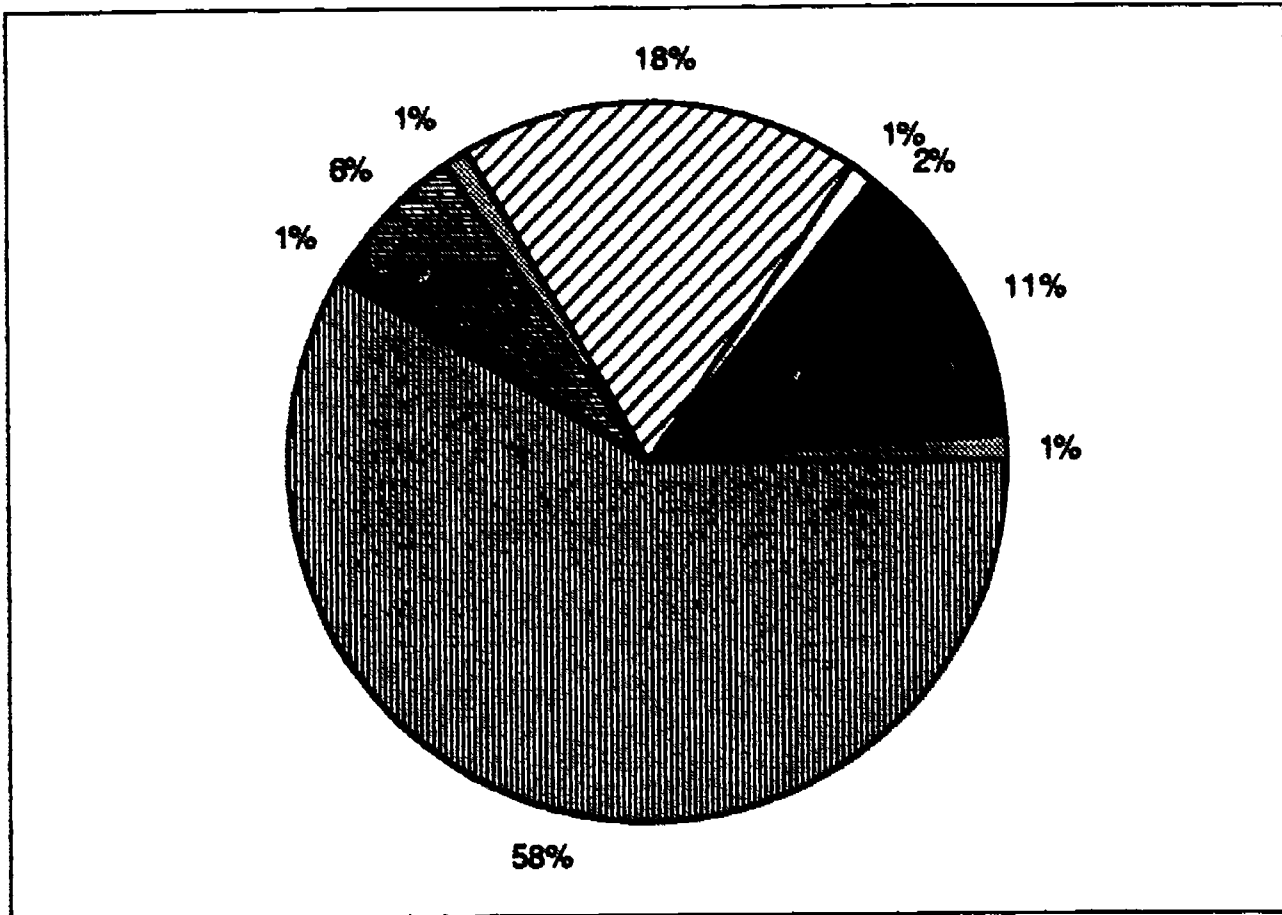
relationship between the counselor and his/her clients does not end with a job placement; it should continue until new methods of support are developed within the work settings. The Train-Place-Train model of the transition process has been successful in many cases.

The process of bringing persons with disabilities to the work place may sometimes be long, tedious and challenging, but the rewards are unending, in both human and economic terms. According to predictions made by the Equal Employment Opportunity Commission (EEOC) in 1991, the benefits should outweigh the costs by a factor of ten to one. The total cost to business of making accommodations for employees with disabilities is estimated at \$16 million. At the same time business productivity gains are estimated at more than \$164 million. The benefits to the government in terms of decreased support payments for persons with disabilities and increased tax revenues from their earnings are likely to be \$222 million, according to the EEOC. Persons with disabilities who are unable to work are dependent on government programs, such as Supplemental Social Security Income (SSI), health care, housing and food stamps. In 1988, America spent ten dollars on these welfare programs for every dollar spent on programs to help persons with disabilities to become independent, such as special education, vocational education and rehabilitation (Ehrsten and Vreeburg Izzo, 1988). It would seem that the wiser investment for our society is in the human potential of persons with disabilities, which is unlimited.

Specific Needs of Persons with Disabilities
Module 9
References

- Brolin, D. E., & Gysbers, N. C. (1989, November/December). Career education for students with disabilities. *Journal of Counseling & Development, 68*.
- Council for Exceptional Children. (1990, October/November). Americans with Disabilities Act of 1990: What should you know? *Exceptional Children, 57*(2), (Suppl.).
- Dougherty, B., Novak, J., & Reschke, L. (1986, September). *Ready, set... go!, Volume 1: Planning and developing a program*. Madison, WI: The Vocational Studies Center, School of Education, University of Wisconsin.
- Dunn, L. M. (Ed.). (1973). *Exceptional children in the schools: Special education in transition*. New York: Holt, Rinehart and Winston.
- Ehrsten, M. E., & Izzo, M. V. (1988). Special needs youth and adults need a helping hand. *Journal of Career Development, 15*(1), 53-63.
- Fagan, T. K., & Jenkins, W. M. (1989, November/December). People with disabilities: An update. *Journal of Counseling & Development, 68*, 140-159.
- Gugerty, J., Phelps, L. A., & Tindall, L. W. (1991, February). Implementing The Americans With Disabilities Act. *WorkAmerica, 8*(2), (4-6).
- Gugerty, J. J., Tindall, L. W., & Heffron, T. J. (1988, May). *Profiles of success: Serving secondary special education students through the Carl D. Perkins Vocational Education Act*. Madison, WI: The Vocational Studies Center, School of Education, University of Wisconsin-Madison.
- Harrington, T. F. (1982). *Handbook of career planning for special needs students*. Rockville, MD: Aspen Systems.
- Humes, C. W., Szymanski, E. M., & Hohenshil T. H. (1989, November/December). Roles of counseling in enabling persons with disabilities. *Journal of Counseling & Development, 68*, 145-149.
- Levine, M. (1984). *Summary of report: Survey of employer needs*. Washington, DC: Committee for Economic Development.
- Louis Harris and Associates, Inc. (1989). *The ICD survey III: A report card on special education*. New York: International Center Disabled.
- Louis Harris and Associates, Inc. (1987). *The ICD survey II: Employing disabled Americans*. New York: International Center for the Disabled.
- Louis Harris and Associates, Inc. (1986). *The ICD survey of disabled Americans: Bringing disabled Americans into the mainstream*. New York: International Center for the Disabled.
- Vocational Education Weekly, 3*(34), 4. (1991, January 7).
- Research & Training Center on Independent Living. (1990). *Guidelines for reporting and writing About people with disabilities* (3rd ed.). Lawrence, KS: author.
- SRI International (1987). *National longitudinal transition study of special education students*. (Available from SRI International, The National Longitudinal Transition Study, Room BS136, 333 Ravenswood Avenue, Menlo Park, CA 94025).
- Tindall, L. W., Gugerty, J. J., Heffron, T. J., & Godar, P. G. (1988, March). *Replicating jobs in business and industry for persons with disabilities, 3*. Madison, WI: The Vocational Studies Center, School of Education, University of Wisconsin.
- Wilcox, J. (1991, February). The new perkins act at a glance. *The Vocational Education Journal, 66*(2).
- Will, M. (1984). *OSERS programming for the transition of youth with disabilities: Bridges from school to working life*. Washington, DC: Office of Special Education and Rehabilitative Services, U.S. Department of Education.
- Worklife, 3*(3). (1990, Fall). P.L. 101-336 Americans with Disabilities Act of 1990.
- WorkAmerica, 7*(9), (2, 4). (1990, September). Equal to the task.
- WorkAmerica, 8*(6), (5). (1991, June). The benefits of accommodation.

U.S. Secondary School Special Education Students, 1987



National Longitudinal Transition Study of Special Education Students, 1987
SRI International, Menlo Park, CA.

Figure 9.1

Life-Centered Career Education (LCCE) Curriculum

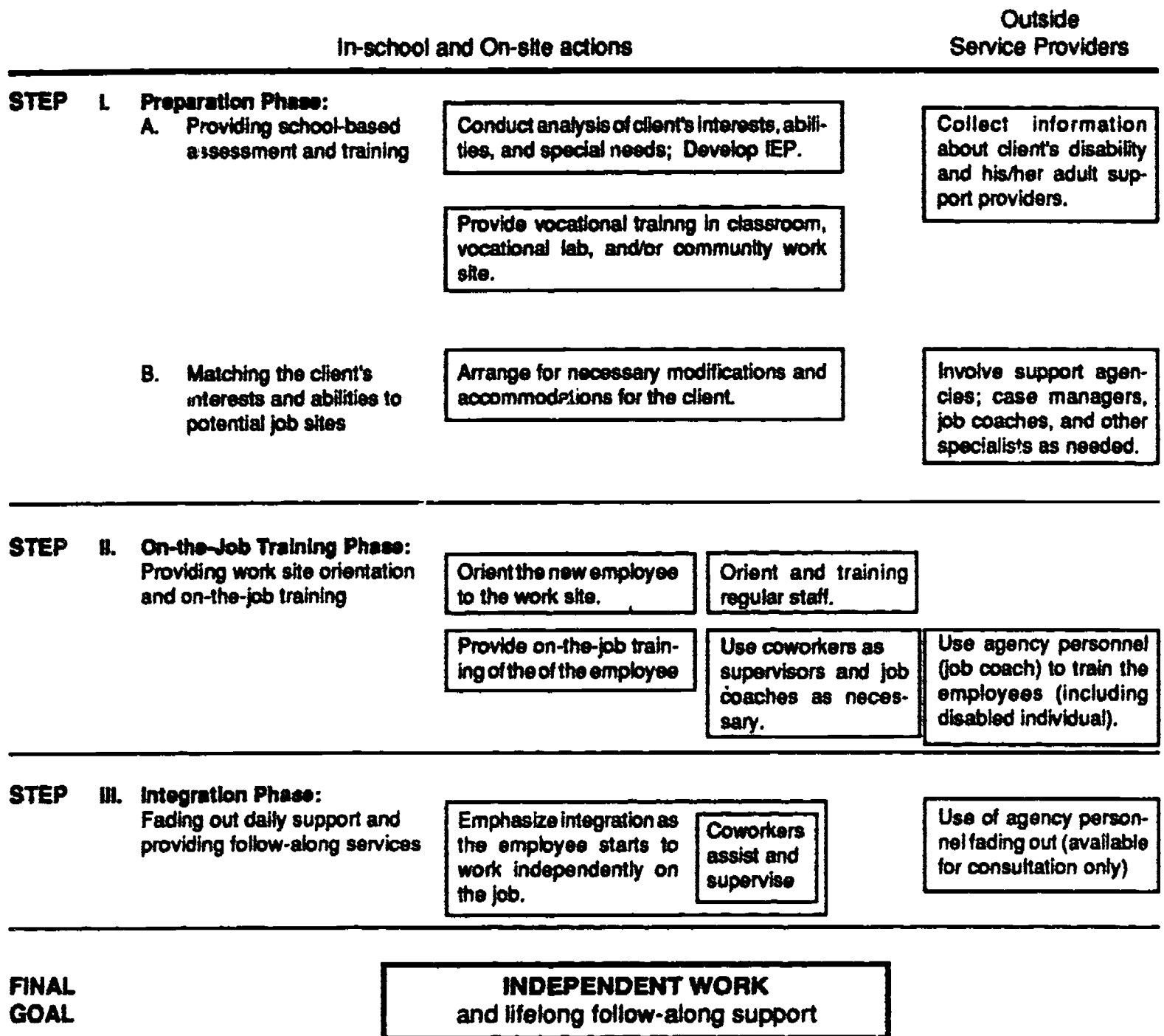
Competency: **Subcompetency: The student will be able to:**

Curriculum Area: Occupational Guidance and Preparation	Knowing & Exploring Occupational Possibilities	Identify wage/salary aspects of work	Locate sources of occupational & training information	Identify personal values met through work	Identify societal values met through work	Classify jobs into occupational categories	Investigate local occupational & training opportunities	
	Selecting & Planning Occupational Choices	Make realistic occupational choices	Identify requirements of appropriate & available jobs	Identify occupation aptitudes	Identify major occupational interests	Identify major occupational needs		
	Exhibiting Appropriate Work Habits & Behavior	Follow directions & observe regulations	Recognize importance of attendance & punctuality	Respect importance of supervision	Demonstrate knowledge of occupational safety	Work with others	Meet demands for quality work	Work at satisfactory rate
	Seeking, Securing & Maintaining Employment	Search for a job	Apply for a job	Interview for a job	Maintain postschool occupational adjustment	Demonstrate knowledge of competitive standards	Know how to adjust to changes in employment	
	Exhibiting Sufficient Physical-Manual Skills	Demonstrate stamina & endurance	Demonstrate satisfactory balance & coordination	Demonstrate manual dexterity	Demonstrate sensory discrimination			
	Obtaining Specific Occupational Skills		There are no specific subcompetencies as they depend on skill being taught					

Source: Brolln, Donn. (1978,1983,1989). Reston, VA: The Council for Exceptional Children.

Figure 9.2

Integrating an employee with a disability in the work place: The Train-Place-Train Model



Adapted from: Ehrsten and Vreeburg Izzo. *Journal of Career Development*. Vol. 15(1) Fall, 1988. Human Sciences Press.

Figure 9.3

Notes

924

Module 10

Specific Needs of Children At-Risk



National Career Development Guidelines-Counselor Competencies

Skills to assist individuals in setting goals and identifying strategies for reaching goals.

Knowledge of education, training, employment trends, labor market and career resources.

Skills to use career development resources and techniques designed for specific groups.

Knowledge of alternative approaches to career planning needs for individuals with specific needs.

SPECIFIC NEEDS OF CHILDREN AT-RISK

MODULE 10

Outline Topic	Delivery Methods	Trainer's Notes
Introduction	Lecturette pp. 1-3 <i>Figure 10.1</i> <i>Labor Force Status of 1987,88</i> <i>High School Dropouts and Graduates</i> <i>Figure 10.2</i> <i>Educational Attainment and Earnings</i>	
Meeting the Needs of Children At-Risk	Lecturette pp. 3-4	
A Strategy that Works: Career Development Programs	Lecturette pp. 4-7	
Summary	Lecturette pp. 7-8	
Activities	11, 17, 20, 22, 29, Case Studies	

SPECIFIC NEEDS OF CHILDREN AT-RISK

MODULE 10

INTRODUCTION

School success is an effective deterrent to a life of poverty.

Despite the importance of education, many students fail to complete high school. Schools are responding to their unmet needs.

There is a critical relationship between income and education.

Introduction

"Only the educated are free." (Epictetus, *Discourses II*)

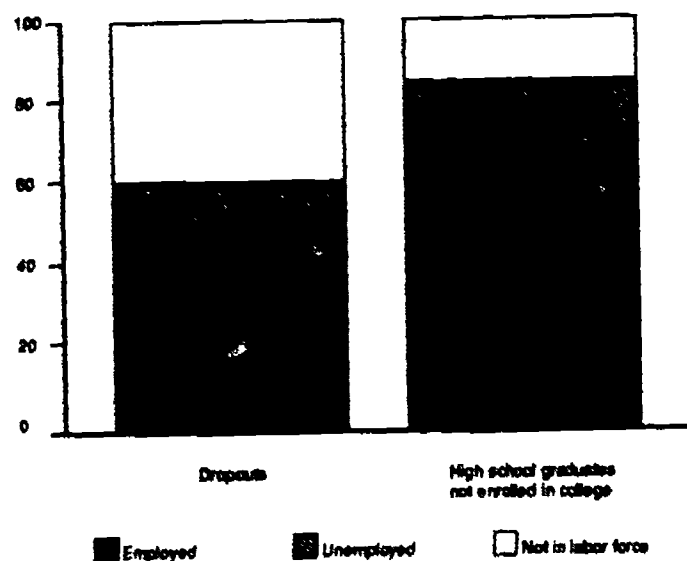
Keeping children in school through high school graduation is an effective deterrent to a life of poverty. Research affirms that school success is the single most important credential in assuring future career opportunities, economic independence and personal well-being (Rodenstein, 1990).

Despite the importance of education, many students fail to complete high school. In an attempt to forestall our nation's alarming dropout rate, many schools have tried to identify those students who are most at-risk of leaving school prematurely. The schools have then developed special educational programs to better meet the needs of these "children at-risk."

Evidence continues to show that an education can make a difference in one's quality of life. The critical relationship between income and education is evident in the following statements:

- Only one in six jobs is suitable for a high school dropout.
 - The military no longer accepts individuals without high school diplomas because of increased training costs and the complexity of its equipment.
 - Dropouts are more likely to be unemployed than their peers who have graduated.
 - Earnings are related to educational level.
- (Rodenstein, 1990)

Labor force status of 1987-1988 high school dropouts and graduates: October 1988



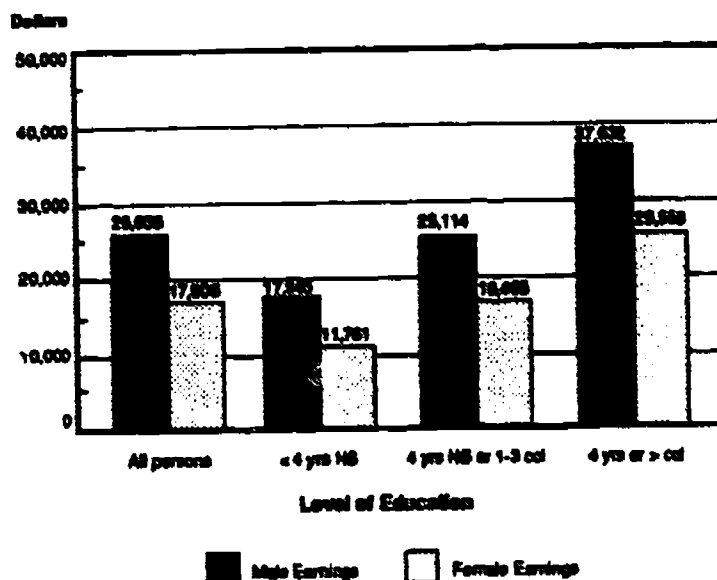
Source: U.S. Department of Labor, Bureau of Economic Analysis

Figure 10.1

Educational Attainment and Earnings

Male versus Female

Year round, full time workers, March 1989



Source: U.S. Bureau of the Census

Figure 10.2

Dropouts will confront many barriers in the work world.

Barriers to employment for high school dropouts include:

- poor job qualifications;
- social/interpersonal conflicts;
- legal and financial problems;
- emotional problems; and
- limited access to a variety of opportunities and role models.

Some writers have described and analyzed the needs of at-risk students as having much in common with the disadvantaged in urban and rural populations. For example, those at-risk who live in urban areas are severely restricted because they are primarily exposed to substandard jobs with limited advancement or tenure. Poor children living in large cities do not have as many opportunities to interact with workers who are successful in their jobs. In addition, their reading skills are often limited, so they are unable to take advantage of the abundance of available printed materials that describe jobs and opportunities. Finally, the norms and values of the urban poor sometimes tend to inhibit academic achievement. The beliefs, values and attitudes that develop from these conditions are often counterproductive to career development.

Children at-risk living in rural areas are additionally challenged by limited access to social and recreational activities. They receive a minimum of health services, participate in fewer educational experiences and have limited exposure to career role models. Poor Appalachian populations are one example of this at-risk group. In this part of the country, the families are often mobile, marriage and parenthood may occur at an early age, and there is little emphasis on education.

The factors that place a student at risk of not completing high school are broad and complex. They can be managed if we approach the challenges with confidence in what we already know about teaching and learning.

MEETING THE NEEDS OF CHILDREN AT-RISK

The literature points to components of effective at-risk programs.

The concept of being "at-risk" is broad and complex. Many factors can place a student at-risk. They may be environmental, emotional, social, psychological, physical and/or academic in nature.

To respond effectively to the needs of these students, our initiatives must be directed by the following assumptions:

- all children can learn;
 - we know how to teach children at-risk;
 - what we teach must be challenging; and
 - we must produce, outcomes count.
- (CCSSO, 1988)

Meeting the Needs of Children At-Risk

The literature (Nash, 1990; NSBA, 1989; Rodenstein, 1990) suggests that successful strategies for working with at-risk youth include the following components:

- base children at-risk policies and programs on the premise that all children can succeed;
- provide a safe and orderly environment by setting high standards for discipline and attendance; enforce them fairly, consistently and firmly;
- ensure that educational reforms positively affect children at-risk;
- provide a challenging academic curriculum to all students, including children at-risk;
- use instructional strategies that meet the educational needs of children at-risk;
- address children's needs at an early age to increase their chances for success;
- carefully plan parent involvement so that it meets the needs of the family, students and school personnel;
- provide a multifaceted program that contains a plan of coordinated services and mobilizes all existing community resources;
- include a supervised work experience component that clearly demonstrates the relationship between school and work;
- have a staff development plan that leads to increased understanding, sensitivity and effectiveness in educating children at-risk;
- Include a component that helps enhance students' perceptions of their own self-worth;
- Coordinate standards for effective and appropriate education of children at-risk at the state level; endorse and implement them at the local level to meet community needs; and
- Include policies, guidelines and programs on drug and alcohol abuse in a comprehensive children at-risk program.

(Rodenstein, 1990)

A variety of approaches are used to integrate these components into schools. The goal is to allow the students to experience success, and in so doing, improve their self-esteem and feelings of empowerment.

A variety of approaches are used to integrate these components into school programs. The goal is to improve self-esteem and feelings of empowerment.

A STRATEGY THAT WORKS: CAREER DEVELOPMENT PROGRAMS

Career development programs can help at-risk students overcome their sense of isolation.

In particular, career information can help strengthen links between school and work and ensure effective career development and decision making.

There are four critical components of career education programs for at-risk students.

Cash

Example of approaches include:

- remedial and basic skills classes;
- reading programs;
- tutoring programs;
- motivational development activities;
- school supervised work experience;
- on-the-job training;
- counseling services;
- parent involvement;
- self-awareness classes;
- programs for school age parents;
- career education programs; and
- vocational/occupational educational activities and classes.

A Strategy That Works: Career Development Programs

Career development is an underlying theme in many of these responses. An effective career development program can help at-risk students overcome their sense of isolation from school and enhance an understanding of how their school work is connected to future employment. This is one way to develop stronger links. Students unmotivated to succeed in school have shown improvement in attendance and retention after participating in career development programs. In addition, it has been shown that vocational students who have participated in career development programs are more likely to complete the vocational program they have selected (Miller and Imel, 1987). In another study, it was found that all else being equal, the more vocational classes students took, the less likely they were to drop out of school (Mertens, Seitz and Cox, 1982).

One component of a comprehensive career development program that appears to be successful with at-risk high school students is the use of career information to improve the school to work transition.

Career information will not only keep students in school by illustrating the links between school and the world of work, but also ensure effective career development and decision making. Many students can make this link independent of a structured, directed program. Children at-risk frequently need more attention in this area. To illustrate implementation of this concept, the use of a Career Information Delivery System (CIDS) to strengthen the link between school and work will be examined.

According to Bloch (1988), career information can be used effectively to build a connection between the students, their schools and the world of work. Many students leave school because they see little relevance in their studies. They cannot imagine transferring what they have learned in school to life outside of the classroom. Bloch believes there are four critical components of career education programs for at-risk students known as the four C's:

Cash

"Cash" refers to the need of students to see the link between making money and the subjects they are studying in school. They need to

understand how their assignment in English class fits into their career aspirations. In turn, student work programs need to be related to their classroom assignments. Basic skills training should be combined with work-related projects as students establish and progress toward their career goals.

Care

Care

"Care" means that students must get the respect they need from teachers and other adults. This means that a philosophy of success for every student should be adopted. There also needs to be personalized, individualized attention to student needs. Schools should strive to provide immediate feedback and rewards for achievement.

Coalition

Coalition

Coalitions of schools, businesses and local education foundations are needed in an effective career development program for those students who have difficulty understanding the linkage between the classroom and the world of work. Successful coalitions involve careful planning with community resources such as government, higher education, business and industry, and civic groups.

Computers

Computers

The final "C" is for computers. One of the more powerful career planning tools is a computer based Career Information Delivery System (CIDS), which is both individualized and interactive. By using a computer to retrieve personally relevant occupational and educational information, students can relate school and learning to the world of work. CIDS helps students feel more in charge of their own lives and gives them a sense of control. Immediate feedback is also built into the system. CIDS has proven to be a motivational tool that helps students touch the reality of the work world. According to one educator, "It helps students dream realistic dreams."

Teachers believe a CIDS is motivational, provides useful information and is user-friendly.

Bloch (1988) conducted a survey to determine how teachers perceive CIDS as an instructional tool for at-risk youth. Many teachers appreciated motivational aspects of CIDS. Others said it was the realistic and factual information that they liked, while others replied that it was a user-friendly approach that helped the students customize information to meet their individual needs.

The following comments from those who teach at-risk students illustrate their evaluation of using career information delivered through a computer based CIDS to encourage at-risk students to stay in school. (Those children at-risk programs that do not have access to a computerized system still can benefit from using career information delivered through video, printed materials, film and contact with the local community.)

CIDS is a motivator.

CIDS--A Motivator

- Students take an interest in their future; it is a starting point for career exploration.
- Students become involved in the determination of their likes

and dislikes; this helps them set goals for the future.

- They see the need for education; at-risk students need this encouragement.
- By using CIDS, students begin to plan programs around their career interests.
- It gives hope to those who are bored and have lost enthusiasm for life and school.
- CIDS shows the importance of education to earnings and the means of advancement.
- They begin to see that one's job doesn't just happen. They can exert some influence over what happens to them. They don't have to just take what comes.
- More students are becoming goal-directed; they begin to see a relationship between what they are doing in school and their hopes for a future job or career.
- It keys to their interests, rather than being forced upon them by teachers.
- It gives them a goal to strive for in the future. Goals are the key to motivation. Many of the at-risk students suffer from misdirected goals. They have difficulty understanding that math, English, and other subjects are important to their future.
- Students begin to see education as necessary for improving their lifestyle in the future.
- Most at-risk students are not academically oriented; this helps them see what qualifications are required for specific jobs and what the pay is for each job. It is very easy to show them that most jobs with high salaries require some education. This has convinced a few students to stay in school and get the required classes and even plan for a year of post high school study.
- Most of the at-risk students do not realize how many different jobs are available; it seems to broaden their views of possible vocations.
- There is pride in the student who feels that he or she is in control of finding useful and helpful materials.

CIDS for information.

CIDS--For Information

- It gives students a more realistic view of the world of work.
- CIDS opens their eyes to careers that they had not considered, or were not aware of; students have been amazed at the opportunities available to them.
- They find out where the training they want is offered and make decisions on what fields of work they would like to go into.
- It is a starting point for career exploration not previously available to clients.
- Just sitting down and looking at state based data seems to make career information much more relevant to students; the state information makes more sense than general information.
- It is a confrontation of expectations with reality; CIDS helps students narrow the gap between fantasy and reality.

CIDS is a good resource for gathering information about the work place.

CIDS is user-friendly.

SUMMARY

- The information stresses continued education or training to obtain better paying and more attractive jobs.
- It provides accurate labor market information on specific jobs; this type of information is generally not available to most youth in their day-to-day living.
- CIDS helps students make more realistic decisions concerning further schooling and employment; it corroborates information provided by the instructors.
- CIDS provides easy-to-read, up-to-date, factual and concrete job information, along with training program information.
- It shows them new options available to them, as well as the preparation and training that are needed.
- CIDS gives students practical, current information to assist in their decision making; it encourages discussion.
- It shows how specific educational or training demands can limit their job potential.
- It helps youth to see how they close off their career options if they drop out.
- It gives them a realistic list of occupations that meets their needs.
- We are a small rural school and have limited ability to provide opportunities for our students to explore careers. CIDS helps us.

CIDS--User-Friendly

- It is self-paced.
- It is a hands-on, independent, one-on-one activity with immediate feedback.
- CIDS is quick, simple, easy, enjoyable and reliable; students trust the computer.
- It gives individual attention, focus and direction; it is non-judgmental and interactive.
- Students are delighted to get a printout of their own to take home to show their parents.

Summary

Career development programs are a powerful tool that can motivate students to discover their likes, dislikes and career interests. Delivery of career information through a CIDS results in a wealth of easy-to-read, up-to-date and individualized information for career decision making. It helps students create a future for themselves. Information gleaned from CIDs may encourage at-risk students to stay in school because they can plainly see what their future options may be with or without education and training. Lastly, students enjoy working with CIDs because they can guide and control the computerized and personalized delivery of career information.

Many students begin their school years with social and economic disadvantages that place them at-risk of not receiving the full benefits of their education. This is tragic and unfortunate, because education is one of their most viable escape routes from a future of

The most successful programs maintain a strong connection between what students are learning in school and their future career. Career information can establish those links.

limited opportunities and a life of poverty. Sadly, many at-risk students do not complete high school, which severely limits their occupational choices and earning power. The most successful programs that meet the special needs of these students maintain a strong connection between what they are learning in school and their future career. When connections have been established between students and the world of work, students are much more likely to complete their education.

Specific Needs of Children At-Risk
Module 10
References

- American Association of School Administrators. (1989). *Problems and solutions*. Arlington, VA: author. (Paper no. 021-00213).
- Bloch, D. P. (1988). *Reducing the risk: Using career information with at-risk youth*. Eugene, OR: Career Information System.
- Council of Chief State School Officers. (1988). *School success for students at-risk: Analysis and recommendations of the council of chief state school officers*. Washington DC: CCSSO.
- Mertens, D., Seitz, P., & Cox, S. (1982). *Vocational education and the high school dropout*. Columbus: The National Center for Research in Vocational Education, The Ohio State University. (ERIC Document Reproduction Service No. ED 228 397).
- Miller, J. V., & Imel, S. (1987). Some Current Issues in Adult Career and Vocational Education. In E. Flaxman (Ed.), *Trends and issues in education*. Washington, DC: Council of ERIC Directors, Educational Resources Information Center, Office of Educational Research and Improvement, U. S. Department of Education.
- Nash, M. A. (1990). *Improving their chances: A handbook for designing & implementing programs for at-risk youth*. Madison, WI: Vocational Studies Center, University of Wisconsin-Madison.
- National School Boards Association. (1989). *An equal chance: Educating at-risk children to succeed*. Alexandria, VA: National School Board Association.
- Rodenstein, J. (1990). *Children at-risk*. Madison, WI: Wisconsin Department of Public Instruction.

**Module Where Activity Can Be Used
to Apply Concepts Presented in Lecturette**

List of Activites	Module									
	Module 1	Module 2	Module 3	Module 4	Module 5	Module 6	Module 7	Module 8	Module 9	Module 10
1. Signature	•									
2. Career Keno	•									
3. Dyadic Encounter	•									
4. Icebreaker Interviews	•									
5. LMI Continuum	•			•						
6. Future Metaphors	•	•	•	•						
7. Career Planning Metaphors	•		•	•						
8. LMI Visualization	•			•						
9. Earning Power				•						
10. Lost Job				•		•		•		
11. Carousel of Careers				•	•	•	•	•	•	
12. Advertising LMI Resources				•						
13. LMI Scavenger Hunt				•						
14. Classification Systems and Resources				•						
15. Implications Wheel		•		•						

	Module 1	Module 2	Module 3	Module 4	Module 5	Module 6	Module 7	Module 8	Module 9	Module 10
16. State and Local Resources				●						
17. Helping Anna Find Work				●	●	●	●	●	●	
18. Around the House				●						
19. Public and Private Self					●					
20. Label Awareness					●	●	●	●	●	
21. Decision Making			●		●					
22. Past Challenges					●	●	●	●	●	
23. Career Lifeline			●	●	●					
24. Sex Role Commandments							●			
25. Sentence Completions							●			
26. What Do You Know About Working Women?							●			
27. Gender Equity							●			
28. Walk in My Shoes								●		
29. Most I Could Handle						●	●	●	●	
30. Case Study - Carl Young	<p>The case studies can be used to pull together information from a number of modules.</p>									
31. Case Study - Marie Alvarez										
32. Case Study - Joseph Deer										
33. Case Study - Jane Williamson										
34. Case Study - Bernie Maas										
35. Case Study - Thomas Lee										

Applications and Activities



National Career Development Guidelines-Counselor Competencies

Knowledge of counseling and career development theories and techniques.

Skills to use appropriate individual and group counseling techniques to assist individuals with career decision and career development concerns.

Skills to assist individuals in identifying influencing factors in career decision making, such as family, friends, educational opportunities, and finances.

Skills to assist individuals in changing biased attitudes that stereotype others by gender, race, age, and culture.

Knowledge of changing gender roles and how these impact on work, family, and leisure.

Knowledge of employment information and career planning materials.

Skills to use career development resources and techniques designed for specific groups.

Knowledge of unique career planning needs of minorities, women, persons with disabilities, and older persons.

Knowledge of alternative approaches to career planning needs for individuals with specific needs.

Signature Activity

Type of Activity: Icebreaker

Teaching Objective(s):

To help participants become better acquainted by illustrating the diversity of attributes, experiences and work roles among them.

Behavioral Objective(s):

Each participant will try to find persons in the group who fit given descriptions on the "Signature Activity" worksheet by conversationally asking other people direct or indirect questions.

Estimated Time to Complete: 20 minutes

Points to Introduce Activity:

1. The purpose of this activity is to acquaint you with one another by exploring some of your diverse attributes, experiences and work roles.
2. Please find the "Signature Activity. The directions at the top will instruct you to find other people in the group who fit the descriptions that are given. Please note the two columns. One is for female signatures; the other for males.
3. Please use the next 20 minutes to find as many men and women who will agree to the descriptions by signing the appropriate places on your "Signature Activity" work sheet. You may have only one signature from each participant on your work sheet.
4. You may ask others these questions either directly or indirectly as you walk around the room and engage your fellow participants in conversations.

Materials and Preparation:

1. Participants will need the "Signature Activity" worksheet.

Activity:

The participants will have a worksheet "Signature Activity," that lists approximately 20 descriptive statements about a person, such as, "Someone who is athletic." The participants will engage one another in conversation to find out if any of the descriptions match the person to whom they are speaking. If the person does match any of the descriptions on the "Signature Activity" sheet, the person should sign his/her name next to it. Women should sign the sheet on the left hand side; men on the right.

Adaptations:

The descriptions on the "Signature Activity" sheet could be changed to fit the audience.

A prize could be awarded to the person who collects the most signatures or "Autographs of Distinguished People."

Questions for Discussion:

1. As you asked questions of your fellow participants, were you aware of any of your own sex role stereotypes? Why/why not?
2. Did you sense that others had preconceived ideas about members of the other sex? Why/why not?
3. How might some stereotypical ideas about sex roles interfere with a career development facilitator's effectiveness?
4. What can career development facilitators do to overcome their sex role stereotypes?

Trainer's Notes:

Signature Activity

The purpose of this activity is for you to explore the diverse attitudes and work roles that exist in our society. You will use the time allotted to you by your trainer to find as many women and men as you can who will agree to a description of themselves on the lines below. You can do this by asking people directly or indirectly about themselves in a conversational style.

<i>Women</i>		<i>Men</i>
_____	A person who strives to outdo others, never admitting defeat	_____
_____	A person who thinks men should not show affection for other men	_____
_____	Someone who is a gourmet cook	_____
_____	Someone who is athletic	_____
_____	Someone who likes to take bubble baths	_____
_____	Someone who has chopped wood for a fire	_____
_____	Someone who shows emotions freely	_____
_____	Someone who is not ashamed to cry in front of others	_____
_____	Someone who feels men and women are equal in all respects	_____
_____	Someone who feels men and women have different roles in life	_____
_____	Someone who likes to garden	_____
_____	Someone who feels their own behavior is appropriate for their gender	_____
_____	Someone who feels the other sex has it made	_____
_____	Someone who found their career by chance	_____
_____	Someone who has used a Career Information Delivery System	_____

Women

Men

_____	Someone who would like to change their career	_____
_____	Someone who follows the stock market	_____
_____	Someone who has held or holds a nontraditional work position	_____
_____	Someone who feels that women should be protected by men	_____
_____	Someone who feels that you are a failure if you do not marry	_____
_____	Someone who likes to clean house	_____
_____	Someone who thinks the nurturing instinct belongs only to women	_____
_____	Someone who would like to be the other gender	_____
_____	Someone who is a single parent	_____
_____	Someone who supervises others in the work place	_____
_____	Someone who works or has worked in a service industry	_____
_____	Someone who works or has worked in a highly technical area	_____
_____	Someone who has been unemployed in the past two years	_____
_____	Someone who has changed their career within the past five years	_____
_____	Someone who is politically active within the community	_____
_____	Someone who started a business	_____
_____	Someone who is mechanical	_____
_____	Someone who can create a computer program	_____

Career Keno

Type of Activity: Icebreaker

Teaching Objective(s):

The purpose of this activity is to introduce participants to one another and to identify those who have special fields of interest or expertise. It will also help the participants begin to think about the types and uses of labor market information that are covered during this training.

Behavioral Objective(s):

The participants will look for persons in the room who fill the career-related descriptions on their list and ask them to sign the appropriate squares. The objective is to meet the other participants and get to know something about their backgrounds by getting as many squares signed as possible during the time period allotted.

Estimated Time to Complete: 20 minutes

Points to Introduce Activity:

1. This is a get acquainted activity called "Career Keno" that can be found on page--of your Participant's Guide. The purpose of this activity is to acquaint you with others and find out more about their interests and experiences.
2. The object of this activity is to find people who match the 25 descriptions given in the squares on your Keno sheet. For example, when you have found a person who regularly uses the DOT, please have him/her sign that square. Only one signature is needed in each square, do not get more than one. (If there are at least 30 participants, there should be 30 different signatures on each sheet. If there are less than 30, each person can sign two squares.) Trainers may participate, if they wish.

Materials and Preparation:

1. Each participant needs a "Career Keno" sheet from the Participant's Guide on page----.
2. Participants need pencils and adequate space to move around the room.

3. A board or flip chart on which to list certain interest groups, if desired.

Activity:

Participants will have a worksheet of 25 squares, each with a description on it that is related to careers. The participants will look for persons in the room who fit the descriptions on their sheet and ask them to sign the appropriate squares. The participants should not sign more than one square on anyone's list. The objective is to get as many squares signed as possible during the time period allotted (15 minutes).

Adaptations:

1. Items listed in the squares may be changed to fit the backgrounds/work settings of the participants.
2. A prize may be offered, such as play money, for the first participant to fill all 20 squares.
3. A completed "Career Keno" sheet could be posted in the room for future reference during the workshop, or, copies could be made for all the participants.

Questions for Discussion:

1. What were some of the interesting things that you found out about your fellow participants?
2. Did you meet anyone who holds a position similar to yours?
3. Who has experience or information that you would like to hear more about? Why?

Trainer's Notes:

Career Keno

Your Name: _____

Below are 25 squares, each with a description. At the signal to begin, please move around the room, find individuals who meet each of the descriptions, and ask them to sign their names in the appropriate squares. You should have 25 different signatures on your sheet.

Someone who:

does placement	works with youth under age 21	regularly uses labor market information	assists special needs clients	has worked in a non-traditional occupation
uses creative career counseling techniques	regularly reads local business news	has worked with at-risk youth	has held a full-time job in the private sector	has provided school to work transition services to clients
has created a Career Center	has collected unemployment benefits	helps clients acquire career development competencies	has been a member of a labor union	has developed partnerships with local businesses or industries
regularly uses the <i>Dictionary of Occupational Titles</i>	follows local economic development activities	hopes to have new occupation within the next two years	uses a classification system to organize labor market information	works with retired adults
uses a computerized career information system	has participated in a job orientation program in industry	does career counseling from a theoretical framework	has had more than 3 occupations in the last 5 years	is a baby boomer

Dyadic Encounter

Type of Activity: Icebreaker

Teaching Objective(s):

To have participants feel more at ease in the training session by giving them the opportunity to interact in an informal discussion of their own careers.

To illustrate how our personal characteristics may be related to job satisfaction.

To illustrate the differences between a job and a career.

To help participants begin thinking about goal setting and a final action plan.

Behavioral Objective(s):

Participants will discuss their personality traits and their jobs with one another; they will share their job related frustrations, concerns and goals.

Estimated Time to Complete: 30 minutes

Points to Introduce Activity:

1. The purpose of this activity is to get to know another person by discussing your career.
2. You will be assigned a partner and given a list of questions to ask one another. Follow the numbered list of questions, with first one person responding to a question and then the other.
3. Do not write your responses.

Materials and Preparation:

1. Be prepared to assign or randomly select pairs of participants.
2. Direct participants to the list of questions titled Dyadic Encounter in their Guide.

Activity:

Participants will discuss a list of 20 career-related questions in pairs.

Adaptations:

Some of the discussion questions could be changed to focus on specific career issues or groups of people.

Questions for Discussion:

1. What are we best at on the job?
2. What do we dislike the most in our work?
3. What are some of the characteristics of the best supervisors?
4. What are some of the things that we hope to accomplish in our jobs?
5. What barriers do we anticipate?
6. Who/what can help us to overcome these barriers?
7. As you answered these questions, what did you note about the differences between a job and a career?

Trainer's Notes:

Dyadic Encounter

Complete the following sentences with your partner.

1. **My name is**
2. **Basically, my job is**
3. **The reason I am here is to**
4. **Usually I am the kind of a person who**
5. **I'm happiest when**
6. **The thing I dislike the most is**
7. **On the job, I'm best at**
8. **My greatest limitation on the job is**
9. **Characteristics of the best supervisor I ever had:**
10. **Characteristics of the worst supervisor I ever had:**
11. **I like people who**
12. **I began working at this job because**
13. **The next thing I am going to try to accomplish in my career is**
14. **The barriers I anticipate are**
15. **I would look to _____ for some support.**
16. **When I am challenged to overcome barriers what has worked best for me in the past is**
17. **The kinds of clients who are the most difficult for me to work with are**
18. **The kinds of coworkers who are the most difficult for me to work with are**
19. **To work better with them, I have tried to**
20. **The thing that worries me about my job is**
21. **The thing that worries me about my career is**
22. **Briefly discuss your reactions to this conversation. Time permitting, you may wish to discuss other topics of your own choosing. Several possibilities are: projects at work, leadership practices, employee needs and the future.**

Source: Based on the work of John E. Jones and Johanna J. Jones.

Applications-10

Icebreaker Interviews

Types of Activity: Icebreaker

Teaching Objective(s):

The participants will get to know one another and feel more comfortable as they begin the inservice program.

The participants will verbalize their expectations of the inservice program to the persons who interview them. In so doing, they will clarify their goals and provide the instructor with an overview of the participants' needs.

Behavioral Objective(s):

Participants will get to know one another by meeting in pairs to interview one another about their jobs and peak career experiences for five minutes in order to introduce one another to the class.

The participants will tell one another what they expect from the class.

Estimated Time to Complete: 25-45 minutes, depending on class size.

Points to Introduce Activity:

1. One of the most pleasurable aspects of taking a class such as this is meeting other professionals who share some of your challenges and concerns on the job.
2. For the next 10 minutes you will be divided into pairs. One person will interview the other for five minutes about his/her job, a peak experience in his/her career and what might be different or interesting about his/her expectations of the inservice program. After five minutes, please change roles.
3. Encourage participants to be clever and creative in the interviews. Their goal is to come up with a fresh and lively introduction of their partner to the other members of the class.

Materials and Preparation:

1. Be prepared to divide participants in pairs; avoid placing people together who already know each other.
2. Model the activity by introducing yourself to the class in a creative/humorous way, and discussing a peak experience in your

career and your expectations of the inservice, or, have a member of the class do the honors and introduce you according to your planned script.

3. Names of the participants, their jobs, and their class expectations as they are introduced to the class should be written on a flip chart and kept in a visible location during the workshop.

Activity:

Each participant will be interviewed by a classmate who, in turn, will interview him/her. Each participant will then creatively introduce his/her partner to the class by telling what work the person does, a peak experience in his/her career, and what he/she expects from the inservice program.

Adaptations:

1. Other items could be included in the introduction, such as how the participants made their career choices, what influenced them to make their choices, what obstacles did they have to overcome, etc.
2. For interviews of greater depth, allow longer time periods.

Questions for Discussion:

1. Are there similar training needs that were expressed by the class?
2. Is there a common thread or theme to these needs? Why? Why not?
3. Have you met any potential networking resources as a result of the introductions?

Trainers' Notes:

Career and LMI Continuum

Type of Activity: Large group

Teaching Objective(s):

To display some of the career and LMI resources available to the participants and their comfort/discomfort level with using them.

To plan future training activities based on the participants' use of career and LMI resources.

Behavioral Objective(s):

Participants will place themselves at strategic points around the room to indicate their levels of comfort or discomfort in using resources such as the DOT, SOC, SIC, etc.

The participants will become more aware of the career and LMI resources available to them.

Estimated Time to Complete: 20 minutes

Points to Introduce Activity:

1. Some commonly used sources of career and LMI (name them) are displayed around the room. The purpose of this activity is to express your feelings about using the resources that are displayed. You will note that there are signs placed near the resources reading: EASY TO USE, SOME PARTS OK and HARD TO USE.
2. Your trainer will ask you some common questions that career counselors need to answer. After each question, please walk to the resource that you would choose to help you answer the question. If you are unsure, take an educated guess and walk to that resource.
3. When you reach the resource that you think would best answer the question that is asked, place yourself near the sign that best describes your comfort level in using the resource; EASY, SOME PARTS OK or HARD TO USE.
4. Repeat this procedure with each question that is asked.

Materials and Preparation:

1. Select five or six sources of career and LMI such as: the *Dictionary of Occupational Titles* (DOT), the *Guide for Occupational Exploration* (GOE), the *Standard Industrial Classification Manual* (SIC), the *Occupational Outlook Handbook* (OOH), and state information from the State Employment Security Agency (SESA). Set these volumes on tables around the room. Place signs

next to each resource reading: **EASY TO USE, SOME PARTS OK and HARD TO USE.**

2. Have a set of questions ready to read, for example:
 - a. I've never really given much thought to what I want to do when I finish high school. What choices do I have?
 - b. My mom works for Sarah Lee and she's always liked it there--what jobs might I find in a big company like Sarah Lee?
 - c. I really like living in Vermont and I don't want to leave. What jobs are available in this area?
 - d. I've always been fascinated by electronics, but I'm not sure exactly what I'd like to do--any ideas?
 - e. I've always wanted to be a carpenter, but I'm worried about being able to make enough money--do you think I can?
 - f. I've worked as a tool and die maker for 15 years and liked my job very much. I was recently in a car accident and I've lost the use of my left arm. I need a good paying job. What can I do?
 - g. I work with black male teenagers in a group home who have had little exposure to positive career role models in the community. How can I help them?

Activity:

Participants will listen to several questions relating to common career counseling concerns. Upon hearing the questions read by the instructor, the participants will choose a resource that is displayed in the room to answer the question. They will walk over to the resource and position themselves according to their comfort/discomfort level using the resource.

Adaptations:

The continuum could be constructed to reveal the participants' attitudes, values or feelings on any issue.

Additional questions could be developed, depending upon the resources available.

Questions for Discussion:

1. What kinds of career and LMI do you most frequently need in your work? Is it readily available? Why/why not?
2. What specific difficulties do you have locating or using career and LMI?

Trainer's Notes:

Future Metaphors

Type of Activity: Large Group

Teaching Objective(s):

To illustrate how a person's view of the future may affect their decision making and the career counseling process.

Behavioral Objective(s):

After hearing the trainer read a description of four metaphors to describe the future, each participant will choose one that best describes his/her own view. The metaphors of the future will be discussed in a large group. In conclusion, the participants will verbalize their own metaphors of the future.

Estimated Time to Complete: 20 minutes

Points to Introduce Activity:

1. While there is no "right way" to do career counseling, there are a number of strategies and techniques that can help clients personalize and internalize labor market information. Using metaphors, developing images of the future, examining thinking and information processing styles, and checking out client belief systems are all examples of techniques effective career counselors should develop.
2. The purpose of this exercise is to examine our images of the future. Think about how you see the future. What best describes your vision or image of the future? I am going to ask you to listen to four metaphors of the future. A metaphor is a figure of speech in which a word or phrase that denotes one object or idea is used in place of another to suggest a likeness between them. As you listen to the metaphors that I read, pick the one that best describes your view of the future. Consider this a forced choice. There are no right or wrong answers. A particular metaphor may not be the best one for you, but pick the one that comes the closest. You will have the opportunity to develop your own metaphor later on.
3. Read "Four Metaphors for the Future."

Materials and Preparation:

1. Description of "Four Metaphors for the Future."
2. A board or flip chart on which to list the four metaphors, participant comments and the concluding metaphors developed by the participants.

Activity:

The trainer will read "Four Metaphors for the Future." Each participant will choose one metaphor that best describes his/her view of the future. The choices of the participants will be discussed in a large group. In conclusion, the participants will offer their own metaphors of the future.

Adaptations:

Other metaphors to describe the future could be written by the trainer.

The metaphors created by the participants could be written individually or in pairs. This could be a five minute contest to write the best metaphor as judged by all the participants.

Questions for Discussion:

1. Why are a person's beliefs about the future important considerations in career counseling? What part do these beliefs have in determining a client's future?
2. Why might a person who has a "Roller Coaster" view of life be a challenging client?
3. Is it important for a client to examine his/her views of the future? Why/why not? Should a counselor be aware of a client's views? Why/why not?
4. What role, if any, does culture play in a person's views of the future? Should counselors be aware of cultural differences? Why/why not?
5. Is it possible that career development facilitators have stereotypes about what kind of counseling certain client populations "need?" Why/why not?
6. Can a person's view of the future change? How? Should career development facilitators attempt to change a client's view of the future? Why/why not?

Trainer's Notes:

Source: ICDM Training Materials developed by the Washington SOICC

Four Metaphors for the Future

Roller Coaster

The future is a great roller coaster on a moonless night. It exists, twisting ahead of us in the dark, although we can only see each part as we come to it. We can make estimates about where we are headed, and sometimes see around a bend to another section of track, but it doesn't do us any real good because the future is fixed and determined. We are locked in our seats and nothing we may know or do will change the course that is laid out for us.

Mighty River

The future is a mighty river. The great force of history flows inexorably along, carrying us with it. Most of our attempts to change its course are mere pebbles thrown into the river; they cause a momentary splash and a few ripples, but they make no difference. The river's course CAN be changed, but only by natural disasters like earthquakes or landslides, or by massive concerted human efforts on a similar scale. On the other hand, we are free as individuals to adapt to the course of history, either well or poorly. By looking ahead, we can avoid sandbars and whirlpools and pick the best path through any rapids.

Great Ocean

The future is a great ocean. There are many possible destinations, and many different paths to each destination. Good navigators take advantage of the main currents of change, adapt their courses to the capricious winds of chance, keep a sharp lookout posted, and move carefully in fog or uncharted waters. If they do these things, they will get safely to the destination (barring a typhoon or other natural disaster that they can neither predict nor avoid).

Colossal Dice Game

The future is entirely random, a colossal dice game. Every second, millions of things happen that could have happened another way and produced a different future. A bullet is deflected by a twig and kills one person instead of another. A scientist checks a spoiled culture and throws it away, or looks more closely at it and discovers penicillin. A spy at Watergate removes a piece of tape from a door and gets away safely, or he forgets to remove the tape and changes American political history. Since everything is chance, all we can do is play the game, pray to the gods of fortune and enjoy what good luck comes our way.

Source: ICDM Training Materials developed by the Washington SOICC

Career Planning Metaphors

Type of Activity: Individual

Teaching Objective(s):

To illustrate the various steps in the career planning process by comparing it to other accomplishments in our lives. This exercise follows the Future Metaphors activity. Both activities also can be used with clients.

Behavioral Objective(s):

Participants will mentally clarify the career planning process by writing five metaphors comparing the process to another experience, accomplishment or skill that they have developed. By becoming familiar with this technique, counselors can use it to encourage their clients to discuss career planning.

Estimated Time to Complete: 30 minutes

Points to Introduce Activity:

1. Research has shown that we are more likely to internalize, learn and remember something if it can be linked to our direct experiences. The purpose of this exercise is to show how career planning and decision making are much like many other activities in our lives.
2. Recall the Future Metaphors activity when we compared our vision of the future with other images, such as a mighty river, etc.
3. Think of an accomplishment, hobby or interest in your life. It could be playing a musical instrument; or a sport, such as golf; or an interest, such as stamp collecting; or a work place activity, such as a leadership role. Visualize all the steps, elements, practice, or components surrounding the topic you have chosen. Using your topic, create a metaphor for career planning. For example, a soccer player might choose the following metaphors:

Career planning is like soccer because you must be alert and stay in shape.

Career planning is like soccer because you must understand the rules.

Career planning is like soccer because you are competing with others.

4. Using the "Career Planning Metaphors" worksheet, write down the topic you have selected and create five metaphors to describe it within the next ten minutes. Be prepared to present your metaphors in a large group discussion to follow.

Materials and Preparation:

1. Participants will need the "Career Planning Metaphors" worksheet.
2. A board or flip chart on which to list some of the most expressive metaphors.

Activity:

After the metaphor concept is reviewed by the trainer, the participants will think of a personal accomplishment, interest, hobby, or work place activity in their own lives. When the participants have chosen a topic, e.g., playing golf, they will compare it to career planning and write five metaphors describing it, which will be discussed in a large group.

Adaptations:

Other subjects could be selected for metaphorical comparisons, e.g., decision making, changing careers, finding a nontraditional job, etc.

Questions for Discussion:

1. What similarities did you find between your topic and planning a career? What contrasts?
2. How did you feel as you wrote your metaphors? Did the experience make you feel more or less confident of planning your career? Why/why not?
3. How could you use this exercise with clients? How might it help them? What groups, if any, would find this exercise especially valuable and why?

Trainer's Notes:

Source: ICDM Training Materials developed by the Washington SOICC

Career Planning Metaphors

Directions: Think of something that is important or meaningful to you that you would be willing to discuss in a large group. It can be a hobby, pastime, a work place activity, a skill, a relationship, a major accomplishment, or anything else of significance in your life. Visualize all the elements, steps, or components surrounding this topic. How is the topic that you have chosen like planning a career? List five metaphors to describe comparisons that can be made.

Example: Playing golf is like planning a career because you must keep your eyes on the ball and keep moving ahead toward your goals.

1. _____

2. _____

3. _____

4. _____

5. _____

Source: ICDM Training Materials developed by the Washington SOICC

Career and LMI Visualization

Type of Activity: Small or large group

Teaching Objective(s):

To make the participants more aware of the sources of career and LMI that are part of their daily lives.

To illustrate how participants can use this exercise with their clients.

Behavioral Objective(s):

By taking an imaginary walk through one of their typical days, the participants will become more aware of the various sources of career and LMI that are readily available to them and their clients.

Estimated Time to Complete: 15 minutes

Points to Introduce Activity:

Close your eyes, get comfortable and walk with me through your day. Imagine your typical routine. Think of awakening and looking around the room, getting up and dressing for the day. Be aware of all of the products surrounding you or that you are using. What information do these items give you about the labor market? Now imagine yourself having breakfast or doing whatever you do before you leave home. When you leave, where do you go and how do you get there? As you travel to your destination, what do you see? What information does that give you about the labor market in your community? Nationally?

Now you are at your destination. If you are at your work place, what kind of work do you do and what do you use to get it done? If you are somewhere else, what kinds of work are people doing and what are you doing there? If you are at work, what are others doing and how are they accomplishing their jobs? Think for a moment about all the information you are gathering about the work place.

It's lunchtime and you meet a friend at a local restaurant. What can you notice about the labor market while you are having lunch? The afternoon goes on, and soon it's time to go home. On the way you might stop to get gas or groceries, or at your health club. You might go shopping at a local mall, or be a chauffeur to some youngsters. Eventually you reach home, read the newspaper before dinner and perhaps watch some TV afterwards, or read the most recent news magazine. Maybe it's play time and you go out to a movie or nightclub. Do you pick up any other information about your labor market?

What have you learned about the marketplace, the world of work, your labor market? Think about the economy, job descriptions, industries, people eating out, the problems you see while working or going to work, shopping, your own purchases, your salary, etc. This is all useful information about the labor market.

Now, imagine yourself in your client's shoes and walk through a day in his/her role. Imagine getting up, leaving the house, coming to see you (how do you get there?). How might the information your client sees be different from your own? What kinds of labor market information might your client collect that is different from your own? How can you and your client use that information in career counseling?

Materials and Preparation:

1. Trainer should be prepared to read the above statement to the participants.

Activity:

While hearing the trainer's introduction, the participants will imagine that they are walking through their typical day and will recall the sources of career and LMI that they encounter. Secondly, they will imagine that they are walking through a day in a client's shoes and compare the career and labor market information collected by themselves and their clients.

Adaptations:

Have the participants go through the visualization exercise as members of special populations. For example, "You are a minority male looking for work." "You are a person with a disability trying to choose a career." "You are a displaced homemaker seeking to reenter the labor market after a 20 year absence."

Questions for Discussion:

1. As you walked through your day, what sources of career and LMI did you find?
2. As you imagined yourself in the shoes of one of your clients, what sources of career and LMI were available to you? What sources were not available to you? Why not?
3. How was the information to which you were exposed different from that to which your client might be exposed?
4. Might these informational differences affect your counseling and your client's decision making process? If so, how? If not, why?
5. What might be the effects of your exposure to labor market information that is different from your client's?

Trainer's Notes:

Earning Power

Type of Activity: Small Group

Teaching Objective(s):

To show participants how to find the average earnings of specific occupational groups by using the *Occupational Outlook Handbook* (OOH).

Behavioral Objective(s):

Working in pairs, the participants will research information in the OOH.

Estimated Time to Complete: 20 minutes

Points to Introduce Activity:

1. Clients are often concerned about how much money they might earn in a particular occupation.
2. One of the best sources for this information is the OOH. This exercise helps to familiarize us with the OOH.
3. For each of the groups listed, see if you can "guess" which occupations have the highest earnings. When you have finished, use the OOH to check your answers. Please keep in mind that the earnings depend on a number of factors; they are not absolute. Look upon the earnings as a clue to the attractiveness of certain occupations and their potential for long-term monetary rewards.

Materials and Preparation:

1. *Occupational Outlook Handbook* for each small group.
2. "Who Earns the Most?" work sheet.

(Answers: 1-b, 2-c, 3-a, 4-c, 5-b, 6-a, 7-c, 8-a.)

Activity:

Using the "Who Earns the Most?" work sheet, the participants will: 1) make guesses from the list of occupational groups and 2) check their answers in the OOH.

Adaptations:

More occupations could be added to the list to make the activity longer; occupations can be deleted to make the activity shorter.

Additional information from the OOH could be researched.

Different resources, such as CIDs, and state and local wage information could be used. A comparison could be made of the resources.

Questions for Discussion:

1. What factors influence the amount of salary that is paid for a given occupation?
2. Do you think some occupations are overpaid or underpaid? Why?
3. Is salary the most important consideration when choosing a career? Why/why not?
4. What are the most important considerations in making a career choice?
5. Where are the high-paying jobs of the future?
6. How can career development facilities use this information to help their clients?

Trainer's Notes:

Who Earns the Most?

For each of the groups listed below, see if you can "guess" which occupations have the highest earnings.

1. A file clerk, fire fighter or licensed practical nurse.
2. An aircraft pilot, TV announcer or veterinarian.
3. An urban planner, architect or lawyer.
4. A bartender, mail carrier or secondary school teacher.
5. A physical therapist, physician's assistant or dental hygienist.
6. A statistician, forester or meteorologist.
7. A building inspector, middle school principal or hospital administrator.
8. A hotel manager, insurance underwriter or retail buyer.

Lost Job

Type of Activity: Individual

Teaching Objective(s):

By simulating the career decision making process, the participants will become more aware of how personal interests, values and the availability of information influence the process.

The participants will gain some practice in using both formal and informal sources of career and LMI in their decision making process.

Behavioral Objective(s):

Imagining that they have lost their jobs, the participants will be given the names of three available jobs by the trainer. The participants will research the jobs, gathering as much information as possible about each one. They will then choose one of the three jobs, based on their interests and values. They will be prepared to share their decisions and the rationale behind them with the large group.

Estimated Time to Complete: 40 minutes

Points to Introduce Activity:

1. Imagine you have lost your job and that you are now a part of the nation's unemployment statistics. You see an employment counselor at Job Service who gives you titles of three positions that are presently available in your community. They are: TRAINING REPRESENTATIVE, VOCATIONAL REHABILITATION COUNSELOR and PERSONNEL RECRUITER.
2. Gather as much information as possible about these three positions within the next 20 minutes, using any and all resources available to you in this room. Don't forget to include the other participants in the room as resources.
3. Be prepared to communicate your career choice to the class, explaining the rationale behind your decision; include considerations such as personal interests, values and family considerations.
4. After 20 minutes, we will meet in a large group to discuss your career choices and the role "information" played in making them.

Materials and Preparation:

1. Have federal sources of career and LMI available in the classroom, such as the *Dictionary of Occupational Titles (DOT)*, the *Standard Industrial Classification (SIC) Manual*, the *Standard Occupational Classification (SOC) Manual*, a

CIDS, occupational projections, wage surveys, and state and local information. Be sure to have enough resources for all the participants to research the jobs. Some informal sources of information would also be highly desirable, such as professional journals, newspapers and current periodicals related to the occupational areas.

2. Be prepared to list the career choices on a board for discussion purposes.
3. Make sure participants have comfortable work areas for research purposes.

Activity:

Participants will imagine that they have lost their jobs and research three possible a career choice with the resource materials in the room for 20 minutes. Participants will make a career choice based on their interests, values, and the information available. They will be prepared to discuss their choices and the rationale behind them in a large group discussion for approximately 15 minutes.

Adaptations:

Different or additional careers could be selected for research, depending on the audience, the time allowed and the resources available.

Questions for Discussion:

1. What were the most important factors in making your career choice? What were the least important?
2. Why is this particular career (whatever career is named) a popular choice? Why is this career (whatever career) the least popular choice?
3. Was information easy to find on these careers? Why/why not? Was the information understandable once you found it? Why/why not? Do you believe it is reliable?
4. Would your clients be able to locate and understand the information you have used today? Why/why not? What could you do to help make this information more accessible to your clients?
5. What have you learned from this activity that you could use in your work with clients?

Trainer's Notes:

Carousel of Careers

Type of Activity: Small group/Roundtables

Teaching Objective(s):

Participants will be able to select certain topics of interest and participate in small group discussions led by resource persons who can address their specific concerns.

Behavioral Objective(s):

Participants will develop skills to describe and locate a variety of labor market information.

Estimated Time to Complete: One and a half hours (three 20 minute sessions with a five minute break between discussions and a wrap-up). Sample schedule:

2:00 - 2:20 p.m.	Session One
2:20 - 2:25 p.m.	Rotate
2:25 - 2:45 p.m.	Session Two
2:45 - 2:50 p.m.	Break
2:50 - 3:10 p.m.	Session Three
3:10 - 3:20 p.m.	Wrap-up

Points to Introduce Activity:

1. This activity will allow you to select three career and LMI topics of interest from the six tables that are located around the room. You will have 20 minutes at each table with a resource person. After 20 minutes, please move to the second table. Please repeat the procedure for a third 20 minute session.
2. When we conclude the carousel, you will have the opportunity to ask any final questions you may have.
3. Trainers: Give a lively and informative introduction of the resource persons to stimulate participant interest.

Materials and Preparation:

1. Six tables that are clearly marked by Career and LMI topics and chairs for all participants.
2. Six articulate and well prepared resource persons to lead discussions at each table.
3. Ask resource persons if any materials are necessary for their presentations.

4. A listing of all the topics and resource persons on a board or flip chart to introduce the activity.
5. An introduction of all the resource persons, with a background sketch of their qualifications.

Activity:

The participants will move three times from one 20 minute discussion to another, allowing them to select specific topics of interest. There will be six discussion tables headed by resource persons on topics such as:

What Can CIDs Do for Us? What Are the National Career Development Guidelines? How Can a SOICC Help Career Counselors? What Is Gender Equity? How Can We Help Students with Disabilities? What Are Some Commonly Used LMI Resources? Where Are the Jobs of the Future? How Do We Meet the Needs of Adults in Transition? Multicultural Counseling--What Does It Mean? What Careers Does the Military Offer? What Opportunities Are Available in this Community?

The activity concludes with a large group wrap-up session to address any final concerns.

Adaptations:

The Career Carousel could be made larger, with more topics and tables to choose from, and more time allowed.

Have one product available at each table. Instead of discussing an issue, demonstrate how to use a product such as the CIDS, OOH, OIS, SOC, DOT, GOE, occupational projections, wage surveys, or Unemployment Compensation (UC) data.

Questions for Discussion:

1. Are there any final questions or comments that you would like to address to our resource persons?
2. Is there any information that you found to be particularly valuable? What specific information will you use in your work place?
3. Are there any other topics that you would like to see covered in a carousel format such as this?

Trainer's Notes:

Adapted from Oklahoma ICDM Workshops

Advertising Career and LMI Resources

Type of Activity: Small groups

Teaching Objective(s):

To familiarize the participants with federal and state government sources of information: to know where to find them, what is in them and how they can be used in career counseling.

Behavioral Objective(s):

Participants will work in small groups to develop a creative advertisement to be presented to the class for some of the more widely used sources of information, such as: the *Dictionary of Occupational Titles (DOT)*, the *Standard Occupational Classification (SOC) Manual*, the *Standard Industrial Classification (SIC) Manual* and the *Guide for Occupational Exploration (GOE)*.

Participants will be more familiar with the use and content of the information resources that are advertised to the class.

Estimated Time to Complete: 45-60 minutes (depending on the number of small groups)

Points to Introduce Activity:

1. This is an exercise to test your advertising creativity. Imagine that you have to sell one of our source books. How can you excite others about the wealth of information in your publication? Most importantly, how can you entice them to buy it?
2. You will have the opportunity to try your hand at advertising an information resource today. You will work with a small group to develop an ad to sell the resource that you are given, such as the DOT or SIC. You will present your ad to the class. It can be in the form of a poster, a newspaper ad, a television or radio commercial, a poem, a song, or even a door-to-door sales pitch. Be clever and creative!
3. In your ad, please try to be as informative as possible; your objective is to sell your classmates on the value of your LMI resource.

Materials and Preparation:

1. An information resource for each small group, such as the DOT, SIC, SOC, CIDS, etc.
2. Materials to create ads, such as paper, markers, tape recorders, etc.

Activity:

Participants will work in small groups to create an ad for an information resource.

Adaptations:

With video taping equipment, each group could make a 30 second commercial for their resource.

An "Addy Award" (a humorous certificate, small statue, bag of jelly beans, etc.) could be given for the best advertisement by having participants vote for their choices.

Questions for Discussion:

1. What information did your team try to project about your resource?
2. If you had more time and materials, what additional information would you present to the class about your resource?
3. What questions do you have about any of these resources?
4. Which of these resources have you used? Does the resource provide you with the information that you need? Why? Why not?
5. What resources have you not used? Why not?
6. Have you been enticed to use any new products as a result of the ads you have seen today? How will you use them?

Trainer's Notes:

970

Career and LMI Scavenger Hunt

Type of Activity: Individual

Teaching Objective(s):

To demonstrate that we are surrounded by career and labor market information in our everyday lives.

To evaluate the validity or reliability of certain kinds of career and labor market information.

To illustrate the various categories of career and LMI.

Behavioral Objective(s):

During their lunch break, participants will gather one piece of career and labor market information from the environment that they can share with the group.

The participants will cite the sources of their information when it is presented.

The participants will evaluate the information that is presented to the group.

The participants will categorize the kinds of information they have reported.

Estimated Time to Complete: 30 minutes

Points to Introduce Activity:

1. As we move through a typical day, we unconsciously absorb a great deal of career and labor market information in various forms from different sources.
2. When you return from lunch, we will ask each of you to share with the class one piece of information that you picked up during your break, along with the source of your information.
3. You cannot use any of the materials in this room as a source.
4. You may write your information and source on a piece of paper, if you wish.
5. Give an example of career and LMI that might be found, such as the HELP WANTED sign in the restaurant window. What kind of help is needed? What are the wages, hours and conditions of employment? Are benefits offered? Any special training needed?

Materials and Preparation:

1. A board to summarize the career and LMI that is found, and a rating scale for the information, such as **QUESTIONABLE, PROBABLY RELIABLE, WELL DOCUMENTED.**
2. (Optional) A list of categories that could be discussed as outlined below in Adaptations.

Activity:

The participants will find one piece of career and labor market information during their lunch break to bring back to class. The information will be summarized on a board and evaluated for its reliability.

Adaptations:

The information could be broken into categories, such as occupational, demographic and labor force information. The information could be divided into federal, state and local information.

The participants could work in teams in a contest to see which team could collect the most information over the lunch hour.

Working in competitive teams in the classroom for a period of 20 minutes, participants could be given copies of the daily newspaper to scan and hunt for career and LMI to report back to the large group.

Questions for Discussion:

1. Were you surprised by the amount and availability of the information?
2. What forms of career and LMI did you find--any labor force information? Demographic? Occupational? Federal? State? Local?
3. How would you rate the reliability of each of these pieces of information?
4. What conclusion can we come to about career and LMI in general?
5. How can you use this in career counseling?
6. How might your clients use this information?
7. What career and LMI did you look for, but could not find?

Trainer's Notes:

Adapted from Florida ICDM Workshops

Classification Systems and Resources

Type of Activity: Small group

Teaching Objective(s):

To show participants how career and labor market information is classified to make it manageable, accessible and useable.

Behavioral Objective(s):

Working in small groups, the participants will look at copies of the *Dictionary of Occupational Titles (DOT)* on their tables. They will list all of the occupations that made it possible for the DOT to be here at the training session.

Estimated Time to Complete: 30 minutes

Points to Introduce Activity:

1. Career and labor market information comes in an assortment of configurations and formats. Before it can be used effectively by either counselors or clients, it must be organized or classified in some way, so it becomes manageable. The purpose of this activity is to illustrate how classification systems work.
2. In small groups of five or six, look at a *Dictionary of Occupational Titles (DOT)* which is placed on the tables around the room. Working as a group, as quickly as possible, write down all the occupations you can think of that made it possible for the DOTs to be here at the training session today.
3. After you have completed your list of occupations, divide your list into at least three, but no more than five, categories of occupations.
4. You will have approximately 20 minutes to develop your list and occupational categories. Be prepared to share your work with the large group when you are asked to do so.

Materials and Preparation:

1. A DOT for each small group, a comfortable seating arrangement for group work, paper and pencils.
2. A board or flip chart on which to list the categories reported by each group.
3. Be prepared to discuss other LMI classification systems, such as the SIC, SOC, GOE, etc.

Activity:

Working in small groups and using the DOT as their resource, the participants will list all the occupations that made it possible for the DOT to be used in the training session. After listing the occupations, the participants will classify them into categories of not less than three and not more than five.

Adaptations:

Other books could be used as resources, such as telephone books or a city directory, a university timetable, encyclopedias, etc.

Have each small group use a different resource such as the SOC, SIC, GOE, etc., and share the results of their research with others. Why are the classification systems different? How can we relate the various systems to one another?

Questions for Discussion:

1. How many occupations did your group have on the first list?
2. How many categories did your group develop?
3. What similarities are found between the categories listed by each group?
4. How are occupations classified in other LMI sources, such as the SIC, SOC, GOE, etc.?
5. How can an understanding of classification systems help you in your work?
How can it help your clients?

Trainer's Notes:

Implications Wheel

Type of Activity: Small group

Teaching Objective(s):

To illustrate ways in which the change from a manufacturing economy to a service economy has had a ripple effect on the U.S. labor market.

Behavioral Objective(s):

Participants will have a greater awareness of the declining work opportunities in manufacturing industries and the growing number of positions in the service industries. They will incorporate this knowledge into their career counseling.

Estimated Time to Complete: 45 minutes

Points to Introduce Activity:

1. Change does not occur in a vacuum; each cause has an effect that produces a chain reaction.
2. The change from a manufacturing to a service economy has many effects, or implications, especially for career counselors.
3. Let's begin with the premise that most new jobs will be in the services; make this statement in the large center circle, or hub, of your wheel.
4. There are many implications, or effects, of this economic trend; write them in the medium-sized circles that are attached to the center.
5. Add new circles to the diagram as you consider the implications (for counselors and their clients) to each circle that you add; the objective is to widen the circle by generating as many ideas as possible.
6. Be specific when you list your implications. For example, "more computers" is not as helpful as "computers will play a greater role in the work place and in the career counseling process."

Materials and Preparation:

1. Illustration of large wheel on blackboard or flip chart to introduce wheel concept.
2. Large sheets of paper and markers for each group to construct their own wheels.
3. Board or flip chart to summarize the outcomes of the activity.

Activity:

The participants will brainstorm to consider the many implications of the economic forecast that most new jobs will be in the service industries.

The participants will break up into small groups of three or four to discuss and design "Implication Wheels" that will portray the many effects of this economic change from a manufacturing to a service economy.

Adaptations:

The implications wheels can be constructed around any change in the labor market, such as: more women in the work force, more technical skills needed, more minority participation, an older work force, a plant closing, a large business relocation, etc.

This can also be done as an individual or large group activity.

Questions for Discussion:

1. What are some of the most important implications on your wheel?
2. At what points on your wheel might career development facilitators or their clients exert some influence or control?
3. What implications on your wheel are controlled by outside influences? What are they? Why?
4. What are some of the more desirable implications on your wheel? What can be done to implement them?
5. What are some of the undesirable implications? What can be done to diminish them?
6. How could you use this activity with your clients?

Trainer's Notes:

Adapted from the ICDM Materials developed by the Washington SOICC

State and Local Resources

Type of Activity: Individual

Teaching Objective(s):

To demonstrate the importance of state and local career and labor market information for clients who plan to remain and find work in their home towns.

To point out some of the sources of state, county and local career and labor market information.

Behavioral Objective(s):

Participants will imagine that they are taking a walk around the communities in which they are presently living. As they do so, they will make a list of: the occupations they encounter; what career and labor market information was necessary for people to work in those occupations; and where one might find that information.

Estimated Time to Complete: 30 minutes

Points to Introduce Activity:

1. Many of your clients plan to find work and remain in the areas in which they have grown up. You may find that career and labor market information describing the national scene is of limited use to them. They need information about the local labor markets.
2. The purpose of this activity is to stimulate your thinking about some of the occupations in your communities and the sources of labor market information about these occupations. (Give an example of an occupation from your community and describe how people would find information about work within it.)
3. Please find the "State and Local Resources" work sheet and complete it according to the directions. You will have 20 minutes. Be prepared to discuss your responses in a large group.

Materials and Preparation:

1. "State and Local Resources" work sheet.
2. Examples of state and local sources of LMI.
3. A board or flip chart on which to list state and local resources.
4. A state/local resource person to answer any questions.

Activity:

After a brief introduction with some examples from the trainer, participants will complete the worksheet, "State and Local Resources."

Adaptations:

Participants could work in pairs.

If the participants come from a large and diverse work place, this activity could be applied to that environment.

Questions for Discussion:

1. What were some of the occupations you listed from your community?
2. How might people find work in these occupations?
3. What specific LMI is needed for these occupations? Where can it be found?
4. Is state and local information accessible to you and your clients? Is it readily available? Is it easy to use? Why/why not?
5. How can you use state and local resources in your work? How can your clients use state and local resources? What could be done to make these resources more available or useable in your community?

Trainer's Notes:

State and Local Resources

Think about the community in which you presently live. As you imagine yourself walking around town, pick an interesting block. As you walk that block, make a list of all the occupations that are represented within its boundaries.

Now, imagine the block in which you live. Walk that block. What kind of jobs do the people on your block have? Where do they work?

What do they do?

What kinds of career and labor market information do you suppose they needed to get their jobs?

If you were to enter any of the occupations in which these people are working, what would you need to know and where would you find it?

If someone in your block were unemployed, what must they do to find work? What resources are available to them?

Helping Anna Find Work

Type of Activity: Small group

Teaching Objective(s):

To simulate the ways in which career development facilitators can use career and labor market information to help their clients.

Behavioral Objective(s):

The participants will work in small groups of three or four on an exercise that requires them to use several sources of labor market information in a simulated job search for a client.

Estimated Time to Complete: 45 minutes

Points to Introduce Activity:

1. This activity, "Helping Anna Find Work," is completed by answering questions 1-13 on the worksheet. You will work in pairs to research the questions for approximately 30 minutes. You will need to refer to several LMI resources that are here in the room. If you are unable to locate a particular resource, someone else may be using it, so please go on the next question. When you are finished using materials, please replace them promptly for others who may need them.

Materials and Preparation:

1. The following LMI resources:

*Dictionary of Occupational Titles (DOT),
Standard Occupational Classification Manual (SOC),
Career Information Delivery System (CIDS),
Occupational Projections,
Occupational Employment Statistics (OES)
Occupational Outlook Handbook (OOH),
Standard Industrial Classification Manual (SIC),
State/National Projections,
State Employment Review,
State Employment Picture,
State Covered Employment by Industry and County,
Classified Directory of State Manufacturers,
State Service Directory,
State/local area wage surveys, economic indicators, etc.,
Local resources such as telephone books, etc.*

Activity:

Using the LMI resources that are provided, the participants will work in small groups to assist Anna, a woman who has lost her job. This activity simulates many of the steps career development facilitators need to take in using LMI resources with their clients.

Adaptations:

The person seeking work could have special needs, such as a person with a disability, a teen parent, a displaced homemaker, a retiree or an adult with limited English proficiency.

The beginning job description could be changed from a salesperson to a computer programmer, an auto mechanic, etc.

Questions for Discussion:

1. What resources were the most valuable in helping Anna find work? Why?
2. Did you have difficulty using any of the resources? Which ones? Why?
3. Were you surprised by the amount of information you were able to find within the time period? Do you think it was time well spent? Why? Why not?
4. What resources would you be most likely to use in counseling your clients? Why? What additional resources do you recommend? Why?

Trainer's Notes:

Helping Anna Find Work

Occupation Questions

Sources

Answers

1. Anna sells electronic equipment and related supplies at Radio Shack. She has an associate degree in marketing.

Select an occupational title for Anna from the following LMI publications and list its numerical code.

Dictionary of Occupational Titles (DOT)

DOT Title:

DOT Code:

Standard Occupational Classification Manual (SOC)

SOC Title:

SOC Code:

Guide for Occupational Exploration (GOE)

GOE Title:

GOE Code:

State Career Information Delivery System (CIDS)

CIDS Title:

CIDS Code:

Occupational Employment Statistics (OES): See State Occupational Projections for list of occupations

OES Title:

2. Anna has been laid off and is looking for other work. What are some occupations that are related to Anna's?

SOC

List related occupations:

CIDS

GOE

Occupation Questions

3. What occupational descriptions can you find of Anna's work? Please include the major tasks and skills required.

Sources

OOH

DOT

CIDS

Answers

Brief description, include major tasks and skills:

List the occupational characteristics of Anna's job, the physical demands and environmental conditions.

Selected Characteristics of Occupations defined in the DOT

Physical demands:
Environmental conditions:

Industry Questions

4. Determine the industries that employ Anna's occupation. (These are places where she may find work)

SIC
DOT
OOH
CIDS

Local and state resources

Use your own knowledge (be expansive and creative, take a clue from some of the variant occupational titles)

List employing industries (kinds of businesses):

5. Identify the specific industry title(s) and numerical codes.

SIC - use alphabetical index to get into the classification scheme

Look at definition and example

Look at the hierarchy of the classification manual

Major industry title and SIC code:
2 digit title and code:

3 digit title and code:

4 digit title and code:

Occupation Questions**Sources****Answers**

6. What are the projections for these industries?

State and National Occupational Projections, 1988-2000: (Prepublication pages)

Projections:

CIDS

Local information resources

Geography and Industry

7. Review the industrial base in the local labor market to assess job opportunities for Anna.

Employment Review

Give industry employment:

State Employment Picture

How many businesses are in the industry?

State Covered Employment

Number of businesses:

Are they large or small?

Large or small?

8. List specific companies or businesses in your area.

Use your own knowledge.

List two or three business establishments:

Classified Directory of State Manufacturers

State Service Directory

Local telephone books

More about the Occupation

Sources

Answers

9. Examine projections to determine employment opportunities for Anna.

State and National Occupational Projections

10. If you identified related occupations, list the occupational preparation and training requirements for Anna, determine whether Anna will need to supplement her current education and training.

OOH
CIDS
DOT
Selected Characteristics Occupations Defined in the DOT

List levels of education needed or specific training programs:

What is the specific vocational preparation (SVP):

What are requirements in Math (M) and Language (L):

11. Look for wage rates.

CIDS
State Wage Survey

Occupational wage rate:

Questions	Sources	Answers
12. Examine advancement opportunities (or lack thereof) and career ladders available to Anna.	OOH CIDS	List any information found:
What are the implications for Anna's career development?	Local Resources	Implications:
13. Examine job openings in the occupations you identified.	State and National Occupational Projections CIDS State or SDA reports	Average annual openings:

Around the House

Type of Activity: Small group

Teaching Objective(s):

To demonstrate the use of the *Standard Industrial Classification* (SIC) Manual and state and national occupational projections.

To broaden the participants' awareness and understanding of the concept of an "industry."

To discuss industrial projections and the growth or decline of occupations commonly found within them by referencing state and national projections and/or the *Occupational Outlook Handbook* (OOH).

Behavioral Objective(s):

Working in small groups, the participants will brainstorm to develop a list of industries involved in the production of several common household items. After a list of industries has been developed, the participants will make some projections concerning their future growth patterns. The participants will select one industry and describe it in detail to the large group from information taken from the SIC, state and national occupational projections, the OOH and other related sources.

Estimated Time to Complete: 45 minutes

Points to Introduce Activity:

1. The production of even the most common items around our homes is often a complex process that requires the work of many people in diverse occupations in far-reaching places. Working in a small group, you will be given a household item as a topic for brainstorming about the many industries involved in its production and the future growth patterns in these industries.
2. Your group will choose one of the industries to investigate in greater detail, using the SIC and state and national occupational projections as your resources. You will discuss the projections for the industry and the occupations commonly found within it. A spokesperson should be prepared to report your findings in a large group discussion.

3. Assign one of the following items to each group:

Your favorite pair of shoes or slippers
A piece of cookware from your kitchen
A towel from the bathroom
Notepaper from your desk
A plastic food container from your refrigerator
The laundry soap you use

Materials and Preparation:

1. *Standard Industrial Classification (SIC) Manuals* or reprints of the classification index for each small group.
2. State and national occupational projections, industry projections and/or the *Occupational Outlook Handbook (OOH)*.
3. Participant worksheets "Around the House."
4. A board, overhead or flip chart for group reporting.

Activity:

Working in small groups, the participants will brainstorm about the industries involved in the production and distribution of a common household item. Using state and national occupational projections as resources, they will make some group projections concerning future growth and occupational needs in the industries they have listed. Finally, they will select one of the industries to report on to the large group using SIC data, offering their own comments about the industry, its economic future and its occupational projections.

Adaptations:

The list of household items could be changed.

Questions for Discussion:

1. What relationships among industries can be seen in the SIC Manual?
2. How could you use the SIC with your clients? What information does it provide that you could not find in the DOT? OOH? SOC? GOE?, etc.?
3. Why would an understanding of an industrial classification system increase employment opportunities for clients?
4. Why are national and state projections an important component of career planning?

Trainer's Notes:

Around the House

Directions: Your group will be assigned a common household item to research the industries involved in its production and distribution. You also will make some industrial growth and occupational projections. The sources of information are the SIC and State and National Projections.

Take five minutes to brainstorm about the various industries that were involved in the production of your item. List them in the blanks below.

Choose one of the industries from the above list to research in greater depth in the *Standard Industrial Classification (SIC) Manual*. Give the name of the industry as it appears in the SIC: _____

What is its Major Group number? (e.g., Agricultural Services is 07) _____

How is the Major Group as a whole described in the SIC (be brief)?

List the industries that are grouped with the one you have chosen and give their SIC classification numbers. In your small group, discuss the industries and occupations that you would expect to grow or decline and the reasons for your projections. Place a plus (+), minus (-) or an equal (=) next to the industries and occupations that you have listed to indicate the pattern of growth or decline. As resources, use state and national projections, common sense, etc.

_____ number	_____ number
_____ number	_____ number
_____ number	_____ number
_____ number	_____ number
_____ number	_____ number

List ten occupations found in these industries:

Choose a spokesperson to report your findings to the large group.

Public and Private Self

Type of Activity: Large group

Teaching Objective(s):

To illustrate cultural differences by demonstrating that what is considered to be a public topic in one culture may be a private topic in another.

To make participants more aware of and sensitive to cultural differences.

Behavioral Objective(s):

Given questionnaires that list a variety of topics, participants will check responses to indicate their public or private views on the subjects listed.

Estimated Time to Complete: 30 minutes

Points to Introduce Activity:

1. We often assume that topics we consider to be public information will also be considered public by others; therefore, we may unintentionally violate the privacy of others.
2. On the "Public/Private Questionnaire," check the topics that you consider to be public and those that you consider to be private. For example, the first question on the questionnaire asks you about your views on religion. If you feel your views are private, meaning that you can only discuss this topic with those close to you, mark the Private Column. If you would feel comfortable if your views on religion were made public, check the Public Column.
3. We will discuss our differences when you have completed the questionnaire.

Materials and Preparation:

1. The "Public/Private Questionnaire" from the Participant's Guide for each participant.
2. The definition of public and private written on board or flip chart.

Activity:

Participants will individually complete the Public/Private Questionnaires and discuss the results in a large group.

Adaptations:

Additional topics related to career development could be added to the questionnaire.

Questions for Discussion:

1. How many people checked public items in the six categories?
2. What categories had the fewest number of public checks? Why?
3. Were differences found between the participants' responses, or were the responses fairly uniform? Why? Why not?
4. In what situations might we find a greater variance in responses? Why?
5. What are the implications for career counseling?
6. What is the effect of learning about individual and cultural differences and respecting the privacy of others?

Trainer's Notes:

Adapted from Pedersen, P. (1988). *A Handbook For Developing Multicultural Awareness*. Alexandria, VA, American Association for Counseling and Development.

Private/Public Questionnaire

Please mark each of the following topics as:

Private: if it is comfortable to discuss only with intimates, such as close friends or members of your immediate family.

Public: if it is comfortable to discuss with casual friends, acquaintances or strangers

Public	Private	
		Attitudes and Opinions
		1. What I think and feel about my religion.
		2. My views on Communism.
		3. My views on racial integration.
		4. My views on sexual morality.
		5. The things I regard as desirable for a person to be.
		Tastes and Interests
		1. My favorite foods.
		2. My likes and dislikes in music.
		3. My favorite reading matter.
		4. The kinds of movies and tv programs I like best.
		5. The kind of party or social gathering I like best.
		Work or Studies
		1. What I feel are my shortcomings that prevent me from getting ahead.
		2. What I feel are my special strong points for work.
		3. My goals and ambitions.
		4. How I feel about my career.
		5. How I really feel about the people I work for or with.

Public

Private

Money

1. How much money I make at work.
2. Whether or not I owe money.
3. My total financial worth.
4. My most pressing need for money right now.
5. How I budget my money.

Personality

1. Aspects of my personality I dislike.
2. Feelings I have trouble expressing or controlling.
3. Facts of my present sex life.
4. Things I feel ashamed or guilty about.
5. Things that make me feel proud.

Body

1. My feelings about my face.
2. How I wish I looked.
3. My feelings about parts of my body.
4. My past illnesses and treatment.
5. Feelings about my sexual inadequacies.

Source: Pedersen, P. (1988). *A Handbook For Developing Multicultural Awareness*. Alexandria, VA, American Association for Counseling and Development.

Label Awareness

Type of Activity: Small group

Teaching Objective(s):

To demonstrate how each of us may wear a culturally assigned label on our forehead.

Behavioral Objective(s):

Participants will be more aware of how culturally assigned labels influence the ways in which others perceive and interact with us.

Estimated Time to Complete: 20 minutes

Points to Introduce Activity:

1. The purpose of this activity is to illustrate how others perceive us according to our cultural background or group identification.
2. Discuss the examples of labeling that you have seen in your own life or in the media.
3. Each participant will have a label placed on his/her forehead or back with a one word adjective or noun to describe him/her. He/she will not know what the label says.
4. Break into small groups of four to six and discuss an assigned topic, e.g., the impact of more women in the work force, for 10-15 minutes.
5. Interact with each participant in your group as if the label assigned to him/her were true, e.g., INTELLIGENT, HOMEMAKER, TRANSIENT, etc.
6. At the end of the activity, participants will try to guess what their labels might be.

Materials and Preparation:

1. Labels for participants to be placed on their foreheads or pinned on their backs, such as: bright, stupid, homeless, wealthy, uneducated, teacher, sneaky, at-risk, agreeable, philosophical, bus driver, school principal.
2. Select an interesting topic that will generate group discussion.

Activity:

Participants will break up into small groups and discuss an interesting topic for 15-20 minutes. Each participant will wear a label on his/her forehead; the others will treat him/her as if that label were true. The participant will not know what his/her label

says. When the discussion period ends, each participant will try to guess what his/her label says. Group members will then reveal their labels to one another and discuss their feelings during this exercise.

Adaptations:

Could be done for a longer period of time.

Could repeat activity twice with a different label for each participant.

Questions for Discussion:

1. When did you first feel that you had a special label?
2. What happened to make you feel that you had a positive or negative label?
3. Did you try to do anything to overcome your label? If so, what? Did it help?
4. What were your feelings as the discussion progressed?
5. How might this be compared to real life?
6. How might you use this activity in your work?
7. What does this say about how we stereotype individuals to fit our expectations?

Trainer's Notes:

Decision Making

Type of Activity: Large group

Teaching Objective(s):

To illustrate individual differences by showing that what seems logical to one person may not seem logical to another person.

Behavioral Objective(s):

Participants will gain an understanding of individual differences in how decisions are made.

Participants will identify the decision outcomes and be aware of the rationale surrounding it.

Participants will have a better understanding of the decision making process from another cultural perspective, instead of from their own point of view.

Estimated Time to Complete: 45 minutes

Points to Introduce Activity:

1. What seems logical to one person may not seem logical to another.
2. Our resource person for this activity is (introduce speaker). Our resource person will describe a difficult decision in his/her life wherein personal values were an important factor. Our speaker will describe the background and circumstances leading up to his/her final decision.
3. After he/she has completed telling you about his/her decision making experience, you will have the opportunity to ask him/her any questions you may have.
4. Our resource person will not tell what his/her final decision was. We will ask each participant to: 1) predict the resource person's final decision, and, 2) provide the rationale that guided the decision. (The predictions of the participants can be written anonymously on a piece of paper or be given orally in a large group.
5. Our resource person will then disclose his/her decision and the rationale behind it.

Materials and Preparation:

1. A resource person who is willing to share an important decision making experience in his/her life wherein values were an important factor.
2. If participants' responses are written, paper and pencils will be needed. If responses are given orally, a board or flip chart to record them.

Activity:

A resource person who is culturally different from the majority of the participants will discuss an important decision that he/she has made wherein personal values were an important factor. The resource person will discuss the background and circumstances leading up to the decision. The final decision that the resource person made will not be revealed. The participants can ask the resource person questions to provide them with more background, but they may not ask questions related to the final decision. The participants will guess what the final decision of the resource person was and the rationale behind it. The resource person will then share his/her decision and the reasons behind it with the participants.

Adaptations:

More than one resource person could address the group.

Questions for Discussion:

1. Why did you guess that the resource person came to a particular decision?
2. How does the resource person's background relate to your guess?
3. Has your background been a factor in your decision making? To what extent?
4. Are there universally "right" or "wrong" patterns of logic leading to decision making? What evidence can you offer?
5. How can individual differences in logical decision making affect career counseling?
6. How might you use this exercise in your work?

Trainer's Notes:

Past Challenges

Type of Activity: Individual

Teaching Objective(s):

To illustrate the steps in one's decision making process.

Behavioral Objective(s):

The participants will reflect upon difficult or important decisions that have resulted in major changes in their lives. By recalling the steps in their decision making processes and the outcomes of their decisions, the participants will be better able to help their clients make career-related decisions based on their own past experiences.

Estimated Time to Complete: 20 minutes

Points to Introduce Activity:

1. At one time or another, most of us have been faced with making a difficult or important decision that had a major impact on our lives. During this activity we will review one of those decisions and the process we went through in making it. We will look for any similarities between that decision and the decisions you are currently considering about career changes.
2. Find the worksheet "Past Challenges." Please answer the 12 questions and we will discuss them when you are finished.

Materials and Preparation:

1. Participants will need the "Past Challenge" worksheet.
2. A board or flip chart on which to list common decision making steps and outcomes.

Activity:

The participants will answer 12 questions from the "Past Challenges" Worksheet about difficult or important decisions they have made that resulted in major changes in their lives. The participants will share their experiences in a large group discussion.

Adaptations:

Participants could discuss the questions in pairs.

Questions for Discussion:

1. From your own experience, what steps in the decision making process did you find to be the most difficult?
2. What helped you to reach your decision? What assistance is generally available to people who are struggling to make decisions?
3. What specific roles can career development facilitators play to assist their clients in the decision making process?
4. Does culture play a role in the decision making process? How?
5. What differences and similarities in decision making have you found in your work?
6. Is there anything that career development facilitators should avoid doing in their efforts to help their clients?

Trainer's Notes:

Past Challenges

Directions:

Take a few minutes to think about a situation in which you were faced with a difficult or important decision that involved a major change in the direction of your life. After you have identified the issue, proceed with the following 12 questions.

1. What was the decision?
2. What major change did the decision involve?
3. Did the decision represent a loss or gain for you? For another individual? Why? How?
4. What were your feelings at the time you were initially aware of your need to make the decision?
5. Did your feelings remain the same or did they change during the decision process?
6. How did you proceed in making the decision?
7. Did anyone help you in the decision making process? Who? How?
8. What was the outcome of the decision?
9. How did you feel about yourself after you made the decision? Why?
10. If you had an opportunity to remake the decision, would you make any changes? What changes, if any?
11. Do you see any similarities between the way you handled the past decision and the way you are handling your current decision about a career change?
12. What did you learn from the past decision making process that could be applied to your present situation?

Adapted from Loretta Bradley, *Counseling Midlife Career Changers*, NCDA, 1990.

Applications-61

Career Lifeline

Type of Activity: Individual

Teaching Objective(s):

To help participants identify their past, present and future career paths. To illustrate how this exercise can be used with clients in career counseling.

Behavioral Objective(s):

Participants will be more aware of the directions their careers have taken in the past and the risks that were involved in making certain choices. As a result of reviewing their career lifelines, participants will be better able to make future career decisions.

Estimated Time to Complete: 30 minutes

Points to Introduce Activity:

1. The purpose of this activity is to help you identify your past, present and future career paths.
2. Illustrate how to draw approximate time lines of a person's paid work life on the board with a horizontal line, using 10 year intervals up to eighty years.

0 10 20 30 40 50 60 70 80

The trainer should use his/her own career experience as an example.

3. At the approximate point on the line, label the time when your career began with a CB. At the time when you anticipate your full-time career to end, mark a CE. Place an X on the continuum to indicate where you are now.
4. Use felt tip markers to identify and illustrate the following:
 - a. Your best career decision in green
 - b. Your worst career decision in red
 - c. Greatest career risk ever taken in yellow
 - d. Obstacle(s) that prevented you from making a career move you wanted in red
 - e. Career obstacles that you overcame in green
 - f. A lucky break in green
 - g. A person who helped you in green
 - h. Your future career goals in green
 - i. A critical decision in the future in yellow
 - j. Something holding you back at the present time in red.
5. All green entries should be made above the line; all red entries below the line, and all yellow entries on the line.

Materials and Preparation:

1. Large pieces of paper to make horizontal time lines.
2. Be prepared or have a horizontal time line drawn on the board as an illustration.
3. A red, green and yellow felt tip marker for each participant.

Activity:

Participants will draw career lifelines showing their past lives and future career plans, indicating both positive and negative directions that have been taken.

Participants will then break into pairs and discuss their career lines.

Adaptations:

Participants could include more or less on their career lines, such as highest salary earned, greatest responsibilities, etc.

Questions for Discussion:

1. Did you have any difficulty in deciding what items should be placed above the line in green? Below the line in red? Why?
2. Were the risks that you took in the past worthwhile--did they pay off in some way?
3. Would you consider taking risks again? Why? Why not?
4. Can you clearly see where you are headed?
5. Could you change directions if necessary? Why? Why not?
6. Does your career lifeline point out anything to you?
7. What differences do you see among yourselves in the ways in which you look at the risks you've taken and the impact of those risks on your careers?
8. How would an adult career development theorist such as Donald Super look at the career lifeline?
9. How might you use this activity with your clients?

Trainers Notes:

Sex Role Commandments

Type of Activity: Individual

Teaching Objective(s):

To illustrate how people learn their sex roles from their parents as they are growing up.

Behavioral Objective(s):

Participants will list ten commandments that their mothers, older sisters, grandmothers or significant female role models gave them about being boys/girls. They will list ten commandments that their fathers, older brothers, grandfathers or significant male role models gave them about being boys/girls.

Estimated Time to Complete: 30 minutes

Points to Introduce Activity:

1. Parents typically give a variety of commandments that influence the behavior of their children. Sharing these commandments with others can increase our understanding of ourselves, others and cultural norms.
2. Please find the "Sex Role Commandments" work sheet. You will have ten minutes to complete your list of commandments. We will discuss our responses in a large group to compare similarities and differences in sex role commandments.

Materials and Preparation:

1. "Our Mothers' and Fathers' Sex Role Commandments" work sheet.

Activity:

After a brief introduction by the trainer, the participants will have ten minutes to complete "Sex Role Commandments" work sheet. The commandments listed by the participants will then be discussed by the large group.

Adaptations:

The list could also include commandments learned in school, from peer groups or religious groups.

Questions for Discussion:

1. Was it easy or difficult for you to remember the commandments that you have listed? Why? Why not?

2. **Were you surprised by these commandments in any way? In your opinion, were there too many or too few commandments? Why? Why not?**
3. **What commandments have you (or have you not) handed down to your children or other young people that you might influence? Why? Why not?**
4. **Do you feel that your life was enriched or restricted by any of the sex role commandments that you have listed? Why? Why not?**
5. **What commandments continue to influence your life?**
6. **Have you adopted any new commandments? What are they?**
7. **How can career development facilitators help their clients recognize sex role stereotypes and overcome the barriers they may impose in career development?**
8. **How are these commandments evident in the work place today?**

Trainer's Notes:

Sex Role Commandments

The objective of this exercise is to help you understand how you learned sex roles as part of growing up.

Directions: List ten commandments that your mother, older sisters, grandmothers or significant female role models gave you about being a boy/girl.

1. _____
2. _____
3. _____
4. _____
5. _____
6. _____
7. _____
8. _____
9. _____
10. _____

List ten commandments that your father, older brothers, grandfathers or significant male role models gave you about being a boy/girl.

1. _____
2. _____
3. _____
4. _____
5. _____
6. _____
7. _____
8. _____
9. _____
10. _____

From *Beyond Sex Roles*, Sargent, 1985.

Sentence Completions

Type of Activity: Large Group

Teaching Objective(s):

To illustrate the sex role expectations that many of us maintain.

Behavioral Objective(s):

Participants will become more aware of their sex role stereotypes and seek to eliminate them in their career counseling.

Estimated Time to Complete: 20 minutes

Points to Introduce Activity:

1. Frequently people organize their behaviors around "shoulds" for themselves and their expectations of others. Sometimes we are not conscious of the "shoulds" we carry with us that can lock us into certain ways of thinking and behaving.
2. One way to bring out some of these expectations and feelings about others is to do some rapid verbal free associations by completing sentences that are started for us. We will do some of these free associations in the large group for approximately five minutes. We will discuss our responses after that time.
3. We will begin 15 sentences with a word or two and ask you to quickly shout out a few words to complete the verbal associations. For example, when you hear a noun such as "teachers," please complete the sentence with the first thoughts that come to your mind about teachers.

Materials and Preparation:

1. Ask for a volunteer that can write very quickly to record the verbal responses, or free associations, of the participants.
2. Ask the participants to free associate words in each of the following categories:

- | | | |
|-------------------|-------------------|------------------------------|
| a. Single mothers | f. Businesswomen | k. Male bosses |
| b. Male nurses | g. Bachelors | l. Married women |
| c. Divorced women | h. Old women | m. Female basketball coaches |
| d. Secretaries | i. House husbands | n. Male basketball coaches |
| e. Truck drivers | j. Blondes | o. Businessmen |

Activity:

Participants will be asked to complete sentences by free associating verbal responses to the sentence subjects that are called out by the trainer. After the sentences have had several completions offered by the participants, the large group will discuss the free associations that were called out by the participants, with attention given to the presence or lack of sex role expectations and stereotyping.

Adaptations:

Participants could write their sentence completions and discuss them afterward.

Questions for Discussion:

1. Were you surprised by some of the associations that you made? Why/why not?
2. Where do these "shoulds" and expectations of other come from?
3. Do these stereotypes of others increase or decrease with age or experience?
4. Why is it important for career counselors to be aware of stereotyping?
5. What skills must counselors develop to move beyond stereotyping when working with their clients?
6. How can a client's potential be affected by stereotyping?

Trainer's Notes:

What Do You Know About Women in the Work Force?

Type of Activity: Individual

Teaching Objective(s):

To make participants more aware of the working conditions of women.

Behavioral Objective(s):

Participants will take a quiz, "What Do You Know About Women in the Work Force?"

Estimated Time to Complete: 30 minutes

Points to Introduce Activity:

1. Many people are unaware of the role women play in today's work place. To test your knowledge, please take the quiz, "What Do You Know About Women in the Work Force?". This is a self-test; your score need not be reported. We will use the quiz for discussion purposes when you have completed it.

Materials and Preparation:

1. Participants will need pencils and "What Do You Know About Women in the Work Force?"
2. A board or flip chart on which to write the answers to the quiz.

3. Answers to quiz:

- | | | |
|---------------------|-------------------|----------------|
| 1. (d) 69%, | 8. (b) \$14,485, | 15. (c) 62%, |
| 2. (a) 35-44 years, | 9. (a) \$17,819, | 16. (a) 44.7%, |
| 3. (b) 68%, | 10. (d) \$25,187, | 17. (d) 80%, |
| 4. (c) 29.3 years, | 11. (a) \$26,045, | 18. (d) 9%, |
| 5. (d) 50%, | 12. (d) \$.70, | 19. (b) 53%, |
| 6. (c) 45%, | 13. (c) 30%, | 20. (d) 33% |
| 7. (a) \$27,228, | 14. (c) 56%, | |

(Source: U.S. Department of Labor Women's Bureau, No. 90-2, September, 1990)

Activity:

Participants will take a self-quiz, "What Do You Know About Women in the Work Force?" from the Participant's Guide. The answers to the quiz will be given and discussed in a large group.

Adaptations:

Questions could be added to the quiz to reflect new information or local conditions.

Questions for Discussion:

1. What facts surprised you the most from the quiz? What surprised you the least? Why? Why not?
2. What facts best describe situations that you have encountered?
3. What figures indicate the "Feminization of Poverty?"
4. What figures indicate the conditions of minority working women?
5. What statistics illustrate occupational segregation?
6. What actions could be taken to improve conditions for working women? Will these actions be taken? By whom? How? When?
7. What future do you envision for working women in the year 2000?
8. How can you use this information with your clients?

Trainer's Notes:

What Do You Know About Women in the Work Force?

Is your awareness of women in the work force increasing? Here are some questions to test your knowledge. Circle the answer that you think is correct.

1. In 1989, the percentage of all women, ages 18 to 64, who were in the labor force.
a. 50% b. 60% c. 45% d. 69%
2. In this age group, 76% of the women are working.
a. 35-44 b. 45-54 c. 25-34 d. 16-24
3. Although most women workers are employed full-time, what percentage of all part-time workers are women?
a. 45% b. 68% c. 75% d. 50%
4. The average woman worker of 16 years of age between 1970-80 could expect to spend how many years of her life in the work force?
a. 20.2 b. 24.5 c. 29.3 d. 32.5
5. Among black workers, what percentage are women?
a. 35% b. 42% c. 30% d. 50%
6. Among white workers, what percentage are women?
a. 37% b. 55% c. 45% d. 40%
7. In 1988, the median income for white men working year-round and full-time was:
a. \$27,228 b. \$22,429 c. \$19,405 d. \$29,998
8. In 1988, the median income for Hispanic women working year-round and full-time was:
a. \$16,424 b. \$14,485 c. \$18,093 d. \$12,029
9. In 1988, the median income for white women working year-round and full-time was:
a. \$17,819 b. \$20,413 c. \$15,423 d. \$21,567
10. In 1988, the median income for women who had completed four years of college was:
a. \$21,899 b. \$19,038 c. \$29,765 d. \$25,187

11. In 1988, the median income for men who had a high school diploma was:
a. \$26,045 b. \$19,413 c. \$23,788 d. \$31,129
12. When 1989 median weekly earnings of full-time wage and salary workers were compared, the average woman earned how many cents compared to every dollar earned by the average man?
a. \$.65 b. \$.60 c. \$.75 d. \$.70
13. More women are choosing to start their own businesses. Women's share of all non-farm sole proprietorships rose to what percent in 1986?
a. 15% b. 22% c. 30% d. 39%
14. What percentage of mothers with preschoolers (children under 6 years) was in the labor force in 1988?
a. 20% b. 45% c. 56% d. 38%
15. Of all persons over 16 years of age with poverty level incomes in 1988, what percentage were women?
a. 34% b. 41% c. 62% d. 71%
16. In 1988, the poverty rate for all families maintained by women with children under the age of 18 was:
a. 44.7% b. 36.2% c. 50.3% d. 26.3%
17. In 1989, women represented what percentage of administrative support (clerical) workers?
a. 56.1% b. 68.9% c. 76.8% d. 80.0%
18. In 1989, women represented what percentage of precision production, craft and repair workers?
a. 16.4% b. 21.2% c. 3.2% d. 9.0%
19. In 1988, the percentage of all poor families that were maintained by women:
a. 35% b. 53% c. 47% d. 61%
20. The 1989 unemployment rate for black female teenagers, from 16-19 years, was:
a. 20.7% b. 18.5% c. 26.4% d. 33.0%

Source: U.S. Department of Labor Women's Bureau, No. 90-2, Sept., 1990.

Gender Equity

Type of Activity: Individual

Teaching Objective(s):

To identify some of the trends in business, industry and society that support the need to achieve gender equity.

Behavioral Objective(s):

Participants will list at least five trends in business, industry and society that support the need to achieve gender equity.

Participants will become more aware of gender equity issues as they affect their clients.

Estimated Time to Complete: 20 minutes

Points to Introduce Activity:

1. The unequal treatment of women in the work place has become costly to business, industry and our society as a whole. Discriminatory conditions can no longer be ignored; there are many trends in business and industry today that support the need to achieve gender equity.
2. Think about the social, political and economic changes that have taken place in the last few decades; think of the changes that are ahead. What trends in business and industry support increased opportunities for women? How do these trends support gender equity in the work place?
3. Please list at least five of these trends on a piece of paper. You have ten minutes to compile your list.
4. We will list the trends on the board and discuss them as a large group.

Materials and Preparation:

1. Have a board or flip chart on which to list the trends.
2. Be prepared with your own list of trends to incorporate into the discussion in the event that they are not listed by the participants, such as: more women in the work force, more service jobs, a need for educated/skilled/trained workers, a decline in the number of workers entering the work force, the aging of the work force, more female consumers, women more politically conscious, more businesses catering to female clients, legislation to promote gender equity, more women moving into management positions, gender equity education, wider acceptance of women in the work place, women better

educated and trained, more occupations now open to women, more women supporting families, etc.

3. Be sure to bring out the changes necessary to accommodate the needs of working women, such as: work site day care for dependents, flexible scheduling, policies guaranteeing parental leave, protection from sexual harassment, equity in pay and promotional practices, and a better understanding of the different communication/management styles of men and women.

Activity:

After a brief introduction from the trainer, the participants will list the trends in business, industry and society that support the need to achieve gender equity. These trends will be summarized, written on the board and discussed in a large group.

Adaptations:

This exercise could be done by listing trends in business, industry and society that support the need for: technical education, multicultural counseling, increased opportunities for special populations such as: minorities, children at-risk, older adults, persons with disabilities, etc.

Questions for Discussion:

1. What trends in business, industry and society support the need to achieve gender equity?
2. What changes in the work place do you foresee as a result of greater gender equity?
3. What could career development facilitators do to promote gender equity?
4. What obligations do career development facilitators have to promote gender equity?

Trainer's Notes:

Walk in My Shoes

Type of Activity: Small group

Teaching Objective(s):

To make the participants more sensitive to and aware of the challenges persons with disabilities must meet in the work place.

To create an awareness of the adaptations that can be made in the work place to accommodate the needs of persons with disabilities.

Behavioral Objective(s):

The participants will place themselves in the roles of persons with different disabilities. They will list the ways in which their work places could be altered to accommodate their needs.

Estimated Time to Complete: 45 minutes

Points to Introduce Activity:

1. During this activity you will place yourself in the role of a person with a specific disability. You must imagine that your life has been suddenly changed by an automobile accident or a medical diagnosis. What effect would your disability have on your present career? What adaptations would be necessary for you to continue in your present work role? Each small group will discuss the implications of the disability that they are assigned and create a list of adaptations that would be necessary for them to do their jobs. After 20 minutes, we will discuss your findings in a large group.
2. In your discussion, please recall the mandates of the Americans with Disabilities Act of 1990.

Materials and Preparation:

1. Participants will need to be assigned a scenario from "Walk in My Shoes," worksheet.

Activity:

Working in pairs or small groups, the participants will take on the roles of persons with disabilities. They will make a list of the adaptations that would be needed in their work places to enable them to continue in their present roles.

Adaptations:

Short scenarios could be written describing different disabilities.

Participants could work individually.

Using the scenarios of disabilities, the participants could research alternative career choices using labor market information.

After the list of adaptations are made, the participants could role play their requests to their employers regarding the adaptations needed.

Questions for Discussion:

1. How did you feel as you took on the role of a person with disabilities? Would some/any/all of the disabilities affect your level of self-confidence? In what ways? Why? Why not?
2. How would the disabilities affect your social life? Would your friends remain the same or would they change?
3. What work place adaptations would be necessary? Would you anticipate any problems, such as funding or supervisory support? Why? Why not?
4. What work tasks, if any, do you feel that you would be unable to complete, despite the available modifications? How might this affect your job?
5. How has the Americans with Disabilities Act of 1990 opened doors for persons with disabilities?
6. How can you incorporate the ADA into your career counseling of persons with disabilities?

Trainer's Notes:

Walk in My Shoes

Directions: Each small group should work with a different scenario. Placing themselves in the roles of the persons with disabilities, the group should make a list of the ways their present career would be affected and the ways in which their work places would need to be adapted in order to accommodate their needs.

1. As a result of an automobile accident, you have lost the use of both legs and are now confined to a wheelchair.
2. As a result of a head trauma suffered in a bicycle fall, you are now subject to convulsive epileptic seizures.
3. Your vision has been severely impaired as a result of cataracts.
4. You have developed an asthmatic condition. You need to carry an inhaler, medication, and be alert for allergic reactions at all times.
5. Your cancerous larynx has been surgically removed. You must speak through an artificial voice box.
6. Your hearing is impaired due to a severe respiratory infection.
7. After suffering a stroke, you have poor handwriting and written work is difficult for you.
8. You have a chronic disease that makes it painful and difficult for you to move your body.

Questions for Discussion:

1. How did you feel as you took on the roles of a persons with disabilities? Would some/any/all of the disabilities affect your level of self-confidence? In what ways? Why/why not?
2. How would the disabilities affect your social life? Would your friends remain the same or would they change?
3. In what ways might you experience growth as a person with a disability?
4. What work place adaptations would be necessary? Would you anticipate any problems, such as funding, supervisory support, etc.? Why? Why not?
5. What work tasks, if any, do you feel that you would be unable to complete, despite the available modifications? How might this affect your job?
6. How has the Americans with Disabilities Act of 1990 opened doors for persons with disabilities?
7. How can you incorporate the ADA into your career counseling of persons with disabilities?

The Most That I Think I Could Handle

Type of Activity: Individual

Teaching Objective(s):

To demonstrate an activity that can be used to assess and build the self-confidence of children at-risk.

Behavioral Objective(s):

Given the worksheet, "The Most That I Think I Could Handle," the participants will take on the roles of at-risk students and answer questions that are related to their personally perceived capabilities in school, social situations and future job searches. The participants will assess levels of self-confidence of at-risk students in the situations that are described.

Estimated Time to Complete: 20 minutes

Points to Introduce Activity:

1. The purpose of this activity is to help us understand how children at-risk would assess their capabilities in certain school, social and job search situations by answering the questions, "The Most That I Think I Could Handle."
2. You will have five to ten minutes to answer the questions on the work sheet. We will discuss your answers in a large group after that time.

Materials and Preparation:

1. Participants will need "The Most That I Think I Could Handle."
2. A board or flip chart on which to list strategies for building self confidence in specific areas of concern, such as speaking in front of an audience.

Activity:

Taking on the roles of children at-risk, the participants will answer the questions from "The Most That I Think I Could Handle", a brief self-assessment of their self-confidence in school, social and job search situations. After the questions have been answered, the participants will discuss them in a large group and identify some strategies for building self-esteem.

Adaptations:

Questions could be designed for any special needs group, persons with disabilities, older adults, displaced homemakers, teen parents, etc.

Questions for Discussion:

1. How did you feel about yourself after answering the questions? Why?
2. In what areas do you have the most self-confidence? Why? In what areas do you have the least? Why?
3. Is having self-confidence an important personal quality? Why? Why not? What qualities do you think are necessary to succeed in school? In social situations? In searching for a job?
4. What can we do to improve the self-confidence of our at-risk students in school? In social situations? In searching for a job?
5. Who are some of the people who could help at-risk students? What public and private facilities or institutions might help at-risk students develop their confidence? How?
6. If you could do one thing to boost the self-confidence of at-risk students, what would it be? Can you do it? Why? Why not?

Trainer's Notes:

The Most That I Think I Could Handle

Read each phrase and fill in the blank following it to describe how much of each activity you feel is the most you can handle.

Hours of homework in a day

Parties or dates during a weekend: parties dates

Phone calls in a day

Boyfriends or girlfriends at one time

Chores at home in a day: How many? How much time?

People living in my house at once

Slices of pizza to eat at one sitting

Pounds I could lift

Tests to take in one day

Number of people in an audience to whom I could speak

How long I would wait patiently for anything without complaining

The number of business establishments that I could walk into on a given day to ask about employment opportunities

The number of people I could telephone in one day to inquire about employment opportunities

The number of job applications I could fill out during a job search

The amount of time I would set aside to read the Help Wanted ads in the Sunday paper

How many adults I would ask to be a reference for prospective employers

How many hours I could work during the week and still complete all my school work

How many reprimands could I take from my employer within a four hour period

Adapted from *Personal Growth and Development Workbook*, Winneconne High School, Winneconne, Wisconsin.

Case Study - Carl Young

(Developed by the New Mexico SOICC)

Carl Young is a high school dropout. You are trying to find him a job in one of the large local motels or hotels but it appears to be a stagnant industry, employment-wise. Is this true? Is there any hiring at all? What are the long-term prospects? Name some jobs found in the industry. Does he meet the educational qualifications? Who are the largest local employers?

Major Labor Market Information Topics by Reports

	Outlook		Requirements			Job Hunting			Economic Trends			Wages
	National	State	Education	Work Environment	Employers' Area	Occupation	Resume & Interview	Unemployment	Employment	Industry		
<i>Occupational Outlook Handbook</i>	x		x	x								x
<i>State Occupational Outlook to 1995</i>		x										
<i>State Supply/Demand</i>		x										
<i>State Job Hunter's Guide</i>					x		x					
<i>Prospects</i>		x	x		x		x					
<i>Large Employers</i>					x							
<i>Industries-Companies-Occupations</i>						x						
<i>Employers with most hires</i>					x							
<i>Employers by Occupation</i>						x						
<i>Jobs for Graduates</i>						x						
<i>State Labor Market Review</i>								x	x	x		
<i>Regional Wage Surveys</i>												x
<i>Other:</i>												

Case Study - Marie Alvarez

(Developed by the New Mexico SOICC)

Marie Alvarez is a recent high school graduate considering possible employment fields and wants your advice on the Automotive Mechanic field. What she knows about the job interests her. Previous testing indicates she has an aptitude for mechanical work. She would like a job offering favorable employment opportunities nationally, but would prefer staying in a metropolitan area and working for a local company. She wants to know if formal training or on-the-job training is preferable. Any additional school would need to be available locally. Salary levels, both beginning and experienced, are also a consideration. What can you tell her about job opportunities, employers, training and pay?

Major Labor Market Information Topics by Reports

	Outlook		Requirements		Job Hunting			Economic Trends			Wages
	National	State	Education	Work Environment	Employers' Area	Occupation	Resume & Interview	Unemployment	Employment	Industry	
<i>Occupational Outlook Handbook</i>	x		x	x							x
<i>State Occupational Outlook to 1995</i>		x									
<i>State Supply/Demand</i>		x									
<i>State Job Hunter's Guide</i>					x		x				
<i>Prospects</i>		x	x		x		x				
<i>Large Employers</i>					x						
<i>Industries-Companies-Occupations</i>						x					
<i>Employers with most hires</i>					x						
<i>Employers by Occupation</i>						x					
<i>Jobs for Graduates</i>						x					
<i>State Labor Market Review</i>								x	x	x	
<i>Regional Wage Surveys</i>											x
<i>Other:</i>											

Case Study - Joseph Deer

(Developed by the New Mexico SOICC)

Joseph Deer, who has just graduated, did well in several work-experience courses in high school. He does not plan to continue his education and is considering looking for work as either a typist or entry level bookkeeper in

_____ of _____
 (insert metropolitan area) (insert name of another area in your state)

What can you tell him about job prospects, employers and wages?

Major Labor Market Information Topics by Reports

	Outlook		Requirements		Job Hunting			Economic Trends			Wages
	National	State	Education	Work Environment	Employers' Area	Occupation	Resumes & Interview	Unemployment	Employment	Industry	
<i>Occupational Outlook Handbook</i>	x		x	x							x
<i>State Occupational Outlook to 1995</i>		x									
<i>State Supply/Demand</i>		x									
<i>State Job Hunter's Guide</i>					x		x				
<i>Prospects</i>		x	x		x		x				
<i>Large Employers</i>					x						
<i>Industries-Companies-Occupations</i>						x					
<i>Employers with most hires</i>					x						
<i>Employers by Occupation</i>						x					
<i>Jobs for Graduates</i>						x					
<i>State Labor Market Review</i>								x	x	x	
<i>Regional Wage Surveys</i>											x
<i>Other:</i>											

1027

Case Study Activity - Jane Williamson
(Developed by the Montana SOICC)

Includes:

1. **The Problem and the Plan**
2. **Jane's high school transcript and ASVAB test scores**
3. **CIDS questions and answers**
4. **Thoughts on ASVAB interpretations**
5. **Occupational Profile**
6. **Occupational Information Resource Matrices - National and State**

1. The Problem and the Plan

The Problem

You have a client that desperately needs your help. Her name is Jane Williamson. She arrived at your office this morning with a set of ASVAB scores, a CIDS questionnaire, her high school transcript, and a list of questions. She desperately wants to know what kind of careers to look into.

You were unable to see her when she was in your office. She left the information and made an appointment to see you tomorrow morning. You can only spend a few minutes getting to know her in the morning. You plan to spend tomorrow afternoon researching available resources. You also made another appointment with Jane later in the week to go over your recommendations with her.

After reviewing her questions, you decide you could use some help. You arrange for several "experts" to be available to answer your questions. You also contact several colleagues who agree to work with you.

Most importantly, you have developed a plan.

The Plan

I. Review Information Jane left at the Office.

Review the ASVAB test scores, CIDS answers and Jane's high school transcript.

Even though you have not met Jane, describe her strengths and weaknesses.

II. Interview Jane. (A volunteer from the group or the trainer) All small groups will interview Jane at the same time.

As a group, decide what you want to find out from Jane.

Select a spokesperson in your group to interview Jane.

Try to find out more about Jane than is shown by the documents. Are there any conflicts between her expectations and the results of her test scores, CIDS answers and her high school record?

All the groups will interview Jane at the same time. Jane can stay only for about 20 minutes.

III. Run a CIDS Program to Get a List of Occupations.

Contact the CIDS representative and make arrangements to run Jane's CIDS answers through the occupational search program. This will give you a list of occupations with which you can begin working. Remember that Jane is a teenager.

IV. Choose Possible Occupations.

As a group, use all the information you now have to choose three occupations to research further. You have decided to limit your research to three occupations for time's sake. You can always recommend others she should research. The possibilities should be based upon the ASVAB, CIDS results, high school record, and your interview with Jane. You realize that Jane should be doing some of this work with you, but because of time limitations, complete the tasks without her.

You also realize there are many other testing and evaluation instruments that could be helpful. However, you do not have time to give any other tests. So, you decide to use the ASVAB and CIDS in this case. If you feel other tests would be useful, you can tell Jane when you present your findings.

When choosing the occupations, try not to consider anything but Jane's skills, abilities, aptitudes and interests. You will be looking at many other factors as your research progresses.

V. Research the Occupations

Now divide your group into pairs of "researchers." Each pair will take one of the occupations chosen and complete the occupational profile for that occupation.

You can complete the parts of the profile in any order. We suggest that you do Part I, Section A first. This will give you the basic codes to access the other data.

VI. Prepare & Present Recommendations to Jane.

You need to prepare a presentation of your findings for Jane. Prepare the presentation as a group. You may do the presentation however your group chooses.

Jane will be in your office at 8:00 tomorrow morning. Your group will only have about 5 minutes to talk to her because she has several other groups working on her problem and must see them also.

#2 JANE'S HIGH SCHOOL TRANSCRIPT AND ASVAB TEST SCORES

PERMANENT RECORD

BETA HIGH SCHOOL

Anytown, IL

Student Name: Public, Jane Q. M/F Father's Name (Guardian) John Z. Public
 Address: 1234 Maple Avenue Mother's Name (Guardian) Mary L. Public
 Telephone: 123-4567 Parents' Address (if different) _____

Grade 9: 1981-82

English I	C	1	English I	C-	1
Soc. Stu.	C-	1	Soc. Stud.	D+	1
P. E.	A	1/2	P.E.	A	1/2
Alg. I	B+	1	Alg. I	A-	1
Gen. Sci.	A-	1	Gen. Sci.	B	1
Typing I	C	1	Typing I	C+	1

TOTAL CR: 5 1/2 TOTAL CR: 5 1/2

Grade 10: 1982-83

English II	D+	1	English II	C	1
Wld Hist	C-	1	Wld History	C-	1
Softball	A	1/2	Basketball	A	1/2
Geometry	B+	1	Geometry	A-	1
Biology	B-	1	Biology	B	1
Computer Sk.	A-	1	Dr. Ed.	B-	1

TOTAL CR: 5 1/2 TOTAL CR: 5 1/2

Grade 11: 1983-84

Comp. III	B-	1	Am. Lit
U.S. Hist.	C-	1	U.S. Hist.
Alg. II	B+	1	Alg. II
Woodwork I	A	1	Drafting
Speech	B	1	Drama
Chemistry	B-	1	Chemistry

TOTAL CR: 6

Grade 12:

Activities: (* = letter)
 Basketball 10,11
 Track 10*, 11
 Drama Club 11

BETA HIGH SCHOOL TERM REPORT CARD

Jane Q. Public 11
 Student Name) (Grade)

1234 Maple Avenue
 (Address)

	1	2	Sem.		1	2	Sem.
Comp III	C	B	B-	Am. Lit.	C		
U.S. Hist.	D+	C	C-	U.S. Hist.	C		
Alg. II	A-	B	B+	Alg. II	A		
Woodwork I	A	A	A	Drafting	A-		
Speech	B-	B	B	Drama	B		
Chemistry	C	B+	B-	Chemistry	B		

ASVAB ALPHA ROSTER REPORT
 STANDARD SCORES
 PUBLIC JANE Q

GS 57	CS 48
AR 60	AS 66
WK 43	MK 57
PC 40	MC 53
NO 49	EI 54

1033

1034

Categories of Occupational Characteristics

SCHOOL SUBJECTS

Check 1 to 3 School Subjects that you like.

- 201. **Language Arts:** literature, composition, grammar, speech, foreign language
- 202. **Mathematics:** general math, geometry, algebra, trigonometry, calculus
- 203. **Chemistry**
- 204. **Physics**
- 205. **Biology**
- 206. **Social Studies:** history, geography, government, sociology, psychology
- 207. **Economics**
- 208. **Music/Art/Drama:** drawing, painting, sculpture, textile art, music
- 209. **Physical Education/Health Fitness:**
- 211. **Industry/Technology:** drafting, graphic arts, metalworking, mechanics, woodworking, electronics, construction, manufacturing, transportation
- 212. **Family/Consumer Science:** foods and nutrition, clothing, housing, parenting and child development, community service, consumer education, independent living
- 213. **Agriculture:** agricultural production, services, mechanics
- 214. **Marketing:** merchandising, marketing, services, entrepreneurship
- 215. **Business/Accounting:** accounting, bookkeeping, business math, management and finance
- 216. **Office/Clerical:** typing, shorthand, wordprocessing,
- 217. **Health/Medical**
- 218. **Computers/Applications:** computer programming, systems design and analysis, electronic spreadsheets, data bases, etc.

EDUCATIONAL PROGRAMS

Check 1 to 3 Educational Programs you would like to pursue.

- 221. **Agriculture/Natural Resources**
- 222. **Business**
- 223. **Computers/Applications**
- 224. **Education**
- 225. **Engineering/Architecture**
- 226. **Family, Food, and Consumer Sciences**
- 227. **Fine Arts**
- 228. **Health Sciences**
- 229. **Industry/Technology**
- 230. **Language/Communication Arts/Interdisciplinary Studies**
- 231. **Mathematics**
- 232. **Personal and Protective Services**
- 233. **Sciences**
- 234. **Social Sciences/Services**

INDUSTRIES

Check 1 to 3 Industries where you want to work.

- 691. Agriculture - Production and Services
- 692. Forestry, Fishing, Hunting, and Trapping
- 693. Mining
- 694. Construction
- 695. Manufacturing
- 696. Transportation
- 697. Communications
- 698. Electric, Gas, and Sanitary Services
- 699. Wholesale Trade
- 700. Retail Trade
- 701. Finance, Insurance, and Real Estate
- 702. Lodging and Personal Services
- 703. Business Services
- 704. Automotive and Other Repairs and Services
- 705. Motion Picture, Amusement, and Recreation Services
- 706. Health and Legal Services
- 707. Education, Social, and Membership Services
- 708. Professional Services
- 709. Public Administration

APTITUDES

Check 1 to 3 Skill(s) that you want to use at work.

- 141. Verbal: speak well and write clearly
- 142. Numerical: work quickly and accurately with numbers
- 143. Visual: see shades of colors, important details, and relationships among shapes and objects
- 147. Coordination: quickly and accurately control movements with your body
- 152. Clerical Perceptions: understand details in spoken and written communications, proofread words and numbers, understand basic math

INTERESTS

Check 1 to 3 of the following that most interest you.

- 131. Data: making judgments and decisions based on facts or figures
- 132. People: directing, helping, or influencing people
- 133. Objects: operating machines, using equipment to perform tasks
- 134. Ideas: using information or concepts to solve problems and make decisions
- 135. Living Things: working with plants, animals, and living organisms

EDUCATION

Check 1 to 3 levels of Education that you are considering.

- 401. No High School Diploma
- 402. High School Diploma or G.E.D.
- 406. Associate degree (2-year program)
- 410. Vocational or Technical Training
- 407. Bachelor's degree (4-year program)
- 408. Master's degree
- 409. Doctoral degree (Ph.D., M.D., etc.)
- 411. Four years or more of college

WORK METHODS

Check 1 or 2 Work Methods that you think match your work style.

- 121. **Structured:** Work activities are clearly defined. Specific procedures or instructions must be followed. Consistency and precision may be required. You may do similar tasks each day.
- 122. **Creative:** Work activities involve developing new solutions to produce products or thinking up new themes or ideas. Each work day may be different, but you may work on one project for several months.
- 123. **Problem-Solving:** Work activities require thinking about problems and choosing solutions that may affect many people. Quick decisions may be required, so you must feel comfortable making decisions with incomplete information.

TRAVEL

Check 1 or 2 styles of Travel that you would like.

- 351. Work at the same place every day
- 352. Travel to different places during the day, but come home each evening
- 353. Travel regularly, stay overnight often

JOB LOCATION

Check one Job Location you prefer.

- 551. Urban: big cities and suburbs
- 552. Rural: small towns and country areas

WORKING CONDITIONS

Check the Working Conditions you prefer.

- 361. Mostly outside
- 362. Mostly inside
- 363. Both inside and outside

PHYSICAL EFFORT

Check 1 to 3 amounts of Physical Effort you prefer.

- 301. Lift up to 10 lbs.
- 302. Lift up to 25 lbs. or more; carry up to 10 lbs.
- 303. Much lifting or physical exertion
- 304. Lift up to 50 lbs. or more; carry up to 25 lbs.
- 305. Lift up to 100 lbs. or more; carry up to 50 lbs.

SALARY

Check 1 to 3 levels of starting Salary you would like.
(If you pick higher salaries, you might not have as many occupations to choose from.)

- 521. Up to \$8,000 per year (to \$4.00 per hour)
- 522. \$10,000 per year (\$5.00 per hour)
- 523. \$12,000 per year (\$6.00 per hour)
- 524. \$14,000 per year (\$7.00 per hour)
- 525. \$16,000 per year (\$8.00 per hour)
- 526. \$18,000 per year (\$9.00 per hour)
- 527. \$20,000 per year (\$10.00 per hour)
- 528. \$24,000 per year (\$12.00 per hour)
- 529. \$28,000 per year (\$14.00 per hour)
- 530. \$32,000 per year (\$16.00 per hour)
- 531. \$36,000 per year (\$18.00 per hour)
- 532. \$40,000 per year (\$20.00 per hour)
- 533. Above \$40,000 per year (over \$20.00 per hour)

WORK FIELDS

Check 1 to 3 Work Field(s) that you might like.

- 661. Artistic: Literary and visual arts, drama, music, dance, and crafts
- 662. Scientific: Physical and life sciences, medicine, and laboratory technology
- 663. Plants and Animals: Animal care and training, plant care, and related areas
- 664. Protective: Safety and law enforcement and security services
- 665. Mechanical: Engineering, quality control, transportation, and related work
- 666. Industrial: Production work, production technology, and elemental work
- 667. Business Detail: Administration, math and finance related work, clerical work, etc.
- 668. Selling: General sales and related work
- 669. Accommodating: Hospitality services, personal care services, and passenger and customer services
- 670. Humanitarian: Social services, nursing, therapy, specialized teaching services, etc.
- 671. Leading-Influencing: Education, law, management and administration, communications, etc.
- 672. Physical Performing: Sports and related areas

READING, WRITING, AND SPEAKING

Check 1 or 2 Reading levels that you want on the job.

- 161. Reading level 1 - Little or no reading required. Read simple words or compare names and numbers.
- 162. Reading level 2 - Read simply written material, such as recipes, invoices, charts, labels, or rules.
- 163. Reading level 3 - Read specialized terms and understand concepts, such as methods of mechanical drawing, or medical terms.
- 164. Reading level 4 - Read service manuals, legal documents, blueprints, instructions on care of equipment, or methods of preparing solutions.
- 165. Reading level 5 - Read scientific or technical material related to specialized fields, such as medicine, chemistry, or law.

Check 1 or 2 Writing levels that you want on the job.

- 171. Writing level 1 - Little or no writing required. Print simple words and series of names, numbers, and addresses.
- 172. Writing level 2 - Write some sentences using proper style and punctuation.
- 173. Writing level 3 - Write short reports and keep records using forms.
- 174. Writing level 4 - Write reports or letters using a specific format. Prepare business letters, summaries, and reports.
- 175. Writing level 5 - Write speeches and technical material. This level involves the ability to be able to write precisely, creatively, and clearly so that others can understand the material.

Check 1 or 2 Speaking levels that you want on the job.

- 181. Speaking Level 1 - Speak simple sentences. Includes following simple oral instructions, and asking co-workers and supervisors simple questions.
- 182. Speaking Level 2 - Speak clearly using correct English, such as conversing with customers at a restaurant, answering customer questions, and discussing work to be done with a supervisor.
- 183. Speaking Level 3 - Speak confidently to a small group, such as greeting customers and answering questions, calling on new customers, talking to patients, giving orders to other workers, and presenting reports to supervisors.
- 184. Speaking Level 4 - Discuss a variety of subjects in a group, such as consulting with a number of people working on different parts of a project, and participating in debates and discussions at business meetings.
- 185. Speaking Level 5 - Talk effectively to a group using persuasive techniques and a well-trained voice, such as discussing technical material with supervisor and workers, speaking to community organizations, speaking before television audiences, or teaching students to speak effectively.

THOUGHTS ON ASVAB INTERPRETATIONS

by

Gene M. Harris

ASVAB Test Specialist

Butte Military Entrance Processing Center

It is useful in a school ASVAB testing situation if the counselor is able to schedule a group presentation to cover basic definitions and concerns general to the particular class. Then, a short individual session to review specific scores or developments can be scheduled with students wishing specific counseling. Group work is appropriate for explaining standard scores, percentile scores, confidence intervals, the Youth Population norming group and sub-groups, the Grade/Sex Percentile, the Grade/Opposite Sex Percentile, and the Grade Percentile. Interpretive materials that can be explained in group format include the Military Career Guide, the ASVAB Student Workbook, Department of Labor publications, and career information in computer format.

Group session could cover the following:

Standard Scores:

The ten subtests of the ASVAB are reported on the counselor's alphabetical roster in standard score format. The tests are: General Science (GS), Word Knowledge (WK), Paragraph Comprehension (PC), Arithmetic Reasoning (AR), Numerical Operations (NO), Math Knowledge (MK), Auto and Shop Information (AS), Mechanical Comprehension (MC), Electronics Information (EI), and Coding Speed (CS). These tests are combined in various ways to achieve the composite scores on the student results sheet. While the composite scores have reliability coefficients ranging from .90 to .96, utilization of individual subtests would not due to fewer items resulting in lower reliability. Counselors must keep in mind this fact when showing students subtest scores and realize potential variation from these subtest scores can occur. Also, the standard scores (T-Scores) do not measure the same as percentile scores. They must be converted with use of a normal curve format to arrive at approximate percentile equivalents. Rough approximations are:

T Score:	30	40	50	60	70
Percentile:	2.5	15	50	85	97.5

Students should be encouraged to see the counselor since the only source of specific sub-test scores rests there and care must be used to not over interpret a sub-test score.

Percentile Scores:

A percentile score tells not how a student scored on a test, but rather how many people in a particular group, out of one hundred, the student's score has beaten. Thus, a Youth Population percentile score of 72 indicates that 72 out of 100 people aged 18-23 were beaten by the individual student's score. The Grade/Sex, Grade/Opposite Sex, and Grade Percentile scores usually differ due to the fact that different groups of people are used as a comparison or standard for the student's score. As a group, the sophomore norm group will not do as well on the ASVAB as the junior norm group, therefore, the same score will beat more sophomores than juniors.

It should be noted that percentile scores should be used to indicate probable levels of competitiveness in the measured areas rather than trying to judge whether a student will be successful in a program. The various percentile scores are listed on the Counselor's Portion of the Student Results Sheet. In parentheses, the abbreviations for the sub-tests included in the composite scores are listed. Please note the parentheses within parentheses as these scores are added together and divided by 2 to weigh verbal tests accurately.

Academic Ability	((WK + PC) + AR)
Verbal	(GS + WK + PC)
Math	(AR + MK)
Mechanical-Crafts	(AR + AS + MC + EI)
Business-Clerical	((WK + PC) + MK + CS)
Electronics-Electrical	(GS + AR + MK + EI)
Health, Social, & Technology	((WK + PC) + AR + MC)

Use of sub-test scores with composite scores will show students which skills were measured for each composite, and they might indicate what skills were tested higher or lower within a composite. Care must be used here, however, as the reliability of a subtest is less than a composite. Questions might be raised, but other information should be used to verify potential answers.

It is sometimes informative for students to see how the academic tests are used within the Occupational Composites. Thus, they can see the importance of academics and realize that high school courses offer advantages for later employment in chosen fields.

Youth Population Norm Group:

This group is aged 18-23 and represents the beginning work force in America. It is a compilation of people from a Department of Labor study which set out to define parameters of America's entering labor force. The Department of Defense sampled the group with the ASVAB and developed the ASVAB-14 norms. Students can see how they compare with these people early and plan accordingly.

Grade/Sex Percentile and Grade/Opposite Sex Percentiles:

These percentile scores are used to show students how they compete with people of their grade and sex or opposite sex. As students choose possible careers or training programs, they should be aware that many are still dominated by one sex or the other. While this is in flux, the dominance still remains, and students might want to see how they compare in areas with either the same sex if entering traditional employment or opposite sex if entering a non-traditional career. These scores are not to be construed as limiting options. They are used to help indicate true comparisons of scores with people actually in the work fields.

Individual sessions could cover the following:

Students who might wonder how individual test scores might reflect their abilities should receive additional counseling. Other sources of information available to counselors such as school grades could be consulted to see if sub-test scores seem to reflect actual performance. With verification from other information, counselors might be able to suggest specific courses that will help the student achieve skills and

abilities most beneficial to the future.

At either a general or individual session, students should be acquainted with the Military Career Guide, at least briefly. The chart of scores for the enlisted programs helps give guidance to how scores relate to training programs in the military. Of course, like everything else, this must be taken with a grain of salt. The Military Career Guide is three years old now, and that is quite old for career information. The newest edition will contain updated information on enlisted programs along with a section of several officer programs. Instead of a chart indicating probability of being accepted into a training program, the officer section will list collegiate coursework appropriate for the particular program in question.

The charts for the enlisted programs help counselors who are uncomfortable with predicting success in non-academic training programs. Since counseling is an academic area, counselors often are more comfortable discussing this type of preparation. Thus, the charts for enlisted training is a start to approximate difficulty of various programs students might consider. Of course, other material regarding each program should serve as a beginning to help narrow the search for additional material regarding specific civilian or military careers and programs.

Of course, much more than academic or skill ability should be considered in a career choice. At this point, the ASVAB Student Workbook could be used to let students explore their values, interests and skills, "must avoid" areas, and education level after high school. These topics have been related to over one hundred careers in the civilian job market by Educational Testing Service through their SIGI Plus program. Students are encouraged to pick three values, three interests and skills, and a level of education that they aspire to. They are not encouraged to take any of the "must avoid" areas, however, in extreme cases, they should pick one to avoid careers that contain public speaking, sitting still, or heavy labor if these are impossible or dreadful for them. The major advantage of the workbook is that all of this information is presented in one place so the student can do some comparison shopping in his/her own time and pace. Decisions made with this information can later be discussed with counselors, parents, or teachers if desired. This material will also help limit the huge variety of careers so the students can better pinpoint the careers apparently best suited for them.

After use of the ASVAB materials, students can go to the counselor to use Department of Labor information, computer based information, or other sources the school has available. The materials are intended to help students find a list of suitable careers and learn the proper process of gathering information for informed choice making. Future classes in school and future programs that are available after high school can then be studied in a context of informed choice.

Occupational Profile

Outline of Contents

(Developed by the Montana SOICC. Substitute local information where appropriate.)

PART I - OCCUPATIONAL DESCRIPTION

- A. Occupation name and related occupations.**
- B. Duties of the occupation.**
- C. Aptitudes and skills needed for the occupation.**
- D. Earnings in the occupation.**
- E. Health hazards related to the occupation.**
- F. Employee organizations for workers in the occupation.**

PART II - EDUCATION AND TRAINING REQUIREMENTS

- A. Recommended high school or postsecondary preparatory courses.**
- B. Educational and experience requirements**
- C. Schools that offer training for this occupation.**
- D. Schools outside the state that offer training for this occupation.**

PART III - INDUSTRIES AND BUSINESSES THAT EMPLOY THIS OCCUPATION

- A. Industry employment and trends.**
- B. Projected employment in this occupation.**
- C. Current events affecting the outlook for this occupation.**
- D. Supply of workers for this occupation.**

OCCUPATIONAL PROFILE

GROUP _____ DATE _____

PARTICIPANT NAMES _____

Complete the blanks or check either Yes or No. Use additional pages if necessary.

SUGGESTED RESOURCES are listed at the end of each question. A space is also provided for additional resources that contain the information. Some other resources can be found by using the Occupation Information Resource Matrix. Sources of information for a local area or town could be the local Job Service office, the local Chamber of Commerce, the local newspaper, and others suggested by your trainers.

PART I - OCCUPATIONAL DESCRIPTION

I.A. OCCUPATION NAME AND RELATED OCCUPATIONS:

Occupation Name: _____

Code Numbers: DOT _____ OES _____
SOC _____ Other _____

Related Occupations and/or specialties (for further study if desired):

Name _____	Number _____
Name _____	Number _____
Name _____	Number _____
Name _____	Number _____

Sources used to answer section I.A.:

OCCUPATIONAL OUTLOOK HANDBOOK (OOH)
STANDARD OCCUPATIONAL CLASSIFICATION MANUAL (SOC)
DICTIONARY OF OCCUPATIONAL TITLES (DOT)
INDUSTRY/OCCUPATIONS PROJECTIONS
STATE CAREER INFORMATION SYSTEM (CIS)
OTHER CAREER INFORMATION SYSTEMS (CIS)
FILL IN OTHER SOURCES:

I.B. DUTIES OF THE OCCUPATION:

Duties of the job (list minimum of five duties):

1. _____
2. _____
3. _____
4. _____
5. _____
6. _____
7. _____

Applications-98

Source/s used to answer section I.B.:

DICTIONARY OF OCCUPATIONAL TITLES (DOT)
STANDARD OCCUPATIONAL CLASSIFICATION MANUAL (SOC)
OCCUPATIONAL OUTLOOK HANDBOOK (OOH)
STATE CAREER INFORMATION SYSTEM (CIS)
OTHER CAREER INFORMATION SYSTEMS (CIS)
FILL IN OTHER SOURCES:

I.C. APTITUDES AND SKILLS NEEDED FOR THE OCCUPATION:

List at least six.

1. _____
2. _____
3. _____
4. _____
5. _____
6. _____
7. _____
8. _____
9. _____
10. _____

Source/s used to answer section I.C.:

OCCUPATIONAL OUTLOOK HANDBOOK (OOH)
STATE CAREER INFORMATION SYSTEM (CIS)
OTHER CAREER INFORMATION SYSTEMS (CIS)
FILL IN OTHER SOURCES:

I.D. EARNINGS AND HOURS WORKED BY THIS OCCUPATION:

Earnings:

National Wages _____
State Wages _____
(indicate per hour, week, or year)

Other benefits:

1. _____
2. _____
3. _____

Hours of Work:

On the average, how many hours would one work at this job?

1. Hours Worked Daily _____

2. Hours Worked Weekly _____
Are there seasonal layoffs? ___ Yes ___ No

Source/s used to answer section I.D.:

OCCUPATIONAL OUTLOOK HANDBOOK (OOH)
OCCUPATIONAL OUTLOOK QUARTERLY (OOQ)
CAREER INFORMATION SYSTEM (CIS)
STATE OCCUPATIONAL INFORMATION SYSTEM (OIS)
STATE SUPPLY DEMAND REPORT
STATE FRINGE BENEFIT AND WAGE INFORMATION
ECONOMIC CONDITIONS IN STATE
OTHER CAREER INFORMATION SYSTEM (CIS)
FILL IN OTHER SOURCES:

I.E. HEALTH HAZARDS RELATED TO THE OCCUPATION:

Are there health hazards involved? ___ Yes ___ No
If so, what kinds? _____

Source/s used to answer section I.E.:

SELECTED CHARACTERISTICS OF THE DOT
CAREER INFORMATION SYSTEM
OTHER CAREER INFORMATION SYSTEMS (CIS)
FILL IN OTHER SOURCES:

I.F. EMPLOYEE ORGANIZATIONS IN THE OCCUPATION:

Employee organizations for full-time workers:

Would you be expected to join a union or other employee organizations?
___ Yes ___ No

Source/s used to answer section I.F.:

OCCUPATIONAL OUTLOOK HANDBOOK (OOH)
OTHER CAREER INFORMATION SYSTEMS (CIS)
CAREER INFORMATION SYSTEM (CIS)
UNION REPRESENTATIVES
FILL IN OTHER SOURCES:

PART II - EDUCATION AND TRAINING INFORMATION

II.A RECOMMENDED HIGH SCHOOL AND POSTSECONDARY PREP COURSES:

What general high school or post secondary courses would help to prepare the client for this job?

_____	_____
_____	_____
_____	_____
_____	_____

Source/s used to answer section II.A.:

**GUIDE FOR OCCUPATIONAL EXPLORATION (GOE)
OCCUPATIONAL OUTLOOK HANDBOOK (OOH)
CAREER INFORMATION SYSTEM (CIS)
OTHER CAREER INFORMATION SYSTEMS (CIS)
FILL IN OTHER SOURCES:**

If this client has deficiencies in basic courses needed for this occupation, what courses would you recommend to overcome those deficiencies?

_____	_____
_____	_____
_____	_____

II.B. EDUCATION AND EXPERIENCE REQUIREMENTS:

Number of years of education required _____
Type (high school, college, Vo-Tech, etc) _____

Is this occupation apprenticeable? ____ Yes ____ No

Length of apprenticeship _____

Name of address of organization to contact to find out more about apprenticeships:

Source/s used to answer section II.B.:

**GUIDE FOR OCCUPATIONAL EXPLORATION (GOE)
OCCUPATIONAL OUTLOOK HANDBOOK (OOH)
STATE APPRENTICEABLE OCCUPATIONS
STATE CAREER INFORMATION SYSTEMS (CIS)
OTHER CAREER INFORMATION SYSTEMS (CIS)
STATE OCCUPATIONAL INFORMATION SYSTEM (OIS)
FILL IN OTHER SOURCES:**

II.C. STATE SCHOOLS THAT OFFER TRAINING FOR THIS OCCUPATION:

What schools in the state offer training for this job?

1. _____
2. _____
3. _____

Source/s used to answer section II.C.:

STATE CAREER INFORMATION SYSTEM (CIS)
OTHER CAREER INFORMATION SYSTEMS (CIS)
FILL IN OTHER SOURCES:

II.D. OUT OF STATE SCHOOLS THAT OFFER TRAINING FOR THIS OCCUPATION:

What schools outside your state offer training for this job?

1. _____
2. _____
3. _____

Source/s used to answer section II.D.:

STATE CAREER INFORMATION SYSTEM (CIS)
OTHER CAREER INFORMATION SYSTEMS (CIS)
FILL IN OTHER SOURCES:

PART III - INDUSTRIES & BUSINESSES THAT EMPLOY THIS OCCUPATION

III.A. INDUSTRY EMPLOYMENT AND TRENDS:

1. List FOUR industries that would probably employ this occupation. Use the two digit SIC level.

Industry Name	SIC code
_____	_____
_____	_____
_____	_____
_____	_____

2. Using THE INDUSTRY/EMPLOYMENT OUTLOOK 1984/1990 complete the table below for the FOUR industries identified in 1 above.

SIC CODE	1984 ANNUAL AVG EMPL	1990 ANNUAL CHANGE AVG EMPL	PERCENT IN EMPL	TOTAL PERCENT CHANGE	ANNUAL PERCENT CHANGE

Sources used to answer section III.A.:

STATE INDUSTRY/OCCUPATION EMPLOYMENT OUTLOOK
 OCCUPATIONAL EMPLOYMENT STATISTICS
 STATE OCCUPATIONAL INFORMATION SYSTEM (OIS)
 STANDARD INDUSTRIAL CLASSIFICATION MANUAL (SIC)
 FILL IN OTHER SOURCES:

III.B. INDUSTRIES WITH BEST OPPORTUNITY FOR EMPLOYMENT IN THIS OCCUPATION:

Using the information from the tables above, list the two or three industries that you feel would offer the best opportunities for employment in this occupation.

III.C. LOCAL EMPLOYMENT IN THE INDUSTRIES:

For the county where the inservice is being held, list the Annual Average employment for each industry you listed in Part III.B.

INDUSTRY	COUNTY	AVG EMP
_____	_____	_____
_____	_____	_____
_____	_____	_____

Source/s used to answer section III.A & B.:

STATE EMPLOYMENT WAGES AND CONTRIBUTIONS
 STANDARD INDUSTRIAL CLASSIFICATION MANUAL (SIC)
 FILL IN OTHER SOURCES:

III.D. BUSINESSES TO CONTACT:

For each industry in Part III.C. that shows employment, list a business that could be contacted to find out more about this occupation. If none of the industries show employment in this area, skip Part III.D.1. and complete Part III.D.2.

1. **INDUSTRY NAME:** _____
BUSINESS: _____
NAME: _____
ADDRESS: _____

PHONE: _____
- BUSINESS:** _____
NAME: _____
ADDRESS: _____

PHONE: _____

Source/s used to answer section III.A & B.:

TELEPHONE BOOK
LOCAL JOB SERVICE
CITY DIRECTORY
CHAMBER OF COMMERCE
FILL IN OTHER SOURCES:

2. If there are no businesses employing the occupation in the area what would you advise the client?

PART IV - OUTLOOK FOR THIS OCCUPATION

IV.A CURRENT EMPLOYMENT IN THIS OCCUPATION:

What is the recent state employment in this occupation?

Date of data _____ Employment _____
(Use most recent data you can find.)

What is the recent U.S. employment in this occupation?

Date of data _____ Employment _____
(Use most recent data you can find.)

Source/s used to answer section IV.A.:

STATE INDUSTRY/OCCUPATION OUTLOOK
STATE CAREER INFORMATION SYSTEM (CIS)
OCCUPATIONAL OUTLOOK HANDBOOK (OOH)
OTHER CAREER INFORMATION SYSTEMS (CIS)

FILL IN OTHER SOURCES:

IV.B. PROJECTED EMPLOYMENT

What is the projected state employment for this occupation to 2000?

2000 Employment _____

What is the projected number of average annual openings in the state for this job to 2000?

Average Annual Openings _____

Source/s used to answer section IV.B.:

STATE INDUSTRY/OCCUPATION OUTLOOK
STATE CAREER INFORMATION SYSTEM (CIS)
OCCUPATIONAL OUTLOOK HANDBOOK (OOH)
OTHER CAREER INFORMATION SYSTEMS (CIS)
FILL IN OTHER SOURCES:

IV.C. CURRENT EVENTS AFFECTING THE OUTLOOK FOR THIS OCCUPATION:

What current factors are affecting the outlook for this occupation in the state? in the nation?

Source/s used to answer section IV.C.:

NEWSPAPERS
OTHER MEDIA
JOB SERVICE OFFICES
LOCAL CAREER PROFESSIONALS
CHAMBER OF COMMERCE
FILL IN OTHER SOURCES:

IV.D. SUPPLY OF WORKERS FOR THIS OCCUPATION:

Occupational supply is information on workers who have completed training or are job ready in this occupation.

Occupations are grouped into "clusters" based on their relationships to each other. For example: File clerk and typist would be in the "clerical office practice" cluster, number OF2.

Write the name of the occupation you are researching: _____

What is the supply for this occupation? _____

What source(s) provided training for this occupation? _____

What is the name and number of the cluster that includes this occupation?

NAME _____ NUMBER _____

What is the cluster total or all related supply total for the cluster including this occupation? _____

During the past year how many people have applied for work in this occupation through the Job Service? _____

Source/s used to answer section IV.D.:

SOICC
STATE SUPPLY DEMAND REPORT
STATE OCCUPATIONAL INFORMATION SYSTEM (OIS)
FILL IN OTHER SOURCES:

Occupational Information Resource Matrix

Categories of Information

State Information Sources	Occupation Activities	Occupational Characteristics	Preparation for Work	Advancement	Related Occupations	Industry	Employment Outlook	Earnings	Places of Employment	Resource People
County Business Patterns						x	x			
State Employment and Labor Force						x	x			
Statistics in Brief						x	x			
Industry/Occupation Projections						x	x			
Career Information System	x	x	x	x	x		x	x	x	
State Apprenticesable Occupations	x	x	x	x			x	x		
Occup. Employment Statistics Publications						x	x		x	
State Occup. Information System (OIS)					x		x	x	x	
State Supply/Demand Report					x		x	x	x	
State Fringe Benefit & Wage Information								x		
Economic Conditions in the State						x		x		

Resource People: (enter names of presenters here)

- | | | |
|----|----|--------------------|
| 1. | 3. | 5. |
| 2. | 4. | 105 ⁶ 4 |

Occupational Information Resource Matrix

Categories of Information

National Information Sources	Occupation Activities	Occupational Characteristics	Preparation for Work	Advancement	Related Occupations	Industry	Employment Outlook	Earnings	Places of Employment	Resource People
<i>Dictionary of Occupational Titles (DOT)</i>	x				x	x				
<i>Standard Industrial Classification (SIC)</i>						x				
<i>Standard Occupational Classification (SOC)</i>	x				x					
<i>Occupational Outlook Handbook (OOH)</i>	x	x	x	x	x	x	x	x	x	
<i>Occupational Outlook Quarterly (OOQ)</i>	x	x	x	x	x	x	x	x		
<i>Guide for Occupational Exploration (GOE)</i>			x		x					
<i>Exploring Careers</i>	x	x								
<i>U.S. Industrial Outlook</i>						x	x			
<i>Occupational Projections and Training Data</i>			x				x			
<i>Selected Characteristics of Occupations-DOT</i>		x								
<i>Career Information System</i>	x	x	x	x	x	x	x	x	x	

Resource People: (enter names of presenters here)

1.

3.

5.

2.

1055

4.

6.

1056

Case Study - Bernie Maas
(Developed by the Maine SOICC)

My name is Bernie Maas. Since leaving the military a year ago, I have been living in _____ . I married my high school sweetheart, and now we have two little girls. I never was afraid of anything when I was in the Army, but I am now. I'm afraid that I won't be able to make enough money to provide for my family.

I never liked school much. Oh, I loved playing sports. I was the second best swimmer on the school team. I even taught a swim class for young kids in the summer. I really liked Automotive Shop, too. I spent a lot of time tinkering with cars. But I just couldn't seem to pass English. I dropped out of school in December of my senior year and joined the Army. After basic training I was assigned to the motor pool. I learned to drive and fix just about everything the Army had on wheels or tracks. Eventually, I became the personal driver for the CO (Commanding Officer), because he knew I could fix the jeep if it broke down out in the boonies.

When I got out of the Service, I got a truck driving job for a construction company. I ran the dozer sometimes, too. The company helped me convert my military operator licenses to civilian licenses. But work got real slack so they had to lay me off. I've tried working with other construction companies, and I have worked on specific jobs, but they haven't paid enough for a family to live on.

I've thought about getting a different job, or moving to an area that might have more jobs. But everywhere I look either the employer wants a high school graduate or the job doesn't pay enough. I just don't know what to do.

Reprinted with permission from:

Kenneth Bridges, Senior Economic Analyst
Division of Economic Analysis and Research
Bureau of Employment Security

and

Maine SOICC
State House Station 71
Augusta, ME 04333

1. **Where would you begin with Bernie? List the first three steps you would take:**
 - a.
 - b.
 - c.

2. **What are three job titles that match Bernie's skills or interests?**
 - a.
 - b.
 - c.

3. **What is the outlook for these occupations in your state?**
 - a.
 - b.
 - c.

4. **How much can Bernie earn in each of these occupations?**
 - a.
 - b.
 - c.

5. **How many people are employed in each of these occupations in one of your local counties?**
 - a.
 - b.
 - c.

6. **In what counties are the highest numbers employed for each of these occupations?**
 - a.
 - b.
 - c.

7. **What are the overall economic conditions like in the county you selected compared to the state in terms of employment, and the unemployment rate?**

8. **Who can Bernie contact for more labor market information about the local and statewide labor market area?**

Trainer's Answer Sheet - Bernie Maas

(Answers are given for the state of Maine. Determine answers for your particular state and enter the data on your answer sheet. Provide state, local and national resources that contain answers to these questions.)

1. Where would you begin with Bernie?

*Review interests, work history
Get GED or Equivalency Diploma
Explore options*

2. What are three job titles that match Bernie's skills or interests?

- a. *Automotive Mechanic*
- b. *Delivery/Route Worker*
- c. *Tractor-Trailer-Truck Driver*
- d. *Heavy Equipment Operator*

3. What is the outlook for these occupations in your state?

(Resources used - Occupational Outlook to 1995, Occupational Matrices)

- a. *Faster than average, annual openings 292, Growth 24.5%*
- b. *About as fast, annual openings 130, Growth 15.1%*
- c. *About as fast, annual openings 294, Growth 16.2%*
- d. *About as fast, annual openings 103, Growth 18.4%*

4. How much can Bernie earn in each of these occupations? (Reported as hourly wage)

	Occ. Matrices	Manf. Wage Surv.	Nmfg. Wage Surv.
a.	\$8.47	\$8.57	\$8.46-8.97-9.97
b.	7.47		6.58
c.	8.94	6.90-8.40	7.17-8.54
d.	7.66	7.66	

5. How many people are employed in each of these occupations in one of your local counties?

	County 1	County 2	County 3
a.	131	131	51008
b.	94	94	55A87
c.	65	65 All Truck 271	54003 54000
d.		80	54B52

6. In what counties are the highest numbers employed for each of these occupations?

a.	<i>Cumb. 1352</i>	<i>Pen. 848</i>	<i>Ken. 622</i>
b.	<i>Cumb. 1687</i>	<i>Pen. 672</i>	<i>Ken. 533</i>
c.	<i>Cumb. 661</i>	<i>Pen. 430</i>	<i>Aroos. 238</i>
d.	<i>Cumb. 551</i>	<i>Pen. 246</i>	<i>York 190</i>

What are overall economic conditions like in the county you selected compared to the state in terms of employment, unemployment, and the unemployment rate?

Resource - Labor Market Digest and local information resources

Who can Bernie contact for more labor market information about the local and statewide Labor Market Area?

LMI Directory, CIDS and local information resources

Case Study Activity--Thomas Lee

Your client, Thomas Lee, has been referred to you by a social service agency. Tom is a minority male, age 26, who is out of work. Tom dropped out of school in the tenth grade; he claims that he could not read well and no one seemed to care about kids like him. Tom has done odd jobs since that time. As you question Tom about his work history, the information that you get is sketchy and he appears reluctant to offer details. He tells you that he has worked in service stations, restaurants and work for a landscaping service. The job he liked the best was laying sod, because he likes doing physical work out-of-doors. Despite his many jobs, he can provide only one employment reference from three years ago, when he worked in a fast-food restaurant. Upon questioning, Tom admits to personality conflicts with supervisors on several jobs. Tom claims that the conflicts were largely due to his drug and alcohol abuse on those occasions. Tom has been in trouble with the law and has recently completed a court ordered drug and alcohol rehabilitation program. His social worker is encouraging Tom to enroll in a community sponsored reading program. As you try to get to know Tom, he appears to be withdrawn and angry. When you question him about his apparent hostility toward you, he says that he does not trust persons from your culture.

Tom has multiple barriers to employment and he is working with personnel from several agencies to help him address his problems. Your responsibility as a career development facilitator is to help Tom explore his career options.

1. As a career development facilitator, where would you begin with Tom?
2. With what other individuals or agencies would you need to work to help Tom become ready for employment?
3. Using the following resources: CIDS, OOH, SOC, DOT, and GOE, see if you can identify three job titles that might be of interest to Tom.
 - a.
 - b.
 - c.
4. How much can Tom earn in each of these occupations?
 - a.
 - b.
 - c.
5. Will these earnings be sufficient to cover his basic needs and allow him to live independently?
6. How many people are employed in each of these occupations in your county?

7. **In what counties are the highest numbers employed in each of these occupations?**
8. **What are the overall economic conditions like in your county compared to the rest of the state in terms of employment and the unemployment rate?**
9. **Who can Tom contact for more labor market information about the local and statewide Labor Market Area?**

Activity Evaluation

(Developed by the Montana SOICC)

Name of Activity:

We would appreciate your thoughts on the activity you have just completed. Please answer the questions below. More importantly, use the rest of the sheet for your comments, positive and negative. We are constantly searching for ways to improve. Tell us what you think.

Although optional, your name and phone number would be appreciated. Then we can contact you if we need clarification on your ideas. We promise not to send anyone with a violin case to see you.

NAME _____ **PHONE** _____

1. Which part of the activity did you like the best?
2. Which part did you like the least?
3. Did you have enough time to complete the activity?
4. Were the instructions clear?
5. Were the trainers available when you needed them?
6. Did you have sufficient resource materials? If no, please explain.
7. Can you use this activity in your work?
8. On a scale of one to ten, how would you rate this activity? (Ten is the highest rating.)
9. Comments and suggestions for improvement:

Appendices are the same as in the
participant's manual (page 116 of this
document)