

DOCUMENT RESUME

ED 303 683

CE 051 985

AUTHOR Tindall, Lloyd W.
 TITLE Retaining At-Risk Students: The Role of Career and Vocational Education. Information Series No. 335.
 INSTITUTION ERIC Clearinghouse on Adult, Career, and Vocational Education, Columbus, Ohio.
 SPONS AGENCY Office of Educational Research and Improvement (ED), Washington, DC.
 PUB DATE 88
 CONTRACT R188062005
 NOTE 57p.
 AVAILABLE FROM Publications Office, Center on Education and Training for Employment, 1900 Kenny Road, Columbus, OH 43210-1090 (Order No. IN335: \$6.00).
 PUB TYPE Information Analyses - ERIC Information Analysis Products (071)
 EDRS PRICE MF01/PC03 Plus Postage.
 DESCRIPTORS Career Education; Dropout Characteristics; *Dropout Prevention; Educational Strategies; Education Work Relationship; Elementary Secondary Education; *High Risk Students; Models; *Potential Dropouts; Program Development; Role of Education; *School Holding Power; *Vocational Education

ABSTRACT

This paper reviews the literature related to the role of career and vocational education in retaining at-risk secondary youth and motivating them to return to secondary or postsecondary school. Selected literature from nonvocational but related areas of service is reviewed to provide the reader with an overview of the scope of the problem and the efforts that other members of the community are making to serve at-risk youth. The paper identifies five major areas of interest to career and vocational educators in the literature: (1) the diverse definitions, characteristics, and causes of at-risk status; (2) the implications of the problem of at-risk youth for the U.S. labor force; (3) key vocational and nonvocational strategies for resolving the problems of at-risk youth; (4) exemplary vocational and nonvocational programs for serving at-risk youth; and (5) the role of career and vocational educators in meeting the needs of at-risk youth. Forty-two references are included. (SK)

 * Reproductions supplied by EDRS are the best that can be made *
 * from the original document. *

ED303683

Information Series No. 335

**RETAINING AT-RISK STUDENTS:
THE ROLE OF CAREER AND
VOCATIONAL EDUCATION**

Lloyd W. Tindall

University of Wisconsin-Madison

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.

**ERIC Clearinghouse on Adult, Career, and Vocational Education
The Center on Education and Training for Employment
The Ohio State University
1900 Kenny Road
Columbus, OH 43210-1090**

1988

BEST COPY AVAILABLE

CEOS/985

FUNDING INFORMATION

Project Title: ERIC Clearinghouse on Adult, Career, and Vocational Education

Contract Number: RI88062005

Act under Which Administered: 41 USC 252 (15) and P.L. 92-318

Source of Contract: Office of Educational Research and Improvement
U.S. Department of Education
Washington, DC 20208

Contractor: The Center on Education and Training for Employment
The Ohio State University
Columbus, Ohio 43210-1090

Executive Director: Ray D. Ryan

Disclaimer: This publication was prepared pursuant to a contract with the Office of Educational Research and Improvement, U.S. Department of Education. Contractors undertaking such projects under government sponsorship are encouraged to express freely their judgment in professional and technical matters. Points of view or opinions do not, therefore, necessarily represent official U.S. Department of Education position or policy.

Discrimination Prohibited: Title VI of the Civil Rights Act of 1964 states: "No person in the United States shall, on the grounds of race, color, or national origin, be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any program or activity receiving federal financial assistance." Title IX of the Education Amendments of 1971 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 ERIC Clearinghouse project, like every program or activity receiving financial assistance from the U.S. Department of Education, must be operated in compliance with these laws.

This publication was prepared with funding from the Office of Educational Research and Improvement, U.S. Department of Education, under Contract No. RI88062005. The opinions expressed in this report do not necessarily reflect the position or policies of OERI or the Department of Education.

TABLE OF CONTENTS

FOREWORD	v
EXECUTIVE SUMMARY	vii
INTRODUCTION	1
Purpose of This Publication	2
Who Are the At-Risk Youth?	2
Key Legislation for At-Risk Programs	3
YOUTH AT RISK: CAUSES AND IMPLICATIONS FOR THE U.S. LABOR FORCE	5
Why Youth Are at Risk	5
Implications for the U.S. Labor Force	7
STRATEGIES FOR SERVING AT-RISK YOUTH	9
Strategies for Resolving Deficiencies in Basic Skills	9
Strategies for Successful Dropout Prevention	10
Strategies for Serving Youth with Substance Abuse Problems	11
Strategies for Serving Young Women	13
Strategies for Suicide Prevention	14
Strategies for Keeping Juvenile Delinquents in School	15
Strategies for Collaborative Approaches to Retention	15
State-Level Strategies for Serving Children at Risk	17
Strategies Recommended by National Organizations	18
Strategies for Developing Workplace Competencies	19
The School-within-a-School Strategy	20
EXEMPLARY NONVOCATIONAL PROGRAMS	23
The Middle College High School	23
Community/School Program	24
George Washington Preparatory High School	24
Michigan's Enterprise High	25
VOCATIONAL EDUCATION STRATEGIES FOR SERVING AT-RISK YOUTH	27
Effects of Vocational Education on Youth	27
Vocational Strategies for Dropout Prevention	27

EXEMPLARY VOCATIONAL EDUCATION PROGRAMS	31
Secondary School Programs	31
Postsecondary Approaches	35
Collaborative Efforts	38
THE ROLE OF CAREER AND VOCATIONAL EDUCATORS IN SERVING AT-RISK YOUTH	41
Key Activities in a Comprehensive Program to Serve At-Risk Youth	41
REFERENCES	45

FOREWORD

The Educational Resources Information Center Clearinghouse on Adult, Career, and Vocational Education (ERIC/ACVE) is 1 of 16 clearinghouses in a national information system that is funded by the Office of Educational Research and Improvement (OERI), U.S. Department of Education. This paper was developed to fulfill one of the functions of the clearinghouse--interpreting the literature in the ERIC database. This paper should be of interest to career and vocational education policymakers, administrators, and practitioners dealing with the problems of retaining at-risk students, as well as teacher educators and prospective teachers.

ERIC/ACVE would like to thank Lloyd W. Tindall for his work in the preparation of this paper. Dr. Tindall is Senior Outreach Program Manager at the Vocational Studies Center (VSC), the University of Wisconsin-Madison. Since 1973, he has served as director and coordinator of the Handicapped Projects Unit at VSC, where he has directed a number of research projects and written numerous publications dealing with the education and employment of students with disabilities. He is currently serving on the editorial review boards of the *Journal for Vocational Special Needs Education* and *CDEI*, journal of the Division on Career Development, Council for Exceptional Children.

The following people are also acknowledged for their critical review of the manuscript prior to publication: Carlos Azcoitia, Director of the Bureau of Vocational Support Services, Chicago Public Schools; Michelle D. Sarkees, Associate Professor, North Texas State University; Lynda L. West, Associate Professor, University of Missouri-Columbia; Hazel Dove Zanders, Broward County (Florida) School Board; Susan Klein, Clearinghouse Monitor, OERI; and Bettina A. Lankard and Margò V. Izzo, Program Associates, Sandra L. Pritz, Senior Program Associate, and James M. Weber, Senior Research Specialist, the Center on Education and Training for Employment.

Wesley Budke coordinated the publication's development with editorial assistance from Sandra Kerka. Jean Messick typed the manuscript, Janet Ray served as word processor operator, and editorial review was provided by Judy Balogh.

Ray D. Ryan
Executive Director
The Center on Education
and Training for Employment

EXECUTIVE SUMMARY

In 1983, the National Commission on Excellence in Education sounded the alarm that the educational foundations of our society are presently being eroded by a "rising tide of mediocrity" that threatens our very future as a nation and a people. This warning was issued via the now well-known report, *A Nation at Risk* (National Commission on Excellence in Education 1983). After 5 years, the seriousness of this warning is being fully realized. The nation is still at risk.

This paper reviews the literature related to the role of career and vocational education in retaining at-risk secondary youth and motivating them to return to secondary or postsecondary school. The problems that at-risk youth encounter and the solutions to their at-risk status are community, state, and national concerns. Career and vocational educators are among the many partners who must be involved in the retention of at-risk youth and ultimately in vastly reducing their numbers. Selected literature from nonvocational but related areas of service is reviewed to provide the reader with an overview of the scope of the problem and the efforts that other members of the community are making to serve at-risk youth.

This paper has the following objectives:

- o To review the diverse definitions, characteristics, and causes that place youth at risk
- o To review the implications for the U.S. labor force
- o To review key vocational and nonvocational strategies for resolving the problems of at-risk youth
- o To review exemplary vocational and nonvocational programs for serving at-risk youth
- o To discuss the role of career and vocational educators in meeting the needs of at-risk youth

In the literature, at-risk youth are most often defined as youth who are school dropouts or potential dropouts. Many factors in our society cause youth to become at risk. These factors include family trauma such as divorce or separation, violence, sexual and emotional abuse, low parental expectations, and apathy. Alcohol and drug abuse, delinquency, poverty, and minority status are contributing factors. Factors used by educators to identify at-risk youth include truancy, disruptive behavior, low self-esteem, and membership in a minority group.

In the literature, vocationally oriented experiences demonstrate a positive effect in the retention and motivation of at-risk youth. Career and vocational education students appear to receive practical job-related skills at both the secondary and postsecondary levels and are able to apply their learning to real life situations. Successful career and vocational programs for at-risk learners are strong in the development and implementation of employment and vocational skills, teacher and student support at the classroom level, remedial basic skill instruction, work experience, job placement, and counseling and supportive services. Parents, business and community leaders, school administrators, and staff are enthusiastic backers of the at-risk programs. Vigorous retention policies and frequent follow-along, follow-up activities are viewed as essential for keeping at-risk youth in school and employed. Postsecondary institutions are developing and implementing at-risk oriented retention strategies in the areas of admissions, academic standards, orientation, counseling, curricula, support services, and job placement.

Business leaders are predicting a severe shortage of labor in the next decade. At-risk youth who acquire employable skills will greatly expand their job opportunities and help reduce this predicted labor shortage. However, at-risk youth who drop out of school will be in competition for a dwindling number of low-skilled jobs, while higher skilled jobs go begging for lack of qualified workers. This situation tends to drive down the wages for low-skilled workers and raises the wages for skilled employees who are already better paid. Business and industry leaders are therefore concerned that at-risk youth develop qualified skills and become part of the labor force.

Career and vocational educators at the secondary and postsecondary levels are key actors in the role of educating and preparing at-risk youth for employment. Being a key actor involves the formation of business and education partnerships and collaboration with a wide range of individuals and community agencies in the development of a comprehensive program to serve at-risk youth. A comprehensive approach to serving at-risk youth provides an administrative environment in which students, staff, and parents believe that all students can succeed. The administration needs community support in providing services to at-risk youth. Alternative and additional funding is needed to supplement regular and local resources. Since a majority of the causes of being at risk are family oriented, families in the community need specific support. Career and vocational educators can play key roles in these areas on a professional and personal basis.

The major input of career and vocational educators in serving at-risk youth is in the development and implementation of vocational programs. This input ranges from the development of strategies to notify at-risk youth of program offerings to strategies for the follow-up of at-risk youth who graduate from or leave the vocational program. This paper presents a wide range of strategies for the vocational education of at-risk youth and identifies exemplary vocational education programs that effectively serve them.

Information on retaining at-risk students may be found in the ERIC system using the following descriptors: Career Education, Dropout Characteristics, *Dropout Prevention, Education Work Relationship, Educational Strategies, Elementary Secondary Education, *High-Risk Students, *Potential Dropouts, Program Development,

Role of Education, *School Holding Power, *Vocational Education. Asterisks indicate descriptors having particular relevance.

INTRODUCTION

On August 26, 1981 the Secretary of Education, T. H. Bell, created the National Commission on Excellence in Education. This commission was directed to present a report on the quality of education by April 1983. The result was *A Nation at Risk: The Imperative for Educational Reform*. This report alarmed the nation's parents, educators, students, employers, and government officials. The Commission stated:

We report to the American people that while we can take justifiable pride in what our schools and colleges have historically accomplished and contributed to the United States and the well-being of its people, the educational foundations of our society are presently being eroded by a rising tide of mediocrity and threatening our very future as a nation and a people. What was unimaginable a generation ago has begun to occur--others are matching and surpassing our educational attainments. (p. 5)

The Commission called for a reform of the nation's educational system in fundamental ways and a renewal of the nation's commitment to schools and colleges of high quality. Recommendations were made to (1) strengthen graduation requirements at the high school level, (2) adopt more rigorous and measurable standards and higher expectations for academic performance and student conduct at colleges and universities, (3) devote more time to learning the new basics, (4) improve

the preparation of teachers or make teaching a more rewarding and respected profession, and (5) hold educators and elected officials responsible for providing the leadership necessary to achieve these reforms.

According to *Newsweek*, in 1988 the nation is still at risk ("A Nation Still at Risk" 1988). Five years of reform have brought significant progress but there is still much to be done. All 50 states have adopted some type of reforms, some starting before 1983. More than a dozen have completely overhauled their school systems. Roughly 40 states have raised high school graduation requirements; in 19 states students must pass a test to receive diplomas. Forty-six have mandated competency tests for new teachers; 23 have created alternate routes to teacher certification.

Many ethnic, economic, and disadvantaged groups are concerned about recognizing the diversity of at-risk youth. The specific identification of who is at risk is important in determining eligibility for federal, state, and locally funded vocational and career programs. Of special concern is the overlap in definitions of youth with disabilities and at-risk youth, especially those in double jeopardy of being both at risk and disabled. Such a concern was voiced by the Council for Exceptional Children's (CEC) Ad Hoc Committee ("Reply to *A Nation at Risk*" 1984). The CEC Committee was concerned that *A Nation at Risk* generally failed to recognize exceptional children and youth, their special edu-

cation needs, and the role of special education and special educators within the schools. A report was submitted to the National Commission on Excellence in Education regarding the concept of equity in educational excellence. The CEC report called for the need to recognize the diversity of special education students; the need for productive learning environments, excellence in training resources, research and development, and the need to recognize the federal role in the education of exceptional students. At this time, no clear distinctions in definitions have been identified. Therefore, the definition of at-risk youth contains some grey areas.

Purpose of This Publication

The purpose of this publication is to summarize the literature related to the role of career and vocational education in retaining at-risk students in high school and motivating at-risk or disconnected young adults to return to secondary or postsecondary school. The problems that at-risk youth encounter and the solutions to their at-risk status are community, state, and national concerns. Career and vocational educators are among the many partners who must be involved in the retention of at-risk youth and ultimately in vastly reducing their numbers. Although career and vocational educators have developed exemplary programs and have expertise that can be an asset to serving at-risk youth, the review of literature revealed that this expertise is often not used or coordinated with other service providers. Other key actors in providing service to at-risk students have developed successful strategies and techniques that can be adapted by career and vocational educators. A coordinated effort by career and vocational educators and other key service providers will enhance the ability of at-risk youth to stay in

school, return to school, and make the transition to successful employment and careers.

Therefore, this review of literature covers both the vocationally and non-vocationally oriented aspects of services to at-risk youth. A synthesis of the role of career and vocational educators in serving at-risk youth is made at the end of this publication.

Specifically, this publication (1) reviews the diverse definitions, characteristics, and causes of at-risk youth and the implications for the U.S. labor force as seen by key authors in the field; (2) reviews key vocational and nonvocational strategies for resolving the problems of at-risk youth; (3) reviews exemplary vocationally and nonvocationally oriented programs serving at-risk youth; and (4) discusses the role of career and vocational educators in meeting the needs of at-risk youth.

The following sections review the definitions of at-risk youth and list the major sources of legislation that funds at-risk programs.

Who Are the At-Risk Youth?

Who are the "at-risk" youth? The definition has been changed, revised, and discussed by educators and state legislators at various times since 1983. In a survey of children at risk conducted by the Wisconsin Department of Public Instruction (Van Den Heuvel et al. 1986), "children at risk" meant dropouts and other pupils (K-12) whose school achievement, progress toward graduation, or preparation for employment are in serious jeopardy due to one or more of the following:

- o One or more years behind their grade level group in reading or mathematic basic skills achievement (K-8)

- o Three or more credits behind their age/grade level in credits earned for graduation (9-12)
- o Chronic truancy
- o School-age parent
- o Adjudicated delinquent
- o Personal and/or family drug and alcohol abuse
- o Family trauma, such as death, divorce, violence, separation, or unemployment
- o Physical, sexual, or emotional abuse
- o Ethnic, economic, or cultural disadvantage
- o Disruptive school behavior
- o Low parental expectations for success
- o Parents who place little value on education
- o Cultural diversity (language, customs, or educational expectations)
- o A family history of dropouts
- o School suspensions

The Wisconsin definition of at-risk youth includes nearly all of the definitive terms used by other states and educators in the at-risk literature. One addition is youth who are suicide prone. Probably the most common definition of the at-risk population is youth who are dropouts or potential dropouts.

A similar list of characteristics of dropouts was provided by Weber and Mertens (1987). The only difference in their list was the addition of four characteristics: (1) low intelligence

test scores (mean IQ of 90); (2) low self-concept and social maturity; (3) feelings of alienation in relation to school, teachers, and peers; and (4) some types of handicaps or limiting conditions.

Key Legislation for At-Risk Programs

Although it is not the intent of this publication to review legislation and in-depth funding for at-risk programs, such knowledge is of utmost importance to service providers. The following list of key federal legislation relating to youth employability development was prepared by Public/Private Ventures (1988):

- o Job Training Partnership Act (JTPA), administered by the Department of Labor
- o State Education Coordination Grants, administered by the Department of Labor (a part of the JTPA)
- o Summer Youth Employment and Training Program (SYETP), administered by the Department of Labor (a part of JTPA)
- o The Carl D. Perkins Vocational Education Act, administered by the Department of Education
- o The Hawkins/Stanford Elementary and Secondary Education Act, administered by the Department of Education
- o Even Start, administered by the Department of Education
- o Secondary School Programs for Basic Skills Improvement, Dropout Prevention, and Reentry, administered by the Department of Education
- o Workplace Literacy, administered by

the Department of Education

- o Dropout Prevention and Reentry Programs, administered by the Department of Education
- o Independent Living Initiative, administered by the Department of Health and Human Services
- o Adult Basic Education, administered by the Department of Education
- o Juvenile Justice and Delinquency Prevention, administered by the Department of Justice

This list is not all-inclusive and is subject to changes and revisions. State legislation initiatives are also becoming more common. The important factors to consider are that multiple sources of funding are available and that the coordination of funding is a vital part of any program that proposes to serve at-risk youth.

YOUTH AT RISK: CAUSES AND IMPLICATIONS FOR THE U.S. LABOR FORCE

Many reasons and theories are found in the literature as to why students drop out of school or are identified as being at risk. It is readily apparent that students in the at-risk categories are the most dropout prone. How many dropouts are there? Rumberger (1987) listed the dropout rate for 18- and 19-year-olds as between 15.2 and 29.1 percent. Barber and McClellan (1987) pointed out that dropout levels in urban school systems vary widely but often fall in the 40-50 percent range. Bloch (1988) quoted a 1986 General Accounting Office report that found about 4.3 million 16- to 24-year-olds who were neither high school graduates nor enrolled in school in October 1985.

Almost 30 percent of the students entering high school leave prior to graduation (Weber and Mertens 1987). According to Weber and Mertens, the dropout rate has remained relatively constant since the 1970s. This means that up to 1 million students drop out annually. Several other authors speculated that the current emphasis on increased academic requirements and lack of direct consideration for those who fail to meet those increased standards will cause the dropout rate to increase in the future. Statistics obtained from various sources by Weber and Mertens listed New York City's dropout rate at over 38 percent and Chicago's at over 43 percent. Nationwide costs of the dropout problem to society were estimated to be at least \$20 billion per school class cohort or a cost to society for each dropout of

about \$26,000 during his or her working life.

Why Youth Are at Risk

The reasons why youth are at risk are not easily identified or agreed upon by educators, social scientists, or legislators. Several opinions are discussed at this point to provide an overview of the causes.

In the past, favorable conditions in the home, church, and community enabled schools to promote social development and positive citizenship in young people. Now, these previously favorable conditions are weak or nonexistent and the school still is asked to intervene for the good of society, according to Wehlage, Rutter and Turnbaugh (1987). These authors found that students from low socioeconomic backgrounds have the highest dropout rate; among ethnics, Hispanics have the highest rate, followed by blacks, then whites. Other demographic factors that influence the dropout rate include a single-parent family, a large family, or living in a city or in the urban or rural South. The students' low expectation of receiving appropriate schooling or a good grade contributes to their dropping out. These negative factors tie in with disciplinary problems, of which truancy is the most common offense. Before dropping out of school, at-risk students demonstrate low self-esteem and a sense of having lost control of their futures.

The at-risk student is pictured as a young person who comes from a low socioeconomic background that may include various forms of family stress or instability. If the young person is constantly discouraged by the school because he or she receives signals about academic inadequacies and failures, perceives little interest or caring from teachers, and sees the institution's discipline system as both ineffective and unfair, then it is not unreasonable to expect that the student will become alienated and uncommitted to getting a high school diploma.

The Oregon Career Information System (CIS) surveyed its system coordinators regarding at-risk youth in local schools and agencies (Bloch 1988). Coordinators were asked to identify the factors or conditions that cause the problems of at-risk youth in their school or agency, an open-ended question that was answered by 225 CIS coordinators. The following categories of factors were identified:

1. **Psychosocial development factors** were identified by 62 percent of the respondents. The major subcategories were substance abuse, 20 percent; lack of goals or career options, 15 percent; lack of motivation, 15 percent; and poor image or self-concept, 10 percent.
2. **Home and family factors** were identified by 62 percent of the respondents. The major subcategories were poor family relationships, 25 percent; lack of parental encouragement, 24 percent; poor role models in family or friends, 15 percent; and broken homes, 10 percent.
3. **Academic development factors** were identified by 41 percent of the respondents. The major subcategories were lack of basic academic skills, 23 percent; alienation from

school, 15 percent; and behind in academic credits or failing, 14 percent.

4. **Socioeconomic factors** were identified by 37 percent of the respondents. The only major subcategory identified was poverty, 31 percent. Others mentioned were cultural isolation, ethnicity, and a language other than English.
5. **Institutional factors** were identified by 16 percent of the respondents. They mentioned such factors as inadequate programs, students "falling between the cracks," and lack of counseling services.

Responses were also examined for only those respondents from high schools with an estimated at-risk rate of 10 percent or higher. Of the 89 respondents in this group, 65 percent identified home and family factors, 60 percent psychosocial development factors, 49 percent socioeconomic factors, 38 percent academic development factors, and 22 percent institutional factors.

The National Association of School Social Workers (1985) published *The Human Factor: A Key to Excellence in Education*. This study identified the following barriers to school excellence that contribute to at-risk status:

Family

- o Child abuse and neglect
- o Divorce/separation
- o Parental apathy
- o Family crisis
- o Poverty

School

- o Lack of positive, cooperative relationships between and among students, staff, parents, and administrators

- o Inadequate discipline policies and/or procedures
- o Lack of alternative schools/programs to meet needs of at-risk groups
- o Lack of collaborative teamwork among school and community professionals

Personal

- o Low self-image
- o Problems with parents and/or other family members
- o Truancy/absenteeism
- o Disruptive behavior

Community

- o Lack of community support services
- o Lack of links between school and community services
- o Lack of preventive mental health programs, such as those addressing drug, alcohol, or family problems

The Business Advisory Commission of the Education Commission of the States issued a report (Brown 1985) that identified three categories of youth at risk:

1. **The Alienated.** These youth are disinterested in or dissatisfied with the values represented by school and work. Most come from the middle classes and can be found in both urban and rural settings.
2. **The Disadvantaged and Alienated.** These youth exhibit all of the symptoms of alienation but have, in addition, the problems associated with being economically disadvantaged. Most lack basic social/academic skills, family support, useful networks, and self-esteem.
3. **The Disadvantaged.** These youth have family support and motivation to succeed but suffer from various effects of economic deprivation and racial discrimination.

Implications for the U.S. Labor Force

Garland, Therrien, and Hammonds (1988) referred to a growing black underclass of young people that are found in decaying inner cities all over the United States. The underclass is isolated from the nation's economic and social mainstream. Its members include chronically unemployed males and welfare mothers, concentrated in crime-ridden, desperately poor, inner-city neighborhoods, and they number at least 1.5 million. "The rising tide of prosperity left those without a high school diploma untouched--they were not even on the boat" (p. 122). Some social scientists believed that cultural factors have become at least as important as economic ones. For example, social scientist Charles Murray stated: "We do not know how to change the attitudes of adolescents who have grown up in the underclass" (Garland, Therrien, and Hammonds 1988, p. 123).

In a special report for *Business Week*, Nussbaum (1988) wrote that the earnings for young men who quit high school fell by 26 percent, adjusted for inflation, from 1959 to 1986. The huge decline in the wages of the unskilled labor force shows that this labor force is no longer competitive in the international economy. The productivity of the unskilled is plummeting, while worker productivity abroad is soaring. This could signal major losses in the battle for world markets. The United States may now be entering an era when neglect of the bottom half of society begins to threaten the welfare of the entire nation.

Bernstein (1988) saw a need to train or retrain as many as 50 million workers in the next 12 years. The most daunting task ahead is to educate and train the young work force entrants. The decline in the number of 21- to 25-year-olds means that employers now must

dig deeper into the barrel of the poorly educated. A larger proportion of new workers will be minorities and immigrants, who tend to have less education than other employees.

Minorities are the neediest of these new workers. However, as employers become increasingly dependent on them, minorities are lagging behind in reading and writing skills. Those already working tend to be stuck in occupations that are disappearing, whereas few have jobs in growing industries. Bernstein described a situation in which Nynex Corporation's New York Telephone Company had to test some 60,000 applicants--many of whom were minorities--to hire 3,000 people. There are too few minorities in fast-growing job categories and too many minorities in slow-growing job categories.

The skills gap will potentially widen as less qualified workers compete for a dwindling number of low-skilled jobs, whereas higher-skilled jobs go begging for want of qualified workers (Bernstein 1988). That would drive down wages for low-skilled workers, who can least afford it, and raise wages for skilled employees, who are already better paid. Bernstein cited a warning from Irwin S. Kirsch, a researcher at Educational Testing Service: "If we don't boost the skills of the bottom ranks of the work force, we'll have an even more divided society than we do now" (p. 108).

The changing demographics of the labor force, especially the youth who are at risk, should be of great concern to vocational educators. As Ehrlich and Garland (1988) noted, the youth cohort of the work force is shrinking, but more of its members will be black, Hispanic, or Asian. They predicted that this change may have dire consequences for the U.S. work force because a disproportionate number of these youths are growing up in families that

are poor or headed by single parents. Many of the adults in these families lack the skills to find decent employment. Their children face worse prospects at a time of dramatic technological change. Ehrlich and Garland used the disturbing new term "underclass" to describe some who are from such disorganized backgrounds that--without intervention or a social miracle--they may never be employable. "Many young people--especially minorities--are caught in a vicious cycle. About a quarter of all kids are born out of wedlock to parents who are poorly educated, frequently young, and unskilled" (Ehrlich and Garland 1988, p. 114). In the United States, about 44 percent of all marriages fail. Female-headed households are more than four times more likely to be poor than are two-parent families.

Harvard sociologist David Ellwood predicted that more than two-thirds of children who grow up in a single-parent household will spend at least some of their childhood in poverty (Ehrlich and Garland 1988). They are three times more likely than others to drop out of school, and they are more deficient in skills. Ehrlich and Garland believed that labor shortages in the future could present an unprecedented opportunity to improve the lot of the poor. They cited Labor Secretary Ann D. McLaughlin's statement: "The new workers--although they are from groups disadvantaged by discrimination, lack of education, and language barriers--will be in very great demand" (p. 118).

The reasons that at-risk youth abound in our society are numerous and diverse. A look at the factors that cause youth to be at risk helps in identifying what some of the solutions might be. Whatever the solution, it is very apparent that only a broad collaborative effort can begin to effect the retention of at-risk youth.

STRATEGIES FOR SERVING AT-RISK YOUTH

Key strategies for serving at-risk youth that have been developed and proposed by a broad range of authors and sources are reviewed in this section. The reader should remember that strategies are not discrete between categories of at-risk youth. Considerable overlap occurs. For the benefit of those service providers serving specific categories of at-risk youth, the strategies are related to specific at-risk groups. As mentioned previously, a synthesis of the role of career and vocational educators serving at-risk youth concludes this publication.

Strategies for Resolving Deficiencies in Basic Skills

A deficiency in basic educational skills is the one characteristic that most at-risk youth have in common, according to a National Governors' Association (1987) task force. The task force lists eight strategies that researchers and practitioners in the fields of education, business, and social services agree are vital to serving at-risk youth:

1. Consideration of a student's culture, language, and family circumstances in determining the appropriate curriculum and instructional techniques
2. Involvement of a student's parents or guardians
3. Student and parental choice among appropriate educational settings

4. A professional school staff trained to work with at-risk learners and develop effective responses to meet their needs
5. Early warning mechanisms to identify at-risk learners and develop effective responses to meet their needs
6. Cooperation among public agencies, businesses, and other community organizations in seeking solutions
7. Adequate resources to support dropout prevention initiatives
8. Enhancement of the student's appreciation of the value of education

Martin (1987) synthesized the learning and employment problems and needs of youthful high school noncompleters. He identified characteristics and components that schools need to adopt when replicating successful programs to serve noncompleters. A summary of the characteristics of noncompleters and the components of successful programs to serve them follows:

- o **Low academic achievement/ability.** Components that work include individualized and small group instruction; small teacher/student ratio; staff who believe students can achieve; students being required to set goals, write research papers, and play a major role in planning their own learning efforts; and career-oriented instruction relevant to student needs.

- o **Inability to function adequately in the social context of schooling.** Components that work include a climate of encouragement and motivation, a staff that requires and gives respect, a program that requires and gives strict rules, and a program to help students work together cooperatively.
- o **Home and family environment that are not academically stimulating.** Components that work include parental involvement in the educational process, career counseling that focuses on occupational competence, staff meetings that discuss individual learner needs, a resource center, exposure to different types of jobs, and program cycles of a year or more.
- o **Tendency to make poor course selections and take fewer credits.** Components that work include personal and academic counseling with low student/counselor ratios, close relationship between course content and individual career plans, a trust in students to plan their own programs, and school experiences that are congruent with realistic life goals.

Strategies for Successful Dropout Prevention

Dropout prevention programs that work were reviewed by O'Connor (1985). Using recent literature and the experiences of Oregon educators, a profile of the potential dropout was developed. Dropouts had the following four characteristics in common:

1. **An unsatisfactory family relationship.** The family is "less solid, less influenced by a father figure, less likely to interact in leisure activities, and less able to com-

municate than a graduate's family" (p. 2).

2. **Low socioeconomic status.** Not being willing or able to conform to the school's middle-class values, "lower class" students are often in conflict with the curriculum, the teachers, and the other students.
3. **Peer influence.** Those unhappy with the larger school environment form relationships with those who have similar dissatisfactions. These friendships perpetuate a cycle of dependency:

Many of those people selected for reinforcement are likely to be dropouts or in the process of dropping out. . . . Contact with these persons maximizes the probability that this dissatisfied adolescent will choose to quit school as a "solution" for feelings of insecurity. (p. 3)

4. **A low level of identification with school.** Although the potential dropout does not associate with other dropouts, there is a low level of identification with or participation in school activities.

Taking these four factors into consideration, the quickest way to identify potential dropouts is through a check of truancy patterns, low grades, and a lag in credits earned.

Ten characteristics of effective retention programs for at-risk students stood out in O'Connor's review. These characteristics are as follows:

1. **Students who are potential dropouts are identified early in their academic careers.**

2. The organizational structure of the program is well-organized and advances realistic expectations.
 3. The selection of appropriate staff is crucial to the success of the retention programs.
 4. Innovative teaching and counseling methods, such as team teaching and the "buddy system," seem to work well with at-risk students.
 5. Programs with a specific focus tend to interest potential drop-outs.
 6. Programs select students who will voluntarily work within the program structure.
 7. Students, faculty, and administrators appreciate the retention program's role within the institution.
 8. The administration demonstrates flexibility and open-mindedness toward the program's operation and funding requirements.
 9. Involvement of the community helps to enrich educational experiences for the students and to reinforce the relevance of education.
 10. Awareness of substance abuse is built into the retention program, since drugs often compound drop-outs' problems.
- o Strengthen pupil services
 - o Increase parent involvement
 - o Emphasize early intervention and prevention
 - o Expand use of the school building
 - o Teach students, staff members, and parents about family life and problems
 - o Help students learn to make the connection between school and the rest of their lives
 - o Encourage the use of volunteers such as parents, senior citizens, and college students to foster the mission of the schools
 - o Develop programs to facilitate children's "transitions" from home, school, grade levels, and beyond
 - o Use the media to demonstrate the merits of school-community collaboration

Strategies for Serving Youth with Substance Abuse Problems

Alcohol and other drug abuse (AOD) problems continue to plague secondary school youth as well as other age levels. Alcohol and other drug abuse is a contributing catalyst in a number of other factors that place youth at risk. These factors include truancy, disruptive behavior, physical and sexual abuse, family trauma, and other results of alcohol and drug use.

Although educators have significantly increased awareness, AOD is still a danger. The Wisconsin State Superintendent of Public Instruction commented that--

The National Association of School Social Workers (1985) proposed several solutions to the school dropout problem:

- o Help students, families, and communities identify and cope with problems that interfere with learning
- o Strengthen collaboration between the school and community

our youth continue to die in alcohol-related suicide deaths and automobile crashes, and they continue to suffer in society containing mixed messages about the use of AOD and homes devastated by addiction.

The problem we face is not simply a school problem. It is a community problem that can only be eliminated through caring, cooperative partnerships among schools, businesses, mental health and social service organizations, law enforcement agencies, hospitals, civic groups, churches, youth groups, parents, and grandparents. (Grover 1988, p. 2)

A five-pronged approach in the next phase of the war on AOD was outlined by Grover:

1. Establish an education center that will provide leadership and training to promote partnerships at the local level.
2. Appoint a youth task force to gather information from their peers and advise on what they perceive to be effective strategies.
3. Train 2,000 high school students during the 1988-1989 school year in developing local AOD projects that have parent and community involvement and support.
4. Establish a parent hotline to provide immediate assistance to parents who fear that their children are involved in AOD and don't know where to turn.
5. Publish a statewide AOD newsletter with tips from the field. A special section will focus on grant writing and program development.

Van Den Heuvel et al. (1986) provided information about 34 local school-community projects that were effective in providing alcohol and other drug abuse education to at-risk and other youth. Recipients of the programs were secondary students with drug and alcohol related problems, peers of students with AOD problems, parents, school staff members, and community members. Activities carried out in various programs are as follows:

- o The Student Assistance Program (SAP) includes a service set up to refer students to an assessment group or to other places of assistance. Referrals are by self, family, friends, or concerned others. An intake coordinator conducts an intake interview and gives the results to a screening team that routes the person to the appropriate assistance.
- o The SAP identifies and refers students who have AOD problems. Teachers are expected to complete a checklist relating to grades, attendance, behavior, and appearance. The referral goes to student services personnel, the student is screened, and an appropriate school or community referral is made. In-school options include individual counseling, tutoring, assessment, and AOD support groups. Out-of-school referrals may be made to city and county AOD help agencies. Parents can make referrals, and students are encouraged to refer themselves. Referrals are confidential.
- o A support group follow-up service is offered for students who are returning from inpatient or outpatient care for AOD.
- o A concerned persons group is set up to address self-esteem, attendance, behavior, and grade point averages

and to increase the number of AOD-free activities. Concerned persons groups receive training on dealing with AOD. School staff and a broad range of community members make up the concerned persons groups.

- o Co-curricular activities at all community public and private schools have a policy written into their student assistance procedures. Students with AOD violations (in or out of school) are not eligible to return to that activity until they meet with the SAP coordinator and agree to follow any recommendations.
- o A nonuser group at the secondary school focuses on decision making, self-esteem, values, drug information, and alternative activities. The nonuser group provides support for students returning from treatment for chemical dependency.

Strategies for Serving Young Women

When people think of students who are most likely to drop out, they think first of disruptive boys and then of pregnant girls. This stereotype does not reflect reality. Girls and boys drop out of school at approximately the same rate. Further, although 40 percent of the girls who do drop out are pregnant or getting married, the majority of girls who drop out are not (Earle, Roach, and Fraser 1987).

Low academic achievement and low self-esteem are school-related factors that affect the dropout rate of girls. Other factors that particularly affect girls are early socialization experiences that teach girls to be less assertive, cognitive differences in the ways that girls and boys learn, teacher interaction patterns that favor boys' response patterns and learning styles,

and curricular selections that often leave girls without the prerequisites for higher-paying jobs and careers. When these factors combine with low socioeconomic status, minority status, and low parental education levels, girls who are only marginally involved in school may choose to drop out.

According to Earle, Roach, and Fraser, program designers should be aware that girls may need attention to enhance their self-esteem, attention to remediation that takes into account some of the differences between boys and girls, attention by teachers on how they respond to students in the classroom, attention by administrators to create school environments that are flexible enough to meet student needs, and attention by the community so that those in health, social services, and employment closely collaborate with schools to ensure student access to a variety of needed services.

Effective dropout prevention programs for girls include having adults (parents, teachers, counselors, community inventors, nurses) act as advocates, keeping track of their academic process, their social relationships, and their health. Also included are more personal, flexible school environments that encourage such attention. Practitioners in a school setting must be aware of the particular risk factors for young women.

Earle, Roach, and Fraser provided a 10-point program based on their knowledge of female cognitive development, socialization, and successful programs. These 10 components include the following:

1. Instructional strategies incorporating the group activities and collaboration that complement female cognitive development

2. Remedial instruction (if needed) in abstract spatial reasoning to prepare girls to enroll in math and science courses
3. Institutional encouragement for girls to enroll in math, science, and other nontraditional courses
4. An institutionalized mentor program that provides girls with the opportunity to identify with female role models who have non-traditional occupations
5. A school environment that is flexible enough to accommodate students' individual learning and service needs
6. Adequate teacher training to promote teacher-student interactions that are free of sex and race bias
7. Extracurricular activities that highlight girls as key participants rather than supportive elements to a male-dominated activity
8. Counseling and related activities (when needed) to enhance girls' self-esteem
9. Parent counseling/education on cultural stereotypes and female potential
10. In general, access to and coordination of a range of services to help the variety of girls who are potential dropouts

Strategies for Suicide Prevention

Suicide prevention programs must be developed by schools serving at-risk youth. Group counseling and other techniques to identify, screen, and counsel students with suicidal tenden-

cies are becoming more common. Students at risk, school staff members, community members, and parents need information on developing suicide prevention programs and appropriate programs to deal with the aftermath and survivors of youth suicide.

Specific characteristics of suicide prevention programs are not provided in this paper. However, in order to assist the reader in the development and implementation of suicide prevention programs, several resources listed by Van Den Heuvel et al. (1986) are provided:

- o **Youth in Crisis.** A prevention program aimed at establishing an awareness of and an ability to respond to suicide. For all age levels. Cost \$20.00. Contact: Sopris West, Inc., 1120 Delaware Avenue, Longmont, CO 80511.
- o **Suicide: Questions and Answers.** Provides background facts on suicide in general and is useful in helping professionals and other adults understand the problem. Contact: Adina Wroblewski, 5124 Grove Street, Minneapolis, MN 55436-2481.
- o **Suicide: The Danger Signs.** Gives concise, comprehensive explanation of the signs of impending suicide in a resource book for professionals and other adults who work with and around youth. Contact: Adina Wroblewski, 5124 Grove Street, Minneapolis, MN 55436-2481.
- o **Suicide: Your Child Has Died.** Booklet provides a positive approach to dealing with the survivors. Cost \$4.95. Contact: Adina Wroblewski, 5124 Grove Street, Minneapolis, MN 55435-2481.
- o **Adolescent Suicide Awareness Training Manual.** Provides a short course on youth suicide and appropriate

intervention. Provides a basis for local district program development. Cost \$13.00. Contact: New Jersey State Department of Education, 225 West State Street, Trenton, NJ 08625.

- o **Prevention of Teenage Suicide: A Comprehensive, Proactive Program.** A community-based, school-focused program. Contains news releases, referral forms, and other materials. Cost \$160. Contact: Southwest Community Health Centers, Inc., 199 South Central Avenue, Columbus, OH 43223.

Strategies for Keeping Juvenile Delinquents in School

A prediction model for keeping juvenile delinquents in school was tested by Dunham and Alpert (1987). The specific factors that are salient for predicting whether a delinquent youth will drop out or remain in school were determined. An important finding in this study was that it required only four factors to yield a high level of prediction. The four factors were--

- o **Misbehavior in school.** This was the most significant predictor for dropping out. However, it appeared to be more of a symptom than a cause. Dissatisfaction with the whole school experience or certain aspects could easily lead to misbehavior in school.
- o **Dislike of school.** Whatever the specific reasons for disliking school, the findings suggested the importance of students enjoying the school experience. Students do not need to be especially successful in school to enjoy it.
- o **Negative influence of peers.** This factor involves peers who have dropped out as well as those who get

into trouble often enough to be perceived as trouble prone. Since misbehavior in school is such an important factor in dropping out, both of these types of peer influence (friends who had dropped out and those who were viewed as troublemakers) have an important impact on dropping out.

- o **Parental influence.** This important influence was referred to as attachment by Hirschi (1969). The stronger the attachment of the youth to conforming members of society, the less likely will deviance occur because the youth will not want to disappoint loved ones. Parents can have a tremendous influence on a child's behavior through attachment.

According to Dunham and Alpert, the four factors are additive. If a student is misbehaving in school, does not like school, has friends who are dropping out and getting into trouble, and has a marginal or weak relationship with his or her parents, there is a very high risk of dropping out. The greater the degree of these factors, the greater degree of risk. Prevention and retention strategies must deal with all four of these predictors.

Strategies for Collaborative Approaches to Retention

Collaborative approaches can be initiated at the federal, state, or local levels. DeLone (1987) argued that state governments can and must take the lead in solving the growing, debilitating, and seemingly intractable problems of youth at risk. He contended that no single agency can do the job and no single program approach is sufficient; programs that combine approaches are required. Treating the problems of at-risk youth with fragmentary local services, even good services, is a prescription for failure.

States are well-positioned to "convene" local youth service agencies controlled by local jurisdictions. A drawback is that state political leaders have generally shown little interest in this powerless and hard-to-serve constituency. Few incentives exist for top-level state officials to give high priority to the development of state-wide interagency youth initiatives. According to deLone, successful state initiatives appear to require (1) a state-level coordinating mechanism, (2) incentives for local participation and creative leveraging of state resources, and (3) encouragement of local creativity within well-crafted guidelines.

Although deLone granted that precise programming strategy depends on individual state and local needs, five broad programming approaches merit particular attention:

1. Increased use of schools as centers for integrated human service delivery
2. Development of more appropriate basic educational offerings for youth at-risk--a need obscured by most recent education reforms
3. Year-round programming to prevent summer learning loss, a major source of educational retardation for at-risk youth
4. Strengthened capacity to provide basic academic skills to out-of-school youth
5. Development of an institutional capacity to provide comprehensive services to out-of-school youth

Public/Private Ventures (1988) listed major participants to be included in coordinating a continuum of services to serve at-risk youth. The following groups were included:

- o Schools--regular and vocational high schools, secondary and postsecondary, and alternative schools
- o Youth agencies--employment and training as well as support service providers
- o Business--the employers or "consumers" of the graduates, as well as contributors to the training process
- o Government--as policymakers, funders, and often providers of services through local government agencies
- o Community-based organizations--neighborhood associations, organizations engaged in related activities, churches, and youth groups
- o Other interested groups--including the United Way and local foundations that may provide funding support

Any major partnership comes together to solve a common problem and seek mutual benefits (ibid.). Building a coordinated system of services to confront the problems of at-risk youth has inherent benefits for all involved. For example, (1) dollars can be more effectively targeted to serve those most in need and fill the most serious gaps in service; (2) clients can be more efficiently and effectively served; (3) businesses can avoid the duplication of effort that arises from sporadic involvement with different agencies and institutions and can gain qualified employees through systematic involvement in the process; (4) increased revenues and commitments can flow to the educational and training system as everyone involved is vested in the problem and the solutions; and (5) accountability increases through ongoing monitoring and evaluation of the overall system and its components. These benefits of collaboration accrue to all the partners and help to reduce

the anxiety or skepticism individual agencies might feel when assessed as part of a coordinated delivery system.

State-Level Strategies for Serving Children at Risk

Wisconsin's Children At-Risk initiative (Van Den Heuvel et al. 1986) was the result of an extensive collaborative effort involving the Department of Public Instruction, the Governor's Office, the Wisconsin Legislature, the Department of Health and Social Services, Cooperative Educational Service Agencies, and many Wisconsin educators. As a prelude to the implementation of Wisconsin's At-Risk Statute 118.153, a statewide survey was made of the at-risk programs in the state's secondary school system. Schools were asked to rate their emphasis on 13 programs and approaches related to at-risk youth retention. The survey development committee deemed the following approaches effective:

1. Remedial instruction (grades 4-12) in mathematics
2. Remedial instruction (grades 4-12) in reading
3. Modified instructional techniques emphasizing individual instruction
4. Comprehensive vocational education programming
5. Comprehensive pupil services programs that coordinate the efforts of school counselors, psychologists, social workers, nurses, and classroom teachers
6. Systematic procedures for communication between school staff and parents
7. Education programs for parents of children at risk
8. Joint school-business partnership programs serving children at risk
9. Planning and evaluation systems to ensure that educational progress/regression of children at risk is monitored and documented
10. A districtwide developmental guidance program
11. A home-call system to wake children and tell them it's time to go to school
12. A school-community sponsored pick-up-truant/absent pupil program
13. A staff-supervised, in-school detention to make up work missed due to truancy

The Wisconsin Department of Public Instruction (Van Den Heuvel et al. 1986) also surveyed the schools to determine the organizational and management factors related to the educational, social, and career needs of at-risk youth. A list of the organizational and management factors follows:

- o A school-community-business advisory committee to plan and to recommend programs for children at risk
- o A school-community-business policy-making committee to develop and manage local programs for children at risk
- o A pupil accounting system to monitor attendance and inform parents daily about trancies and absences
- o A board-approved district attendance policy
- o Technical assistance from the Department of Public Instruction in training school personnel, developing model programs, and providing

materials and curricula

- o State and federal grants to districts to develop truancy and drop-out prevention programs
- o A designated school attendance officer in the school district
- o Local staff development programs to enable school staff to work more effectively with children at risk
- o Systematic enforcement of school attendance policies
- o Local law enforcement cooperation in dealing with truants and their parents
- o Local media attention that supports school attendance policies
- o A local Chamber of Commerce Education Committee
- o Adequate health and social service programs to deal with the nonschool problems of children at risk
- o Community education awareness programs to generate support for the importance of school attendance and achievement
- o A districtwide curriculum planning committee
- o School-community sponsored programs for parents of children at risk
- o A designated district leader responsible for coordinating children-at-risk programs

Strategies Recommended by National Organizations

The U.S. Department of Education and
the Council of Chief State School Of-

ficers developed recommendations for the education of at-risk youth. Although these recommendations are of a broad and general nature, they do contain guidelines that career and vocational educators need to consider in developing programs for at-risk youth. Both of the agencies' recommendations call for community-wide approaches and equity in serving all youth.

Recommendations from the U.S. Department of Education

In the U.S. Department of Education's (1987) publication on educating the disadvantaged, *Schools that Work*, 16 recommendations were provided for schools; parents, guardians and communities; and local, state, and federal governments. These recommendations are as follows:

Schools

1. Mobilize students, staff, and parents around a vision of a school in which all students can achieve.
2. Create an orderly and safe school environment by setting high standards for discipline and attendance.
3. Help students acquire the habits and attitudes necessary for progress in school and in later life.
4. Provide a challenging academic curriculum.
5. Tailor instructional strategies to the needs of disadvantaged children.
6. Help students with limited English proficiency become proficient and comfortable in the English language--speaking, reading, and

writing--as soon as possible.

7. Focus early childhood programs on disadvantaged children to increase their chances for success.
8. Reach out to help parents take part in educating their children.

Parents, Guardians, and Communities

9. Instill in children the values they need to progress in school and throughout life.
10. Demand the best from children and show this concern by supervising children's progress.
11. Get involved with the schools and with children's education outside school.
12. Invest in the education and future success of disadvantaged children.

Local, State, and Federal Government

13. Ensure that education reforms make a difference for disadvantaged students.
14. Give local school officials sufficient authority to act quickly, decisively, and creatively to improve schools, and hold them accountable for results.
15. Assess the results of school practices, paying special attention to the impact of reform on disadvantaged students.
16. Support improved education for disadvantaged students through supplementary and compensatory programs, leadership, and research.

Recommendations from the Council of Chief State School Officers

The Council of Chief State School Officers (1988) developed a model state statute to provide educational entitlements for at-risk students. The following suggested practices for local education agencies (LEAs) serving at-risk youth were identified:

- o Appropriately certified and trained staff
- o The adoption of systematic instructional strategies that--
 - have demonstrated effectiveness or that show promise of being effective,
 - are designed to assist at-risk children in mastering the same skills and knowledge expected for all students, and
 - are designed to ensure coordination and integration of programs to assist at-risk children with the entire education program.
- o The use of appropriate and up-to-date textbooks, materials, and equipment
- o The conduct of education programs in facilities that are clean and safe
- o The involvement of parents or other primary caregivers in all facets of their children's education
- o A system of school-based administration that encourages goal setting at each school and affords scope for innovation within the broad limits of policies established by the LEAs

Strategies for Developing Workplace Competencies

Public/Private Ventures (P/PV) (1988) found that young people go through a

common sequence in developing the skills and knowledge they need to function in the workplace. They start learning these skills at the middle-school level and continue to learn skills as they settle into a career. The sequence of these four competencies was described as follows:

1. **Basic skills**--the reading, writing, computational, and speaking skills necessary to function in a work setting
2. **Preemployment skills**--the techniques for finding a suitable job, such as taking part in an interview, filling out a job application, and communicating one's skills to a potential employer
3. **Work maturity**--knowledge of the behavior expected in the workplace and the skills needed to meet work demands
4. **Occupational training**--acquisition of the specific skills and knowledge needed for a particular trade or field of work

Most youth, with occasional starts and stops, attain these competencies in this approximate sequence.

The P/PV authors identified eight strategies aimed at helping at-risk youth acquire these competencies: basic skills enhancement, alternative schooling, work/study, job-readiness training, on-the-job training, residential training, and youth service corps. P/PV authors provided the rationale, strategy elements, programming options, costs, and program examples for these eight strategies.

The strategy elements for job-readiness training as described by P/PV are provided here as an example. A basic program or curriculum focusing on job-readiness training will include the

following strategy elements:

- o Assessment of individual interests and aptitudes for different types of work
- o Job search techniques--where to look for and how to access job opportunities
- o Preparing job applications and using them as a sales tool
- o Preparing a resume or personal profile
- o Interviewing skills
- o Meeting the demands and expectations of an employer
- o Job placement and follow-up

Effective delivery of such a program requires such elements as (1) a training period of from 1 to 4 weeks, depending on the intensity of instruction and individual needs; (2) flexible staff with expertise in vocational counseling, educational services, and job development; (3) small group and individual instruction as needed; (4) individual employability plans with competency measurements; (5) a large network of employers to hire youth and give appropriate supervision; (6) emphasis on matching individuals to jobs and not vice versa; (7) linkage with or provision of other training and/or educational activities, and support services as needed; and (8) post-placement support services for both youth and employers.

The School-within-a-School Strategy

Wehlage, Rutter, and Turnbaugh (1987) found evidence in previous research that educators have already developed effective programs in response to the

difficulties of at-risk students. A general model for alternative programs of the school-within-a-school or alternative school type exists. Characteristics of this program can be described under four categories: (1) administration and organization, (2) teacher culture, (3) student culture, and (4) curriculum. Highlights of these characteristics are as follows:

Administration and Organization

- o A school-within-a-school program can be built in a school of not more than 100-150 at-risk students; 25-100 students and 2-6 faculty are desirable.
- o Face-to-face relationships are necessary for teachers to communicate with a sense of caring. Teachers can individualize and personalize their instruction.
- o Teachers can keep track of at-risk students.
- o Small size facilitates face-to-face communication among faculty.
- o Teachers have authority to control admissions and dismissals from the program. The school's commitment is communicated to the teachers.

Teacher Culture

- o Teachers believe that at-risk students deserve a renewed opportunity to learn.
- o Teachers have an extended role that allows them to deal with the whole person, including certain problems in the home, community, or peer group. It may mean dealing with a substance abuse problem in the parent or student.
- o Teachers must develop a strong sense

of joint decision making and cooperation.

- o The model works best in a single complex or facility.

Student Culture

- o The program is voluntary and students need to apply for admission. Not all are accepted.
- o The applicant must be candid about why he or she is in trouble with the school and admit that a change in attitude is necessary for future success.
- o Students must commit themselves to a set of rules, work expectations, and standards of behavior. Rules include attendance, the quality and quantity of work required, and the consequence for breaking the rules.
- o Those who cannot make this commitment are not accepted; those who fail are terminated from the program.
- o These standards allow students to take pride in their program and accomplishments and create a positive student culture.

Curriculum

- o Curriculum and teaching must be substantially different from that ordinarily found in high school.
- o Individualization, clear objectives, prompt feedback, and concrete evidence of progress are dominant features.
- o Attention must be given to basic skills.
- o The level of skill mastery dictates where teachers begin.

- o Only a portion of the student's time is allowed for remediation.
- o Important activities include sex education and parenting instruction, health care and nutrition, and community social services.

EXEMPLARY NONVOCATIONAL PROGRAMS

The previous chapter highlighted strategies for working with at-risk students. This section reviews exemplary nonvocational programs that have put some of these strategies into practice. Key features of these programs and the techniques used to serve at-risk youth are described. Similarities with vocationally oriented programs will be apparent.

The Middle College High School

Lieberman (1986) and a special group of educators designed a Middle College, a collaborative alternative high school/college program to serve the needs of urban high school youth. The Middle College High School (MCHS) was operated under the joint auspices of the New York City Board of Education and LaGuardia Community College.

MCHS admits prospective 10th-grade students who have been identified as high-risk youth with college potential. About 85 percent of the students graduate and 75 percent of these go on to college. The goals of MCHS are to reduce the dropout rate by improving the students' academic performance and self-concept and to enhance college and career options by helping the students reach their full potential. Potential dropouts are supported by visible peer models, small classes, and superior academic and support services.

Guidance counselors in the seven feeder schools to MCHS identify potential students. MCHS personnel visit each

school, talk to the potential students, and answer questions. Interested students then fill out applications with their parents' permission. The principals of the junior high feeder schools receive a list of applicants. MCHS personnel then negotiate for 20 students from each school. Current MCHS students and staff interview the 140 prospective students. Each year 14 of the 600 MCHS students are selected in this manner.

During the 10th grade, MCHS students work in nonpaying internship positions selected by guidance counselors and job developers. Each MCHS student spends 3 years in school with each year divided into trimesters or cycles. Students work one trimester each year and study in two trimesters. The objectives of the internship program are to--

- o use reality testing to develop process skills and self-knowledge to set career and life goals;
- o develop educational plans identifying and based on academic and vocational skills necessary to achieve career and life goals;
- o develop a realistic sense of positive self-esteem;
- o develop job acquisition skills such as resume writing, interview techniques, and development of useful references;
- o understand the protocols of the world of work;

- o develop and apply coping skills appropriately in the workplace;
- o integrate the experiences and skills developed in the Middle College Career Education Program with the goals of the LaGuardia Community College cooperative education program; and
- o understand the complex interdependencies of communities, agencies, and individuals.

After the 10th year, MCHS students have the option of taking tuition-free college courses. There is close collaboration among MCHS, community college teachers, and employers. The success of the MCHS alternative school program is apparent when comparing dropout rates. The MCHS dropout rate is 5.8 percent compared to the citywide rate of 40 percent.

Community/School Program

Richmond, Virginia, Public Schools developed the Community/School Comprehensive Dropout Prevention Program (Van Den Heuvel et al. 1986). The following factors helped this program effectively reduce the dropout rate:

- o A school-community-business policy-making dropout prevention council
- o Systematically planned goals and objectives
- o Parent education workshops
- o Reward systems and acknowledgement for school attendance
- o Shared school-community-business responsibility for school attendance
- o Extensive public relations campaigns
- o Involvement of community volun-

teers--senior citizens, churches, youth groups--as partners in the school attendance effort

- o A dropout prevention team in each school
- o A community-wide student attendance monitoring system
- o Awards days for parents and children for perfect school attendance
- o Attendance campaigns involving national celebrities
- o A system for students to make up lessons missed due to absence
- o Alternative programs to suit student learning styles
- o Return-to-school workshops for dropouts and their parents
- o Community-wide "truancy centers" to get truants back into class
- o Law enforcement help to pick up students during school hours and bring them to truancy centers

George Washington Preparatory High School

The George Washington Preparatory High School in Los Angeles, California, is described by the U.S. Department of Education (1987) as an example of a school that works. This particular example illustrates the effect of leadership in serving disadvantaged youth. When George McKenna was appointed principal of Washington High, as it was then called, over half of the 1,800 students sought to be bused to other schools. More than 65 percent of the students came from low-income families. The school was known for gang violence, drug use, vandalism, and low academic standards.

One of the first changes made was to name the school George Washington Preparatory High School, a name that would symbolize a new academic excellence. To ensure a high-quality education, the following steps were taken:

- o Parents and students were required to sign a contract. Students had to agree to abide by school rules, adhere to a dress code, and complete all assignments. In addition to attending workshops on how to help their children achieve in school, parents agreed to visit the school at specified times.
- o The school held training in nonviolence, modeled on the teachings of Mahatma Gandhi and Martin Luther King, Jr. Parents and their children signed a Contract for a Non-violent Home, promising they would not physically or verbally abuse one another.
- o A parents' advisory group was organized that helped acquire funds for improving the school building. Parents also monitored student attendance.
- o Teachers were required to assign homework and to make daily calls to the homes of students absent from their classes.
- o A strict discipline code was enforced. "Hall sweeps" were held to find students who were not in their classes. Anti-graffiti squads were organized, with students scrubbing the walls in the school and on any houses adjacent to the school that had been defaced by students.
- o Eighty-five percent of the faculty were replaced with new teachers with the assistance of parents and teachers.
- o Remedial and tutoring programs were

established in all subject areas. Any student receiving a D or an F was required to come in for tutoring on Saturday.

- o Magnet centers were established in mathematics, science, and communications arts with small classes and extra resources. Centers were open only to students who agreed to take college-preparatory courses.
- o Frequent testing was required in all subjects.

The results are that George Washington Preparatory High School is now one of the safest and best schools in the district. Seventy percent of its students go on to college; absenteeism dropped from 33 percent in 1979-80 to less than 10 percent in 1985-86. The exodus of students has ended. Now there is a waiting list, and the school enrollment exceeds 2,800 students.

Michigan's Enterprise High

Enterprise High is a unique curriculum begun in Michigan to simulate life outside of school to show students how education affects their ability to earn a living and manage life (Benedict, Snell, and Miller 1987). The curriculum serves 500 16- to 21-year-old dropouts in 10 programs in 3 Michigan counties. The most basic program component is trust. Staff members are trained to suspend judgment, cultivate friendship, share feelings honestly, and confront from a position of caring.

The curriculum has four components:

1. **The Enterprise: How to Earn a Living.** Students engage in business ventures, making products or providing services that are marketed for profit after expenses are deducted.

2. **The Simulation: How to Manage Life.** Students earn up to 10 points for each hour spent in English, math, social studies, and prevocational arts. These points may eventually allow a student up to four credits. Points are also turned into a simulated wage. Students start at minimum wage; try to meet the costs of housing, food, clothing and transportation, entertainment, and life-style choices; and pay bills by check. Students learn that they will need more education to have a decent life.
3. **Basic Academic Skills Embedded.** The Enterprise offers many opportunities for students to engage in basic skills related to business, such as math, writing, and budgeting.
4. **Group Problem Solving Embedded.** All problems regarding the Enterprise are group related. What to build, what to charge, how to manage, and what rules to follow are decided by the group.

Extensive staff development has two basic characteristics. The first is that long-term success is based on local ownership and that development takes place over time. As a result, the staff members schedule the students' time in 4 days, and the fifth day each week is spent in the collaborative development of curriculum.

VOCATIONAL EDUCATION STRATEGIES FOR SERVING AT-RISK YOUTH

As discussed in an earlier chapter, the problems of at-risk youth have serious implications for the U.S. labor force. Therefore, vocational education strategies--aimed at enhancing employability and preparing students for the workplace--are especially important for the at-risk population.

Effects of Vocational Education on Youth

Findings by the National Center for Research in Vocational Education on the effectiveness of high school vocational education for youth were reported by Campbell and Parnes (1986). Concentrating in vocational education in high school leads graduates to spend more time in the labor force, have more paid employment each year, earn higher wages if they work at jobs related to their high school training, and be more productive when employed in training-related jobs. Vocational graduates frequently go on to postsecondary education and are as successful as general graduates in other areas.

Employers saw vocational education as having advantages for their employees. Those employees who had relevant vocational training were reported to be significantly more productive from the start and to require less training than those who had no vocational education. These effects were positive, but small at the secondary level and considerably larger for training obtained in public postsecondary institutes or community colleges.

In the Weber and Mertens (1987) summary of studies describing dropout programs that work, three characteristics stood out. The first was that vocationally oriented experiences are an important part of a dropout prevention program. A second characteristic is a strong vocational emphasis in which students learn practical job-related skills in school and apply academic learning to real life situations. Third, much learning occurs in a paid employment situation. Finally, a dropout prevention strategy included a combination of parental involvement, remedial basic skills instruction, work experience, job placement with counseling, supportive services, and in-school vocational instruction.

Vocational Strategies for Dropout Prevention

Weber and Sechler (1987) stated that little progress has been made in combatting the dropout problem nationally, but that a number of local programs that link vocational education and related work experience with other critical components appear to be working. They reviewed the operational and organizational characteristics of nine such exemplary programs nominated by their respective state departments of education and identified the characteristics that these programs had in common in the areas of general organization, staffing, and instruction. These characteristics follow.

General Organization

- o Programs are presented in contexts that differ from a "traditional" school environment, and they function somewhat autonomously.
- o Classrooms have low teacher-pupil ratios.
- o Approaches tend to be holistic and multifaceted.
- o Strategies are defined by a combination of remedial basic skills, parental involvement, work experience/job placement, counseling, supportive services, and vocational (skill) training.
- o Programs focus on students who are in the beginning stages of their high school careers.

Staffing

- o "Special" staff teachers are committed to their program's philosophy and goals.
- o Teachers are able and willing to establish relationships with students that tend to be more demanding than "normal."
- o Staff are flexible in their approach and able to stay on top of their students' needs.

Instruction

- o Teachers devote about half of their efforts to addressing students' remediation needs (especially in basic skills); about one-fourth to resolving their personal needs (for example, improved self-concepts); and one-fourth to addressing their work-related needs.
- o Staff use persuasive motivational strategies (for example, tying

school activities directly to the real world and building team spirit among the participants).

- o Instruction involves some degree of individualized teaching and learning.

Model Dropout Prevention Programs

Model dropout prevention program characteristics were identified by Weber (1988). He compared vocational classrooms to model dropout prevention programs; table 1 indicates where vocational education is successful and where it needs improvement.

TABLE 1
**VOCATIONAL CLASSROOMS COMPARED TO MODEL
 DROPOUT PREVENTION PROGRAMS**

Model Dropout Prevention Program Characteristics	Vocational Classrooms
Teachers have authority to design courses and experiences	Vocational teachers feel they have more authority and control
Low teacher/pupil ratio	Vocational classes have significantly lower teacher/pupil ratios
Teachers willing and able to "stay on top" of students' needs	Vocational teachers spend more time counseling students on a personal basis, but less time working with other staff to resolve students' problems
Emphasis on basic skills remediation	Vocational teachers spend less time on basic skills reinforcement and enhancement
Emphasis on resolving students' personal problems	Vocational teachers place significantly less emphasis on personal growth and development as a teaching goal
Environment free from absenteeism, theft, substance abuse	Vocational teachers perceive fewer such problems
Individualization	Vocational classes are significantly more likely to be individualized
Active role for students	Vocational class activities involve students more actively
Provide recognition and special awards	Students are recognized for their performance more often in vocational classes

SOURCE: Adapted from Weber (1988)

EXEMPLARY VOCATIONAL EDUCATION PROGRAMS

Many exemplary vocational programs that serve at-risk youth were identified in the review of literature. Detailed descriptions of several outstanding programs are provided in this section. Strategies and techniques vary among the programs but similarities are apparent.

Secondary School Programs

This section describes successful programs for at-risk middle and high school students.

An Exemplary Secondary Vocational Program in Verona, Wisconsin

The Employment Skills Program and the Designated Vocational Instructor (DVI) Program have assisted Verona (Wisconsin) High School in achieving a dropout rate of less than 1 percent (Gugerty et al. 1988). This dropout rate has been maintained over a period of years in a high school of about 650 students. This program is designed to meet the vocational, career, academic, and life needs of all at-risk students. The DVI approach is a cooperative, interdisciplinary effort between special and vocational education. DVI teachers work with vocational special needs students to help them enter and participate in regular vocational education classes. Instructional support is supplied to the vocational teacher and the students. DVI teachers assist in the coordination of special and vocational education, in student services,

and in the transition from school to work.

The Employment Skills Program (ESP) provides courses in Career Awareness (grade 9), Career Exploration (grade 10), World of Work (grade 11), and Career Decision Making, Independent Study, and On-the-Job Work Experience (grade 12). Direct instruction and instructional support to students who need extra assistance is provided by the ESP. Stress is placed on keeping students in school and on successful completion of all courses. Particular attention is given to the enrollment in vocational courses and the completion of course sequences leading to job placement in the occupational prep/coop program. Students increase their awareness of career skills while directly exploring the world of work. Students acquire the ability to obtain and maintain employment.

All Verona Middle School students are required to enroll in 9 weeks of industrial education and 9 weeks of home economics survey courses. Students in these classes learn about basic hand tools, materials, safety, and other vocational classes available at the middle and high school levels. Special emphasis is placed on learning about career opportunities and future employment.

Verona High School's Employment Skills Program provides vocational opportunities to disadvantaged at-risk students and students with disabilities. Programs provide vocational skills and

career knowledge that will lead to employment and/or appropriate transitional training for these students. It is the intent of the program to recognize the unique abilities, needs, interests, aptitudes, and aspirations of each student. A cooperative partnership venture by all school staff provides an appropriate educational program that includes both instruction and work experience for all identified students. Positive relationships between students, the school, and employers are stressed.

Under an ESP advisor-advisee component, each vocational instructor selects one or more at-risk students with whom to work on a one-on-one basis during the year. The purpose is to develop a personal rapport with the at-risk student, discuss career and job interests, monitor school progress, and assist the at-risk student in making appropriate career decisions and in staying in-school. The ESP vocational advisors' role includes the following:

- o Get to know the student's interests, hobbies, and school activities.
- o Discuss his or her career interests, present or past jobs, or if he or she is seeking employment.
- o Ask the student how he or she is doing in other classes. If a student expresses a need for help, suggest the appropriate person to see.
- o Advise the student on course selection related to his or her career interest.
- o Relate what the student is learning in classes to future employment.
- o Refer the student to the guidance counselor or other school personnel if such help seems appropriate.

- o Consult with other teachers or school personnel when appropriate.
- o Meet with students four times each semester, at progress report time, and at the end of the quarter to discuss progress.
- o Provide information to the ESP coordinator about the student's progress.

Each at-risk student makes a transition into full-time paid employment, post-secondary education, or supported employment. Transition planning occurs during the 12th grade. Each at-risk student receives a placement prior to completing school.

In addition to an almost zero dropout rate, the Verona High School at-risk graduates have nearly a 100 percent employment rate. A secondary school with such an extremely low dropout rate and whose students are nearly all employed must be doing something right. Gugerty et al. (1988) asked school staff members to identify the key factors that make the ESP/DVI Project effective in retaining at-risk students. Much of the credit for the success of the program is given to the ESP/DVI Coordinator. The close attention given by the coordinator to students who have problems is critical. Students are forced into a future-oriented posture. They look at their strong points and visualize how they will fit into the world after high school. Students have high self-esteem. Teachers are shown the importance of the skills they teach. Another key point is that the guidance counselors report directly to the director of pupil services. All teachers are involved and highly motivated and have a good work ethic.

Other factors are the communication between the ESP/DVI Coordinator and the vocational education staff; the

sense of involvement/ownership on the part of the whole vocational staff; administrative support from school administrators and school board; appropriate referrals from teachers; community involvement; general student awareness of the program; the coordinator's assistance in explaining student needs, abilities, and interests and in working with employers; a shared philosophy among staff; communication, cooperation, and commitment; shared ownership of students; and a shared commitment to serving students' needs.

Reducing the Dropout Rate in Chicago

In Chicago, where some 43 percent of entering freshman do not complete high school, students who have goals and students enrolled in career-vocational programs are less likely to drop out than those in traditional school programs (Azcoitia and Viso 1987). In an experiment, all freshman students were placed in vocational programs for a minimum of 1 year. The dropout rate was reduced from 24 percent to 6 percent, with the only variable being enrollment in vocational education.

Funds from the Illinois State Office of Vocational and Technical Education were used to create a vocational support service team for disadvantaged, handicapped, and limited English proficient youth. Youth enrolled in vocational programs are provided with assessment screening, peer tutoring, specialized services for the handicapped, an academic resource center, and vocational aides in schools with a high concentration of special needs youth and a strong need for bilingual services.

The Student Services Corporation is a component of the vocational support services team. Peer tutors are trained and supervised by a teacher and paid for their services. In the 1986-1987

school year, over 13,000 students received limited tutoring services, and 4,161 received long-term tutoring. Of all the students tutored, 92 percent successfully completed the vocational program in which they were enrolled.

A Vocational/Academic Resource Center functions at 15 high school sites. Students receive computer-assisted instruction in math and reading related to vocational education. Students are provided assistance in the transition to competitive employment or postsecondary schooling.

Vocational Education for Teenage Parents

Teenage parent centers play a positive role in directing single and pregnant teenage parents to vocational schools. The Teenage Parent Center in New Brunswick, New Jersey (Zanzalari and McCloud 1987) encouraged over 75 single parents to remain in school or enroll in vocational training. An ongoing recruitment effort coordinated with local social agencies, hospitals, and schools advised out-of-school teen mothers about vocational training and job opportunities and encouraged them to enroll in a vocational program. The Center's objectives stressed personal commitment to vocational education, marketable skills, and job placement, especially in nontraditional areas. The following activities helped single teenage parents achieve these objectives:

- o A coordinator who informs out-of-school single teen parents and pregnant teenagers about the value of a high school diploma from a vocational school
- o Information and referral as needed to support training with resources and services, including child care or transportation

- o Workshops, conferences, and/or seminars with teachers, counselors, and parents to increase successful participation in nontraditional vocational programs
- o Career counseling and assessment that enables participants to identify skills, set goals, obtain vocational information, learn job search techniques, and overcome the effects of sex stereotyping
- o Prevocational (when necessary) and vocational training at Middlesex County Vocational and Technical High Schools and Adult Technical Schools
- o Employment assistance after graduation through the Teenage Parent Center
- o Documentation of services to each participant, including child care and transportation

An advisory committee made up of a broad range of community members provide a solid network for the Teenage Parent Center. Advisory committee members furnish valuable resources and supplemental information in areas related to life management and coping skills. According to the teen parents, the five most helpful services provided to them were child care assistance, school attendance support, information on the importance of a high school diploma and vocational training, coordinators' enthusiasm for the teen parents' goal of becoming economically self-sufficient, and personalized attention and guidance.

The support services coordinator performed intake and follow-up testing on teenage parents' self-image, attitude, and expectations. Improved self-image and attitude of teen parents were correlated to students' retention in the program. Outreach efforts performed by the coordinator were effective in in-

creasing vocational training awareness and, consequently, enrollment in a vocational training program. Contacts with community agency personnel were important outreach vehicles that promoted the need for and availability of vocational training. In addition, workshops provided information to future students about vocational training, especially in nontraditional areas, and admission requirements of Middlesex County Vocational Schools.

The Family Education Center in Arlington, Virginia more than triples pregnant teenagers' chances of staying in school (Scholl and Johnson 1988). The long-range goals of the Center help a pregnant teenager to remain in school. These goals enable each student to (1) realize her full academic potential, (2) acquire skills necessary for competent motherhood and family living, (3) maintain her own health and that of her child, (4) acquire information on planning pregnancies, and (5) develop vocational skills required for employment and financial independence.

Reducing the Dropout Rate in Pittsburgh

Multiple interventions are used in the city of Pittsburgh to reduce the dropout rate (Monaco and Parr 1988). A summary of this multiple approach follows:

- o Vocational and technical courses in nearly 40 occupational, vocational, and technical areas are provided to over 50 percent of the 11th- and 12th-grade students.
- o A dual-purpose prevocational training and dropout prevention program, Occupational and Academic Skills for the Employment of Students, is provided to more than 100 at-risk students.

- o The Select Employment Trainee program provides career development training, tutors or mentors, and employment for about 2,000 disadvantaged students.
- o A high-tech magnet school begins with basic electricity and progresses through digital electronics and robotics. Vocational education is infused in all academic subject areas.
- o A vocational education magnet school offers a 4-year vocational program that coordinates academic work with hands-on problem solving in vocational courses.
- o A cooperative endeavor, a School within a School, involves the Edna McConnell Clark Foundation, the Urban League of Pittsburgh, the Allegheny Conference on Community Development, and five local banks.

In addition to these programs, Pittsburgh is one of five cities involved in the New Futures Initiative. Under this school-community partnership, 10th-grade students must choose either a vocational or an academic program, career education is infused in all subject areas from grades 4 to 12, and the "Pittsburgh Promise" offers students volunteer activities, career exploration, work-world orientation, and summer, part-time, and entry-level jobs.

Postsecondary Approaches

Two-year technical, community, and junior colleges must also be prepared to deal with at-risk students. Successful postsecondary programs are highlighted here.

Retention of At-Risk Students at the Florence Darlington Technical College

A nine-component plan for retaining high-risk students at the Florence Darlington Technical College (South Carolina) is based on the requests of students, faculty, coordinators, and deans (Cellucci and Price 1986). This plan was developed after a national search for successful postsecondary retention plans was made, programs were reviewed, and the best practices were selected. Each of the nine components has goals, objectives, and strategies for implementing the objectives, as follows:

1. Admissions Goals

- To maintain academic integrity
- To foster a student's sense of individual worth and self-esteem from the outset
- To reduce attrition from application to registration
- To increase student success in various technical education curricula

2. Academic Standards Goals

- To increase the number of students who are academically successful
- To develop a set of intervention strategies for probationary students
- To maintain collegiate standards

3. Advising Goals

- To increase retention by upgrading academic advisory for students
- To provide students with holistic and continual advising
- To promote interactions between high-risk students and their advisors that reflect commitment to students

- To formalize course planning and goal setting for students
4. Freshman Orientation Goals
 - A task force was set up to develop an effective and systematic orientation process that would be feasible for the Florence Darlington Campus. It was determined that this task force would write its own goals, objectives, and strategies.
 5. Counseling Goals
 - To continue to expand counseling services
 - To offer a broad variety of services directed toward meeting the variety of individual needs of high-risk students
 - To generate a unified campus directed toward assisting the high-risk student
 - To ensure that each student is thoroughly aware of counseling services
 - To integrate counseling services into a student's on-campus experience
 - To eliminate the stigma attached to counseling
 - To serve as a clearinghouse for information
 6. Individually Guided Studies Program Goals
 - To ensure all students an equal opportunity for success in curricula
 - To develop basic proficiency and competency in students
 - To motivate and to guide students enrolled in developmental/remedial preparatory programs
 - To develop more coordination and consistency between curricula and developmental/remedial preparatory programs
 - To incorporate relevant vocational-career components into developmental/remedial preparatory programs
 7. Student Assistance in Curricular Goals
 - To initiate the idea of lifelong learning in students prior to their acceptance into curricula
 - To provide continuous and consistent monitoring of curricula
 - To provide high-risk/probationary students with additional academic help
 - To assist faculty in delivering high quality education
 - To make modifications in a student's placement when success is affected
 - To expand professional growth experiences for faculty
 8. Peer Tutoring Goals
 - To provide assistance to students who need supplemental instruction
 - To assist instructors in meeting individual needs of students
 - To develop positive attitudes and learning strategies in high-risk students
 - To provide high-risk students with a personal relationship to the college
 - To facilitate peer interaction in an academic atmosphere
 - To reward academically successful students
 - To increase self-confidence of participants
 9. Auxiliary Service Goals
 - To increase retention of high-risk students
 - To provide auxiliary services/resources to high-risk students as needed
 - To continue to treat students as consumers

A JTPA Program in a California Community College

A Job Training Partnership Act (JTPA) program in a North Orange County (California) Community College was described by Coad (1985). This project addressed requirements related to a job placement program. Guidelines on reviewing, coaching, and updating job placement skills of disadvantaged participants were provided. Job skills were identified, defined, and evaluated. Job placement activities for the placement specialist are summarized as follows:

- o Individualized interview with clients
- o Review/coaching/update of clients' job search activities
- o Weekly client counseling (one-on-one or group pep talks)
- o Daily client contact (including job referrals)
- o Daily contact with employers
- o Planning and executing a business advisory meeting
- o Follow-up procedures

Coad stressed that it is imperative to a successful job search to know which job search competencies a disadvantaged person has mastered. Job placement specialists should review these competencies with the individual and provide coaching and instruction in those competencies that are still needed. A job placement program should use follow-up procedures to assess the effectiveness of vocational training, improve the placement program, and disseminate information about the vocational and placement services. Students who have been placed should feel free to come for advice and further services if

necessary. Employers should be contacted on a regular basis to develop good public relations and to assist in any problems with the clients placed.

Vocational Education at a Northwest Florida Junior College

The Chipola Junior College in Northwest Florida provides basic skill remediation, support services, and vocational training programs and opportunities for disadvantaged students (Dunn 1987). Chipola Junior College serves five counties in which the high school dropout rate is around 35 percent. Work with the disadvantaged falls into three traditional areas: recruitment, retention, and placement

Recruitment is a team effort that includes a craft advisory committee, interested community members, and all campus personnel. Heavy recruitment takes place in group meetings, in shopping areas, on school career days, and in churches, laundromats, and other community places. Some of the best recruiters are disadvantaged students who are enrolled in or recently graduated from Chipola.

Once the barriers to enrollment are met and students are enrolled, retention becomes the next problem. One of the most effective retention tools is gaining the trust and confidence of students and encouraging them to share their problems with the faculty before they leave campus. In most cases, helping potential dropouts explore other answers to their immediate frustrations preserves the integrity of their longer term goals. A second retention tool is monthly small group activities for those students who have been away from school a year or more. Staff members listen to students' problems and modify programs where necessary. Over 80 percent of the students enrolled in vocational-tech-

nical programs need remediation in math, reading, and writing. The campus Success Center provides these basic skills, as well as computer, employability, and life management skills.

The third aspect, placement, is the responsibility of everyone in the vocational division and requires cooperation with Student Services, the Job Service of Florida, and advisory committee members who provide employment opportunities and job leads. Employability skills training is part of all occupational instruction, and each teacher's program is evaluated on the basis of its placement rate. Current placement rates range from 91 to 100 percent. Current economic development activities have provided ample employment for those who want to work.

Collaborative Efforts

Partnerships have benefits for all types of educational programs, but especially for those serving youth at risk, whose special needs require various kinds of assistance. This section examines collaborations among and within states, between institutions, and between schools and businesses.

A Three-State Demonstration in State Employment Initiatives for Youth

In 1983, Public/Private Ventures (P/PV) identified Oregon, California, and Connecticut as three states willing to meet criteria for participation in its State Employment Initiatives for Youth Demonstration (deLone 1987). The purpose was to advance the process of initiating and implementing successful state youth initiatives. The criteria were that the governor and chief state school officer both sign off on participation and that the governor agree to designate a Youth Coordinating

Council (YCC), an interagency mechanism composed of senior officials from state education, job training, and human service agencies. The purpose of the YCC was to provide forums for exchanging information, developing cooperative relationships among state agencies, setting priorities, and developing coordinated services for at-risk youth in selected communities. Each YCC was allotted a small funding pool (\$400,000-\$500,000 per year from discretionary sources) as seed money for improvements to local systems and programs for serving at-risk youth.

Under leadership of a county commissioner, the YCC initially emphasized identification of local needs and the crafting of desirable responses to those needs from state agencies, notably the Department of Education, the Department of Human Services, and the Department of Community Development and Training. A series of local forums followed to determine state priorities and an assessment of program models that proved effective. The YCC issued requests for proposals for local collaboration approaches to serve at-risk youth. Localities were required to match state funding. Funds were obtained from the Vocational Education Act and JTPA 8 percent dollars. A number of innovative and effective local programs were developed. The YCC proved to be a flexible and effective way to pool state and local resources for coordination of critically needed services for at-risk youth.

In 1987, funds to the YCC for interagency initiatives were increased to \$7.5 million dollars from an appropriation from the state legislature. The Oregon approach produced effective programming for at-risk youth and brought about state-level interagency cooperation that should provide a durable base for future initiatives.

A Technical College and Community-Based Organization Strategy

A creative partnership between a community-based organization (CBO) and a postsecondary technical college was described by Zaragoza and Huber (1987). This partnership was formed when a firm specializing in data entry services, Automated Data Entry (ADE), asked the Milwaukee Area Technical College (MATC) to train the 30 new data entry operators on the IBM System 36. The MATC did not possess an IBM System 36 or the space to install the system. The technical college did have instructors capable of teaching customized courses for data entry operators.

Administrators at MATC contacted SER-Jobs for Progress, Inc., a JTPA-funded community-based organization that provides basic skill remediation and job-search services to low-income Hispanics in Milwaukee. SER was interested in working with MATC to solve the training problem. SER had classroom space available and the ability to recruit, screen, counsel, and provide support to students.

At this point, the consortium had a community-based organization, a postsecondary technical school, and a local employer but no equipment. The IBM Corporation was approached and agreed to contribute a \$150,000 computer system to the partnership. The MATC instructor was paid with JTPA funds.

ADE wanted employees who had good employability skills as well as solid technical skills. To meet this demand, SER adapted a stringent screening process that looked at the students' basic aptitudes, competencies, attitudes, and ability to maintain composure under stress. Thirty participants were selected from a pool of about 90 applicants. Most of those selected were JTPA-eligible Hispanic or black

students. Many were high school dropouts. Instruction included employability skills training and internships with various data entry firms in Milwaukee. Students gained first-hand experience with dress codes and other aspects of the work environment. Ninety percent of the first class were placed. Other students trained in later classes have had similar placement rates. The ADE production manager reported that the SER students were "among our top operators in quality of work, quantity of work, initiative, comprehension and desire to learn" (Zaragoza and Huber 1987, p. 33).

Other employers in the community have heard formal and word-of-mouth publicity about the program, and an increasing number of employers are hiring the graduates. Employers in the community benefit in two ways: (1) they are gaining a pool of trained data entry operators and (2) they are achieving a reputation for addressing and solving the problems of poverty and unemployment for at-risk youth.

All members of the partnership are benefiting. MATC has built a bridge between the college and a large Hispanic community. Project graduates who are now employed have returned to enroll in more advanced business courses. From the CBO's and school's perspective, the partnership has provided additional credibility and justification for funding requests.

MATC has recently begun a second venture with a CBO, Milwaukee Goodwill Industries. This partnership provides training in business, data processing, and programming, customized for the severely physically disabled. MATC faculty deliver the curriculum in the Goodwill Industries facility with the assistance of the CBO staff and a special Business Advisory Council that is composed of 25 major Milwaukee-area businesses. The project has received

major donations of equipment from the IBM Corporation. The Wisconsin State Department of Vocational Rehabilitation contributes funds to the project. Many of the students receive permanent jobs with employers where they interned.

Zaragosa and Huber (1987) concluded that it is important to pick organizations that have solid track records in the area of employment and training and to establish good linkages with area employers. They suggested looking for a CBO that has a strong business advisory committee and is consistent in meeting its contract requirements. A good place to start is to contact the local private industry council and request information about local CBOs funded by JTPA.

State Department of Education and Area Vocational-Technical School Collaboration

The names of students who drop out of school in Oklahoma are listed and sent monthly to the state education department (Wheeler 1988). The state education department forwards the names to the appropriate area vocational-technical schools. The Jobs through Education and Training (JET) Project at the Great Plains Area Vocational Technical School tracks down persons on the list and encourages dropouts to come in for a few days of testing and recruitment. Persons referred by community agencies also come in for testing. In 1987-88, 70 of the 147 potential participants entered mainstream vocational education programs. Youth who qualify for JET must be secondary school dropouts and 16 or older. Services to qualified youth include career assessment and counseling, tuition and fee waiver, books and supplies, school bus transportation, 24-hour accident insurance, free lunch (income qualification), child care (gender, income, and program qualifications), individual

and group counseling, academic remediation (preparation for the General Educational Development Test), financial aid, and job placement assistance.

Vocational education classes are structured differently from schooling that the dropouts failed in the past. In these vocational programs--

- o classes are 3 hours long. Spending a longer time together promotes the formation of a positive student-teacher relationship.
- o students progress at their own rate and deadlines are flexible. Individual learning styles are recognized, and the end product is seen as the most important aspect of the training.
- o classes are usually limited to 18 students. Small vocational classes are necessary for safety reasons and provide more time for individual instruction.

THE ROLE OF CAREER AND VOCATIONAL EDUCATORS IN SERVING AT-RISK YOUTH

This review of literature shows that a great deal of resources from a broad spectrum of society are being directed at resolving the problems of at-risk youth. Some factors that cause youth to become at risk, such as drug and alcohol abuse and disease, begin their influence prior to birth. From early childhood through their adult lives, many members of society are being pushed into the at-risk categories by a myriad of factors, over many of which they have no control. These factors include ethnic, race, and sex discrimination; poverty; the breakdown of the family; and destructive life-styles.

Interventions are needed prior to birth and should continue through early childhood, adolescence, and well into adulthood. If solutions and interventions are not effective, the at-risk factors begin to recur and affect the next generation.

Career and vocational educators have a role in serving at-risk youth. Senator Edward M. Kennedy (1988) stated:

Vocational education is a good and important education strategy that should be a key part of our national effort. Steps already underway at the local level, coupled with the modest investment the federal government made last year, are a good beginning. We must do more. But above all, we must ensure that vocational education is not seen as the single "solution" to the dropout (at-risk) problem. We need a

multifaceted approach that involves all parts of the education system. There are no magic bullets in this war. (p. 35)

This review of literature has identified effective programs that serve many categories of at-risk youth at both the secondary and postsecondary levels. Effective programs of other key non-vocational actors in serving at-risk youth have been reviewed. Important factors from these programs should be incorporated into a comprehensive program to serve at-risk youth. The chief components of this program are (1) administrative support, (2) community support, (3) family support, (4) funding support, and (5) at-risk program development. An outline of key activities for such a comprehensive program follows.

Key Activities in a Comprehensive Program to Serve At-Risk Youth

Administrative Support

- o Establish an educational environment in which students, staff, and parents believe that all students can achieve
- o Develop a K-12 approach to retaining at-risk students
- o Appoint a youth at-risk coordinator for the school district
- o Develop a school-community spon-

sored truancy reduction plan

- o Recruit and assign qualified staff members
- o Provide effective inservice training
- o Encourage creativity and ownership of programs
- o Involve staff members in planning and decision making
- o Create a flexible management style
- o Recognize and reward accomplishments

Community Support

- o Develop appropriate advisory committees from the community to assist staff members
- o Involve community-based organizations in planning and implementing programs and services
- o Involve employers in business-education partnerships in program planning
- o Coordinate approaches with other service providers such as Private Industry Councils, community service organizations, health and human service agencies, and religious institutions
- o Involve families in monitoring attendance, selecting new staff members, and improving school-student-parent relationships

Family Support

- o Assist families in dealing with separation and divorce
- o Assist families in dealing with child abuse and neglect problems

- o Help families to raise expectations and self-esteem and to reduce apathy
- o Assist in the development of healthy family relationships
- o Help resolve and prevent alcohol and other drug abuse problems

Funding Support

- o Use a multiple funding approach for teachers and teacher aides, assessment, equipment, curriculum development, stipends, inservice training, and other support services
- o Identify needs and apply for and use funds from such legislation programs as--
 - Job Training Partnership Act
 - Carl D. Perkins Vocational Education Act
 - Education for all Handicapped Children Act
 - Vocational Rehabilitation Act
 - Hawkins/Standford Elementary and Secondary Education Act
 - Even Start
 - Workplace Literacy
 - Secondary School Programs for Basic Skills Improvement, Dropout Prevention, and Reentry
 - Independent Living Initiative
 - Adult Basic Education
 - Juvenile Justice and Delinquency Prevention
 - State legislation initiatives
 - Foundation and corporate funds
 - Local business and community funds

At-Risk Program Development

- o Be alert to the characteristics that identify youth as potential dropouts such as--
 - behind in grade level and poor academic performance
 - chronic truancy

- disruptive behavior, alienation, hostility
 - teen parent
 - lack of interest, self-esteem, dislike of school
 - personal and/or family alcohol/drug abuse
 - family trauma, divorce, death, violence, separation, unemployment
 - low parental expectations, negative peer influence
 - member of a minority group
 - limited English proficiency
 - low socioeconomic background
 - lack of career goals
 - lack of basic skills
 - suicide prone
- o Recruit at-risk youth for reentry to school by--
- identifying and contacting students and parents
 - assessing interests and aptitudes
 - counseling, setting goals, offering alternatives
 - developing reentry process for student and parents
 - providing work experience and employment
- o Retain at-risk students by--
- identifying potential dropouts early
 - raising self-esteem
 - providing in-school and out-of-school support services
 - involving the community in solutions
 - providing specific programs to problem areas such as teen parenthood, delinquency, alcohol and drug abuse, limited English proficiency
 - using appropriate staff and approaches
 - being flexible in programming
 - relating school to work
 - providing alternative programs
- providing workshops for parents and students
 - rewarding attendance
 - recognizing achievements
 - developing a truancy program backed by local law enforcement authorities
- o Assess at-risk youth by--
- evaluating interests and aptitudes
 - providing satisfactory school and/or work placement
 - providing effective counseling
 - developing a plan for making a transition to work or advanced schooling and career advancement
- o Develop and/or strengthen prevocational programs by--
- providing basic remedial skills
 - providing socialization skills
 - providing financial management skills
 - providing character development skills
 - providing job procurement skills
 - providing workplace ethics and coping skills
- o Implement vocational programming by--
- providing early notification of vocational offerings
 - advertising capabilities of the vocational education program
 - providing or requesting appropriate vocational assessment
 - assisting in the development of a transition plan to advanced school or to employment and career advancement
 - providing special services to meet assessment outcomes
 - providing support of vocational teachers and at-risk students in the vocational classroom and laboratories

- developing appropriate curricula and modifications to ensure the development of usable employment skills
- making local employers a partner in developing relevant curricula
- providing recognition for employer contributions
- establishing business-education partnerships
- developing appropriate instructional approaches
- coordinating vocational education with appropriate others in school areas such as regular education and special education
- coordinating vocational education with community-based organizations and service agencies
- providing special assistance to limited English proficiency students, teen parents, students with alcohol and drug problems, and others as needed
- eliminating sex and race biases
- providing for the development of job placement competencies
- providing job placement, work experience, and on-the-job training
- providing job retention assistance
- providing follow-along, follow-up assistance
- providing assistance to graduates and school leavers
- using follow-up, follow-along experiences to assess vocational program effectiveness
- reviewing program effectiveness and making appropriate adjustments

Career and vocational educators at the secondary and postsecondary levels can have a significant impact in improving the education and employment of at-risk youth. Involvement at the professional and personal levels is necessary. At the professional level, career and vocational educators can provide leadership in the development of effective

vocational education. Effective vocational education should prepare youth to obtain and continue employment, advanced education, and career development. Effective vocational education programs have been identified at both the secondary and postsecondary levels. Their techniques and strategies can be replicated to serve nearly all categories of at-risk youth. Strategies and techniques that are effective in vocationally related programs can be used in programs that supplement or are complementary to the vocational program.

It is obvious that one person cannot develop and provide the comprehensive services needed by at-risk youth. However, individuals and small groups can serve as catalysts and key figures in the development and delivery of services. Prime examples of significant individual impact are seen in the Verona High School and the George Washington Preparatory High School programs. Vocational educators can provide leadership in influencing administrators, school districts, and communities in the development of effective at-risk programs. The role that career and vocational educators play in the improvement of services to at-risk youth is basically an individual concern. The opportunity to provide leadership in the improvement of service to at-risk youth is available to all career and vocational educators.

REFERENCES

Items with ED numbers may be ordered from the ERIC Document Reproduction Service, 3900 Wheeler Avenue, Alexandria, VA 22304-6409, (800) 227-3742, (703) 823-0500.

Azcoitia, C., and Viso, P. A. "Dropout Prevention Chicago Style." *Vocational Education Journal* 62, no. 2 (March 1987): 33-34. (ERIC No. EJ 348 703).

Barber, L. W., and McClellan, M. C. "Looking at America's Dropouts: Who Are They?" *Phi Delta Kappan* 69, no. 4 (December 1987): 264-267. (ERIC No. EJ 363 376).

Benedict, R.; Snell, R.; and Miller, D. "Enterprise High: Helping School Dropouts Become Self-Supporting Adults." *Educational Leadership* 44, no. 6 (March 1987): 75-78. (ERIC No. EJ 353 794).

Bernstein, A. "Where the Jobs Are Is Where the Skills Aren't." *Business Week*, September 19, 1988, pp. 104-105, 108. (ERIC No. EJ 375 847).

Bloch, D. P. *Reducing the Risk: Using Career Information with At-Risk Youth*. Eugene, OR: Career Information System, 1988.

Brown, R. *Reconnecting Youth: The Next Stage of Reform*. Denver, CO: Education Commission of the States, 1985. (ERIC Document Reproduction Service No. ED 272 635).

Campbell, P. B., and Parnes, H. S. "New Findings on Effectiveness." *Vocational Education Journal* 61, no. 5 (August 1986): 13-14.

Cellucci, P. M. C., and Price, T. P. *IMPACT: A Map for Success. A High-Risk Student Retention Plan*. Florence, SC: Florence-Darlington Technical College, 1986. (ERIC Document Reproduction Service No. ED 278 440).

Coad, C. *Job Placement Program and Follow-Up System: Orange County Educational Consortium for Competency Based JTPA Vocational Training*. Fullerton, CA: North Orange County Community College District, 1985. (ERIC Document Reproduction Service No. ED 271 576).

Council of Chief State School Officers. *Elements of a Model State Statute to Provide Educational Entitlements for At-Risk Students*. Washington, DC: Council of Chief State School Officers, 1987. (ERIC Document Reproduction Service No. ED 292 930).

- de Lone, R. H. *State Governments and At-Risk Youth: The Critical Link*. Philadelphia, PA: Public/Private Ventures, 1987. (ERIC Document Reproduction Service No. ED 292 919).
- Dunham, R. G., and Alpert, G. P. "Keeping Juvenile Delinquents in School: A Prediction Model." *Adolescence* 22, no. 85 (Spring 1987): 45-57. (ERIC No. EJ 356 482).
- Dunn, T. "Connecting with the Disadvantaged." *Vocational Education Journal* 62, no. 2 (March 1987): 35-36. (ERIC No. EJ 348 704).
- Earle, J.; Roach, V.; and Fraser, K. *Female Dropouts: A New Perspective*. Alexandria, VA: National Association of State Boards of Education, 1987.
- Ehrlich, E., and Garland, S. B. "For American Business, A New World of Workers." *Business Week*, September 19, 1988, pp. 112-114, 118, 120. (ERIC No. EJ 375 848).
- Garland, S.; Therrien, L.; and Hammonds, K. H. "Why the Underclass Can't Get Out from Under." *Business Week*, September 19, 1988, pp. 122-124. (ERIC No. EJ 375 849).
- Grover, H. J. "It's Time to Deploy All the Troops in the War against AOD." In *Education Forward*. Madison: Wisconsin Department of Public Instruction, 1988.
- Gugerty, J.; Tindall, L. W.; Heffron, T. J.; and Dougherty, B. B. *Profiles of Success: Serving Secondary Special Education Students through the Carl D. Perkins Vocational Education Act*. Madison: Vocational Studies Center, University of Wisconsin-Madison, 1988.
- Hirschi, T. *Causes of Delinquency*. Berkeley: University of California Press, 1969.
- Kennedy, E. M. "When Students Drop Out, We All Lose." *Vocational Education Journal* 63, no. 6 (September 1988): 34-35. (ERIC No. EJ 375 862).
- Lieberman, J. *Middle College: A Ten Year Study*. Long Island, NY: Council of Articulated Programs, LaGuardia Community College, 1986. (ERIC Document Reproduction Service No. ED 271 153).
- Martin, L. G. *Youthful High School Noncompleters: Enhancing Opportunities for Employment and Education*. Information Series no. 316. Columbus: The National Center for Research in Vocational Education, The Ohio State University, 1987. (ERIC Document Reproduction Service No. ED 284 064).
- Monaco, F., and Parr, P. "From Problems to PROMISE in Pittsburgh." *Vocational Education Journal* 63, no. 6 (September 1988): 39-41, 52. (ERIC No. EJ 375 864).
- "A Nation Still at Risk." *Newsweek*, May 2, 1988, pp. 54-55.

- National Association of School Social Workers. *The Human Factor: A Key to Excellence in Education*. Silver Spring, MD: NASSW, 1985.
- National Commission on Excellence in Education. *A Nation at Risk*. Washington, DC: National Commission on Excellence in Education, 1983. (ERIC Document Reproduction Service No. ED 226 006).
- National Governors' Association. *Bringing down the Barriers: Making America Work. Productive People, Productive Policies*. Washington, DC: Center for Policy Research and Analysis, National Governors' Association, 1987. (ERIC Document Reproduction Service No. ED 284 843).
- Nussbaum, B. "Needed: Human Capital." *Business Week*, September 19, 1988, pp. 100-103. (ERIC No. EJ 375 846).
- O'Connor, P. "Dropout Prevention Programs that Work." *Oregon School Study Council Bulletin* 29, no. 4 (December 1985): 1-34. (ERIC Document Reproduction Service No. ED 275 065).
- Public/Private Ventures. *A Practitioner's Guide: Strategies, Programs and Resources for Youth Employability Development*. Philadelphia, PA: P/PV, 1988.
- "Reply to 'A Nation at Risk': Report to the CEC Ad Hoc Committee to Study and Respond to the 1983 Report of the National Commission on Excellence in Education." *Exceptional Children* 50, no. 6 (April 1984): 484-494. (ERIC No. EJ 302 823).
- Rumberger, R. W. "High School Dropouts." *Review of Educational Research* 57, no. 2 (Summer 1987): 101-122. (ERIC No. EJ 369 707).
- Scholl, M. F., and Johnson, J. R. "Keeping Pregnant Teens in School." *Vocational Education Journal* 63, no. 6 (September 1988): 42-43, 52. (ERIC No. EJ 375 865).
- U.S. Department of Education. *Schools that Work: Educating the Disadvantaged. What Works*. Washington, DC: U.S. Department of Education, 1987. (ERIC Document Reproduction Service No. ED 280 938).
- Van Den Heuvel, D.; Contrucci, V. J.; Erpenbach, W. J.; and Kunelius, L. *Children at Risk: A Resource and Planning Guide*. Madison: Wisconsin Department of Public Instruction, 1986.
- Weber, J. M. "The Relevance of Vocational Education to Dropout Prevention." *Vocational Education Journal* 63, no. 6 (September 1988): 36-38. (ERIC No. EJ 375 863).
- Weber, J. M., and Mertens, D. M. "Vocational Education's Role in Dropout Prevention." *Vocational Education Journal* 62, no. 2 (March 1987): 46-48.

- Weber, J. M., and Sechler, J. "Characteristics of Exemplary Vocational Education Programs Designed to Prevent At-Risk Youth from Dropping Out." *Educational Leadership* 44, no. 6 (March 1987): 72.
- Wehlage, G. G.; Rutter, R. A.; and Turnbaugh, A. "A Program Model for At-Risk High School Students." *Educational Leadership* 44, no. 6 (March 1987): 70-73. (ERIC No. EJ 353 793).
- Wheeler, S. "JET Propelled to a Brighter Future." *Vocational Education Journal* 63, no. 6 (September 1988): 44-45, 61. (ERIC No. EJ 375 866).
- Zanzalari, J., and McCloud, K. *Teenage Parent Center of the Single Parent Assistance, Counseling and Education Project. Annual Report FY 86-87*. New Brunswick, NJ: Middlesex County Vocational and Technical High Schools, 1987. (ERIC Document Reproduction Service No. ED 287 056).
- Zaragoza, F., and Huber, R. "Customized Training with CBOs." *Vocational Education Journal* 62, no. 3 (April 1987): 32-33. (ERIC No. EJ 348 711).

THE NEW 1988 ERIC INFORMATION ANALYSIS PAPERS

IN 330 \$4.75

Trends and Issues in Adult Education 1988, by Susan Imel.

Reviews two groups of trends and issues in adult education. Those related to the profession deal with professionalization, certification, ethics, history, and adult learning. Those related to programming deal with access and equity and adult literacy education.

IN 331 \$6.00

Training and Educating the Work Force in the Nineties: The Rationale for Public-Private Collaboration, by Thomas J. Smith and Carolyn Trist.

Considers the changing context of skills training, which is making partnerships between the public and private sectors a necessity. The background of job training legislation and institutions is described, and forms of public-private collaboration are explored. Presents six recommendations for policy initiatives that will encourage cooperative actions.

IN 332 \$4.75

Trends and Issues in Career Education 1988, by Ida M. Halasz.

Examines trends and issues related to helping individuals with career concerns in five areas: career education as a viable construct, impact of the changing workplace, programs for adults, programs for youth with special needs, and the use of computers in career education.

IN 333 \$6.00

Career Development Programs in the Workplace, by Lynn Slavenski and Marilyn Buckner.

The social and economic changes affecting career development programs are described. The theoretical bases and components of career development programs are reviewed. A model that includes the phases of staffing, evaluating, and developing is presented in terms of the systematic use of programs and tools that support the management cycle in organizations.

IN 334 \$4.75

Trends and Issues in Vocational Education 1988, by Wesley E. Budke.

Traces the influence of social, economic, and technological changes on the vocational education and training enterprise. Delineates three major trends in vocational education--the reform movement, changing administrative and instructional roles, and access--and describes specific issues confronting vocational educators.

IN 335 \$6.00

Retaining At-Risk Students: The Role of Career and Vocational Education, by Lloyd W. Tindall.

Reviews the causes of at-risk status and their implications for the U.S. labor force. Describes vocational and nonvocational strategies and exemplary programs for serving at-risk youth. Discusses the role of career and vocational educators in addressing the problems of these youth.