

DOCUMENT RESUME

ED 089 115

CE 001 171

TITLE Career Development Curriculum Guide, 1970-1973.  
INSTITUTION Senior High, Tenth through Twelfth Grades.  
SPONS AGENCY Cleveland Public Schools, Ohio.  
Bureau of Adult, Vocational, and Technical Education  
(DHEW/OE), Washington, D.C.  
PUB DATE 73  
NOTE 217p.; For related documents, see CE 001 168-70.  
Pagination within the document is not in sequence,  
but the document is complete. Document is filmed from  
best copy available  
EDRS PRICE MF-\$0.75 HC-\$10.20 PLUS POSTAGE  
DESCRIPTORS Annotated Bibliographies; Behavioral Objectives;  
\*Career Education; \*Curriculum Development;  
Curriculum Guides; Disadvantaged Youth; Instructional  
Materials; Occupational Clusters; Resource Materials;  
\*Senior High Schools; Teacher Developed Materials;  
Units of Study (Subject Fields); Urban Slums;  
\*Vocational Education; Word Lists  
IDENTIFIERS Career Exploration; Cleveland; \*Developmental  
Vocational Education Program; Model Cities Program

ABSTRACT

The guide was developed by the coordinating teachers of the Developmental Vocational Education Program for the senior high school level in the Model Cities area of Cleveland, Ohio. The purpose of the guide is to strengthen the students' ability to select and acquire a positive attitude toward work, toward all levels of occupational choices found in society, and toward themselves. To these ends, the senior high school program orientation is toward exploration and preparation for actual job placement beyond school. Students move from exploratory experiences in a number of occupational areas to intensive training in one skill area of their choice. Work study programs provide on the job experience. Participation is voluntary. Each unit of the curriculum guide lists general objectives and specific behavioral objectives. General discussions, information and study sheets, and pre- and post-tests are provided for most units. Vocabulary lists, learning experiences, desired outcomes, and instructional and resource materials are specified. The Office of Education's fifteen occupational clusters are coordinated with English, Social Studies, Mathematics, Science, Business, Home Economics, and Foreign Languages. An appendix and four-page annotated bibliography are included. (AG)

ED 089115

# **CAREER DEVELOPMENT CURRICULUM GUIDE**

**1970 - 1973**

**SENIOR HIGH**

**Tenth thru Twelfth Grades**

## **DEVELOPMENTAL VOCATIONAL EDUCATION PROGRAM**

**( DVEP )**

# **BEST COPY AVAILABLE**

U.S. DEPARTMENT OF HEALTH,  
EDUCATION & WELFARE  
NATIONAL INSTITUTE OF  
EDUCATION

THIS DOCUMENT HAS BEEN REPRODUCED EXACTLY AS RECEIVED FROM THE PERSON OR ORGANIZATION ORIGINATING IT. POINTS OF VIEW OR OPINIONS STATED DO NOT NECESSARILY REPRESENT OFFICIAL NATIONAL INSTITUTE OF EDUCATION POSITION OR POLICY

**CLEVELAND PUBLIC SCHOOLS**

**CLEVELAND, OHIO**

**1973**

**Creating Bridges Between School and Earning a Living**

CE 001 171

# BEST COPY AVAILABLE

CLEVELAND PUBLIC SCHOOLS

CLEVELAND BOARD OF EDUCATION

Arnold R. Pinkney, President

George Dobrea, Vice-President

Joseph M. Gallagher

Mary Ann Geraci

William B. Nagy

Gerald F. Sweeney

Ailene S. Taylor

Paul W. Briggs  
Superintendent of Schools

Cleveland, Ohio

1973

# BEST CONCEPTS IN CAREER EDUCATION

"Strong claims are being made for career education's efficacy. To the extent that the concepts are not untried, there is already evidence in experiment and demonstration. But given the high mortality rate of panaceas in recent times, it is wise to leave room for uncertainty. Some of it may not work because of being improperly done. In such a broad concept some applications are likely to be unsuccessful. But the experiment is sufficient to promote reasonably high success probabilities to major aspects of the notion where they are carefully thought through and well administered".<sup>1</sup>

---

<sup>1</sup>Kenneth B. Hoyt, Rupert N. Evans, Edward F. Mackin, and Garth L. Mangun, "Career Education: What It Is," Career Education-What it is and how to do it. Salt Lake City, Utah: Olympus Publishing Company, 1972, p. 16.

---

CURRICULUM COMMITTEE

Mabel M. Artis  
East High School

Spellman Lane  
East High School

Sharyl White  
John Adams High School

---

ORGANIZATION

Margaret Fleming  
Directing Supervisor  
Division of Research and Development

Donald V. Healaas  
Director  
Technical-Vocational Education

William I. Sims  
Project Director  
Developmental Vocational Education Program

**BEST COPY AVAILABLE**

FOREWORD

A new emphasis is being placed on the development of technical-vocational programs in the Cleveland Public Schools in line with our goal of providing quality education to all Cleveland children.

A reevaluation of programs is being made, existing programs are being upgraded, and new programs are being offered.

This "five to twelve" Career Development Curriculum Guide outlines the Cleveland program of training in Career Education.

Paul W. Briggs  
Superintendent of Schools

BEST COPY AVAILABLE

## PREFACE

This curriculum guide has been developed by the co-ordinating teachers of the Developmental Vocational Education Program which is funded under Part D of the Vocational Education Amendments of 1968. This program is being administered and implemented by the Cleveland Board of Education in cooperation with the Model Cities Association of Cleveland.

The material and information that is needed to implement this program has been gathered by the Co-ordinating Teachers and Vocational Aides from the local business world.

**BEST COPY AVAILABLE**

## STATEMENT

This Exemplary Project in Vocational Education is conducted under Part D of the Vocational Education Amendments of 1968, P.L. 90-576.

The schools in the Model Cities area in Cleveland, Ohio are presently bounded by East 55th on the West, East 79th on the East, Superior Avenue on the North, and Kingsbury Run on the South. This amendment was designed to assist the cities in raising the standards of living for those locked into the target areas of selected cities.

During the summer of 1972, approximately sixty classroom teachers, department chairmen and guidance counselors prepared curricula materials and selected visual aids that formed the nuclei for this Career Development Curriculum Guide.

The purpose of this guide is to strengthen the students' ability to select and acquire a positive attitude toward work, toward all levels of occupational choices found in society, and toward themselves as prospective employees and their employers.

The results of these individuals during the summer of 1972, warrants our thanks and appreciation.

William I. Sims  
Project Director  
Developmental Vocational -  
Education Program

**BEST COPY AVAILABLE**

## TABLE OF CONTENTS

	Page
Senior High School Career Development Units.....	313 - 525
English .....	316 - 328
Social Studies.....	329 - 361
Mathematics.....	362 - 381
Science.....	382 - 409
Business.....	410 - 430
Home Economics.....	431 - 521
Foreign Languages.....	522 - 525
Appendixes.....	526 - 554
Materials Available at DVEP Office.....	527 - 533
DVEP Visual Aids Description.....	534 - 539
Student Office Tours.....	540 - 543
DVEP Career Pyramids.....	544 - 551
Career Wheels (Newspaper, Radio, Television).....	552 - 554
Bibliography.....	555 - 558

## PHILOSOPHY

### Cleveland Public Schools

It is through education that a society not only transmits to individuals, but also reinforces for them, the values, skills, understandings, and standards of behavior through which society renews and repairs itself.

The responsibility for education is properly viewed as a partnership featuring a complementary and supplementary relationship among such agencies as organized religion, social and welfare agencies, cultural institutions, governmental agencies, and mass media as well as the schools. All these agencies support the family as the basic unit of personal and social development.

In a democratic society the school should create an environment in which young people will receive an integrated view of their culture, come to accept the basic assumptions of democratic behavior, and acquire a body of common knowledge essential for effective citizenship.

## PHILOSOPHY

### Developmental Vocational Education

Through the concept of career education all educational experiences, curriculum instruction, and counseling should be geared to preparation for economic independence and an appreciation for the dignity of work.

DVEP embodies the main thrust of career education, that is, to prepare all students for a successful life of work by increasing their options

for occupational choice, by eliminating barriers, real and imagined, to attaining job skills, and by enhancing learning achievement in all subject areas and at all levels of education.

## PROGRAM DESCRIPTION AND OBJECTIVES

In cooperation with the Model Cities, the overall goal of the DVEP project is to create a bridge between school and earning a living.

This is done through a career development program beginning in elementary school and continuing through high school. It provides students with a broad base of vocational information and exploratory experiences on which to base career decisions, with skill training to enable them to secure employment or undertake future training in the field of their choice and with actual job placement. Thus, the program is designed to increase options for making occupational decisions; to eliminate real and imagined barriers to attaining job skills; and to enhance learning achievement in all subject areas and at all levels of education for the youth in high poverty Model Cities area schools.

The program is developmental in nature and pyramidal in design. It begins with a broad informational/organizational approach at the elementary level, and is narrowed to an exploratory/preparational approach at the senior high level. Such an approach is designed to put the student at each level in a position to make informed decisions as to the next step in his career development and successively narrow his vocational preference.

Beginning at the upper elementary school level, students in grade five and six acquire reliable and valid information on the broad range of available occupations and their requirements.

The program is worked in conjunction with the Social Studies classes. The emphasis is on occupational clusters rather than on specific jobs, including future occupational areas which are expected to emerge as a result of new technology. The students are to become oriented to the world of work through multi-faceted experiences including field trips, work simulation games, and role playing, and are to obtain experience in basic job skill operations.

At the junior high school level, the orientational-explorational aspect of the program involves learning the functional interrelationships between the production, management, and the service areas of business and industry. Students also sample the operations and skills required in a number of occupations through work-site tours and experience.

Finally, at the senior high level the program orientation is toward exploration and preparation for actual job placement beyond school. Students move from exploratory experiences in a number of occupational areas to intensive training in one skill area of their choice. High school students get on the job experience in work study programs.

## PROGRAM DESCRIPTION AND OBJECTIVES

### I. Specific Objectives For The Teacher

- A. To assist students in identifying a variety of jobs in the 15 occupational clusters (elementary school level).
- B. To cause an awareness through a description of various occupations (elementary school level).
- C. To teach and demonstrate the relationship between specific vocational activities and "real" occupations (junior high school level).
- D. To increase knowledge and functional interrelationships between management, production and service areas of business and industry (junior high school level)
- E. To foster positive attitudes toward self, others, and the world of work (senior high school level).

### II. Specific Outcome Objectives For Students

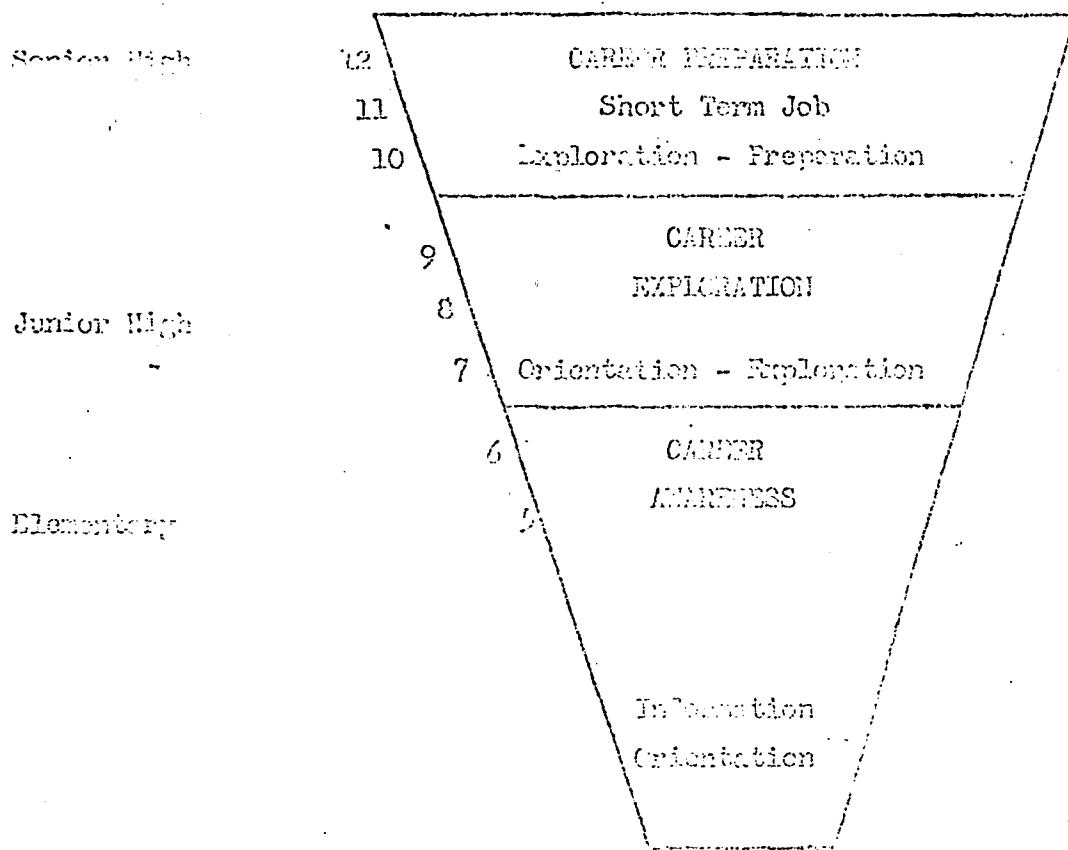
- A. Increased ability to identify and describe a variety of occupations in a broad array of occupational areas (elementary school level).
- B. Increased knowledge of equipment used in various occupations and their utility (elementary school level).
- C. Increased knowledge of the operations of a functional interrelationship between management, production and service areas of business and industry (junior high school level).
- D. Increased ability to describe the relationship between specific vocational activities and "real" occupations (junior high school level).
- E. Increased positive attitudes toward vocational education (senior high school level).

## INTRODUCTION

The Model Cities Developmental Vocational Education Program is directed toward serving the occupational needs and aspirations of those youths in the Cleveland Model Cities area. This vocational education project embraces four basic components:

1. An informational-orientation program at the elementary school.
2. An orientational-exploratory component at the junior high school level.
3. An exploratory-preoperational phase at the senior high school level.
4. An extensive short term job program.

The figure below illustrates a clearer picture of the above mentioned components:



## INSTRUCTIONS FOR USE OF THIS GUIDE

All units in this guide have been developed around the fifteen occupational clusters as have been identified by the United States Office of Education's Bureau of Adult, Vocational and Technical Education.

The Developmental Vocational Education Program has made a concentrated effort to assist Model Cities area disadvantaged and handicapped youth who have been turned off by education. Since it is probable that many of these inner city youth will never leave the city of Cleveland, it becomes necessary to make these individuals aware of the many career opportunities available in other areas in general and the City of Cleveland in particular.

The various materials in the elementary section of this guide are designed for injection in the various fifth and sixth grade social studies units presently used in the schools participating in this program. Obviously use of all of the occupational clusters is not possible in any one social studies unit, nor are all of the social studies units equally amenable to use of all of the clusters. Certain clusters complement and enhance certain units better than others.

In using this guide, the elementary social studies teacher will have to decide which cluster to use in any given unit on the basis of how well the cluster will integrate with said unit, and the interests and aptitudes of his/her students. The use of the guide necessitates the use of teacher creativity and discretion in its implementation.

The time allotted to cover a regular social studies unit varies from two to six weeks. In scheduling the time allotted for the "cluster" material, the teacher may find that a certain cluster can best be presented in one or two sessions; another cluster may be enhanced by injection bit by bit at various stages in the teacher's regular social studies schedule.

At the elementary level, the conceptual approach, followed by a list of specific behavioral objectives is used. To augment this, vocabulary lists, learning experiences, desired outcomes, and instructional and resource materials are listed. Preceding each unit is a brief general discussion related to the cluster under consideration. In most cases a pre test and a post test is used at some point during the presentation of each occupational cluster; however, teachers are encouraged to be creative and use their own initiative in developing varied means of generating interest and enthusiasm for the subject.

On the secondary level, each unit is preceded by a list of general objectives, followed by specific behavioral objectives. General discussions, information and study sheets, and in some cases pre tests and post tests are provided for the majority of the units in the secondary section. In many instances, answers are provided for pre tests and post-tests. On occasions where answers are not given, it is suggested that teachers refer to their basal and supplementary textbooks used in the classroom, and the survey of occupational resources available in the school's career library and guidance office. At all levels, instructional and resource materials (films, slides, tapes, books, pamphlets, etc.) are indicated and available in either the school, the DVEP office, or the Audio-Visual Services office provided by the Cleveland Board of Education.

The teacher, vocational aide, or any other resource person is not expected to use all of the learning activities listed or to achieve all of the objectives and goals listed in any one setting; only those which are applicable and appropriate should be used for a particular class. However, the teacher is encouraged to use his/her own objectives if he/she feels the need to do so.

In summary, for each unit in this curriculum guide, an effort has been made to supply the teacher with as much information as possible, such as lists of films, tapes, and videotapes, contact points for speakers and field trips etc.. Teachers are also encouraged to call upon the school guidance staff, the librarian, and any other qualified school and/or community resource who may be more effective in aiding the students in developing the positive attitudes toward self, others, school and the world of work.

**BEST COPY AVAILABLE**

## OUTLINE OF PROCEDURES

### A. Elementary (Informational -- Orientation Component)

1. Involve or inject the 15 occupational clusters into fifth and sixth grade social studies.
2. Relate occupational areas to the subject matter.
3. Emphasize occupational areas rather than specific jobs.
4. Introduce future occupational areas.
5. Develop appropriate classroom activities:
  - a. role playing
  - b. simulated games
  - c. time organization problems
6. Secure films, slides and other visual aids for reinforcement.
7. Secure speakers for informational purposes.
8. Organize field trips:
  - a. local companies and businesses
  - b. junior high and senior high school vocational education facilities.

### B. Junior High (Orientational -- Exploratory Component)

1. Inject the 15 occupational clusters into all junior high high classes. (all classes and subject areas are involved)
2. Relate the full range of occupational requirements, opportunities and advantages.
3. Establish a model industrial system:
  - a. management
  - b. production
    1. production line
  - c. service components
    1. related concepts to actual operations
    2. managing the production
  - d. business office
    1. planning the production
    2. managing the production
  - e. each student to have equal time in every department

4. Arrange field trips to local business and industrial work sites.

a. Time spent by students talking with employees in different areas:

1. get a feel of actual duties performed
2. working conditions
3. wages
4. job requirements
5. advantages of the occupation

5. Encourage student reactions to the field trips.

a. Individual counseling sessions

1. discuss reactions to field trip
2. discuss and relate roles students play in the model industrial system (Vocational course of study will be an elective at grades eight and nine).

b. Self-evaluation

1. analyzing own abilities
2. attitudes
3. interests in future employment possibilities

6. Provide special instruction and experiences in narrower work areas.

a. Build competence in a number of skill areas

1. woodwork
2. mechanical drawing
3. printing
4. metal shop
5. typing
6. home economics

7. Instruct and teach by direction.

a. Junior high students instruct elementary school pupils

1. tools
2. machinery
3. shops
4. operations

C. Establish a career information center

- a. books
- b. pamphlets
- c. brochures
- d. files
- e. films

C. High School (Exploratory-Preparational Component)

1. Establish a Career Information Center

- a. information on job opportunities
- b. post graduate training programs
- c. job requirements
- d. career planning

2. Counsel for career and occupational choices

- a. students analyze their interest
- b. aptitudes
- c. abilities
- d. discuss the next step in career development
- e. select a small area to work in for one year
  - 1. visit work sites
    - a. observe operations involved in related occupations
    - b. demonstration by tradesmen

3. Selection of one major occupational skill by student

- a. intensive training
- b. continue to make work-site visits
- c. observe and talk to the advanced students in the program (work and study)
- d. enter work-study program ( $\frac{1}{2}$  day school --  $\frac{1}{2}$  day work)
  - 1. earn money
  - 2. put training to use in real work situation

4. Plan for post graduation

a. finding a job

- 1. employment office
- 2. work orientation teacher
- 3. high school vocational counselor
- 4. newspapers

b. furthering vocational training (Cleveland Board of Education)

1. Max S. Hayes

- a. for males
- b. know specific industrial career he wants to train for

2. Jane Adams High School

- a. for females
- b. know specific industrial career she wants to train for

3. Martin Luther King High School
- a. for males
  - b. vocational training for interested and qualified students
  - c. high school diploma
  - d. academic instruction geared toward related occupational goals

## OCCUPATIONAL CLUSTERS

1. Business and Office Occupations
2. Marketing and Distribution Occupations
3. Communications and Media Occupations
4. Construction Occupations
5. Manufacturing Occupations
6. Transportation Occupations
7. Agri-Business and Natural Resources Occupations
8. Marine Science Occupations
9. Environmental Control Occupations
10. Public Service Occupations
11. Health Occupations
12. Hospitality and Recreation Occupations
13. Personal Services Occupations
14. Consumer and Homemaking-Related Occupations
15. Fine Arts & Humanities

\* The above clusters have been identified and codified by the United States Office of Education's Bureau of Adult, Vocational and Technical Education.

## OCCUPATIONAL CLUSTERS

1. Business and Office Occupations
2. Marketing and Distribution Occupations
3. Communications and Media Occupations
4. Construction Occupations
5. Manufacturing Occupations
6. Transportation Occupations
7. Agri-Business and Natural Resources Occupations
8. Marine Science Occupations
9. Environmental Control Occupations
10. Public Service Occupations
11. Health Occupations
12. Hospitality and Recreation Occupations
13. Personal Services Occupations
14. Consumer and Homemaking-Related Occupations
15. Fine Arts & Humanities

\* The above clusters have been identified and codified by the United States Office of Education's Bureau of Adult, Vocational and Technical Education.

## HIGH SCHOOL LEVEL

- At the high school level the program will move into an exploratory-preparational phase designed to put the students in a position to obtain a job after graduation or to go on for further training. The vocational course of study will be optional at all grade levels with provision for students to transfer freely between vocational and academic courses. The outline of the senior high program is as follows:

1. A career information center will be established in the senior high school with a broad array of information on job opportunities, post graduate training programs, job requirements, and career planning.
2. At each grade level the work orientation team will provide intensive occupational counseling to help the student analyze his interests, aptitudes and abilities, make decisions as to the next step to take in his career development. Such counseling will be coordinated with the activities of the Department of Guidance.
3. At Grade 10 the students will sample among different job skills. Guided by the work orientation team each student will choose four occupation areas among which to rotate on a nine-week basis. Instruction will be offered in the following areas:
  - a. Typing, Shorthand, and Office Practice
  - b. Bookkeeping
  - c. Retailing and Sales
  - d. Wood Shop
  - e. Metal Shop
  - f. Drafting
  - g. Appliance Mechanics
4. In Grade 10 the work orientation team will instruct the students in how the particular skills they are learning from the basis for the operations involved in particular occupations. This instruction will be supplemented by work site visits to observe the operations involved in related occupations and by demonstration visits by tradesmen and other employees from cooperating companies to reinforce the idea that the skills being learned bear a real relation to the opportunities available in the world of work.

5. At Grade 11, on the basis of their previous experiences and with the guidance of the work orientation team the students will choose one major occupational skill in which to major for intensive training. Instruction will be offered in the following areas:
  - a. Cooperative Office Education (typing, shorthand, bookkeeping, office programming)
  - b. Merchandizing, Retailing, and Sales
  - c. Banking
  - d. Home Economics (foods and food service, clothing and clothing service, home nursing, vocational homemaking)
  - e. Carpentry
  - f. Appliance Mechanics
  - g. Auto Mechanics
  - h. Machine Shop
  - i. Mechanical Drawing and Drafting
  - j. Graphic Arts and Printing
  - k. Building Maintenance
6. In Grade 11 students majoring in different work areas will continue to make work-site visits to observe how the skills they are learning match those used by employees working in different occupations. They will also observe at work and talk to students in Grade 12 who are involved in a work-study program, so that they may see first-hand that the skills they learn in school are saleable skills and form the basis for earning a living.
7. At Grade 12, the students will enter a work-study program in which they will attend school for  $\frac{1}{2}$  day and hold a part-time job with a cooperating company for the other half. The job will enable them to earn money while putting their training to use in a real work situation. Placement for work-study will be the responsibility of the work orientation team who will monitor the students' performance on the job, provide guidance and support and assist the student in interpreting his work experience in terms of what his next step in career development will be.
8. The work orientation team will play a large role in helping the student find employment or plan for further vocational training following graduation. These efforts will be coordinated with the job placement program operated by the Job Development Project, a program currently operating under state funds which has a record of placing 97% of its student clientele in jobs after graduation.

## ENGLISH

We would like to suggest several facets of a Career Development Program which seem to call for the special competence of English teachers. These are, in a sense, outside the area of work laid out for us in the occupational clusters, where we are developing lesson plans for instruction about career areas and their relationship to our subject areas. These facets of the program meet needs other than strictly informational needs:

1. Young people should learn how to write good letters of application and letters requesting information about jobs. Well-written personal biographies and resumes are useful job-seeking tools.
2. Neat, accurate, and clearly executed application blanks are an aid to employment. Hopefully some skill in the use of these blanks can be developed.
3. Perhaps somewhere in the English curriculum, skills in the taking of oral and written examinations can be practiced.
4. The reading of newspapers, especially the want-ads, is an important job-seeking activity.
5. Practice with forms of oral address in introductions and inquiries would be of help to young people in business and employment situations. Public speaking in general is helpful. The inability to speak coherently and to the point hampers many of our young people.
6. This item is perhaps most important of all. Role playing, skit writing, and compositions around topics relating to life plans and career goals can help to stimulate, clarify, and deepen the thinking of young people in regard to their careers. Book reports on career topics could be a part of this thrust.

**BUSINESS AND OFFICE OCCUPATIONS**

SUGGESTED SUBJECT AREA: English  
 SUGGESTED GRADE LEVEL : 10, 11, 12

GENERAL OBJECTIVES : (1) To acquaint students with career opportunities available in the area of Business and Office occupations.

- (2) To introduce students to skills essential for qualifying for career opportunities available.
- (3) To provide mini experiences with the skills essential in several occupations.
- (4) To visit several job sites for on-the-spot observation and information.
- (5) To improve school achievement and motivation.

SPECIFIC BEHAVIORAL OBJECTIVES	VOCABULARY	LEARNING EXPERIENCES OR ACTIVITIES	DESIRED OUTCOMES
The students will be able to perform some of the basic skills and operations required in various office jobs.	Accountant Advertiser Bookkeeper Cashier  Electronic Computer Operator Office Machine Operator Receptionist Secretary Stenographer Typist	Pre-test for skills and career information.  Administer an interest inventory.  Give each student a career opportunities list.	The students will have a greater ability to describe the relation between specific vocational activities and real occupations.
The students will be able to list and discuss ways in which English can be applied in the working world.	Those 11th and 12th grade students who are working in Co-op programs will be able to evaluate the program in which he is involved and effectively describe it to others.	Compare interest inventories with career opportunities list.	The students will be familiar with Business Career opportunities available in the greater Cleveland area.
	The students will be able to list and describe various career opportunities in his community. The student will be able to list the location of the job site.		The students will have a more positive attitude toward school and the work world.

FILMS, FILMSTRIPS, AND TAPES		BUSINESS AND OFFICE OCCUPATIONS		
SOUND SLIDES DEVELOPED BY DVEP	SPEAKERS	FIELD TRIPS	CAREER LIBRARY	
Films: "Your Career as a Secretary" "Careers Clerical"	Accountant Cashier Office Machine Operator Secretary Stenographer Typist	Contact: Cleveland Trust Bldg. 9th and Prospect Ave. Cleveland, Ohio	Contact: Addressograph Multi-graph Company Cleveland, Ohio Public Relations Department	Pamphlets Brochures SRA Kits Occupational Exploration Kit Popeye Career-Comics People and Choices Career Follies Occupational Outlook Handbook Chronicle Occupational Library DOT

**EVALUATION:** Successful attainment of objectives in this unit will be based on the ability of 85-90% of the students to be able to list, in writing, the location and description of at least ten different business and office jobs located in his/her community. Teacher evaluation of pre-test and post test will be that at least 75-80% of the students correctly answer at least 75-80% of the pre-test items and 80-85% of the students correctly answer at least 85% of post test items.

#### SUGGESTIONS FOR IMPROVEMENT OF UNIT:

#### ADDITIONAL INSTRUCTIONAL AND RESOURCE MATERIALS:

## BUSINESS AND OFFICE OCCUPATIONS

### ADDITIONAL LEARNING EXPERIENCES OR ACTIVITIES

SUGGESTED SUBJECT AREA: English  
SUGGESTED GRADE LEVEL : 10,11,12

1. Take a field trip to the Cleveland Trust Bank, 9th and Prospect Ave., Cleveland, Ohio.
2. Create skills competition with the use of word games and puzzles for oral and written vocabulary enrichment.
3. Use several filing systems for classroom practice involving student teams.
4. Take students on a field trip to Stock Exchange for observation of the more advanced aspects of business careers.
5. Post test for skills and career knowledge.

### MATERIALS

1. Interest inventories
2. Various filing systems and boxes with file cards
3. Word games and puzzles (vocabulary)
4. Flash cards
5. Classroom sets of dictionaries
6. Monopoly games

**OCCUPATIONAL CLUSTER: Communications and Media**  
**SPECIFIC JOB:**

**SUGGESTED SUBJECT AREA:** English  
**SUGGESTED GRADE LEVEL :** 10, 11, 12  
**GENERAL OBJECTIVES :** (1) To introduce students to career opportunities available in the Communication and Media Cluster.

- (2) To involve students in simulated career experiences utilizing the four essential communication skills.
- (3) To emphasize the importance of the listening, speaking, reading and writing skills.
- (4) To acquaint students with experts in several communications career opportunities.
- (5) To improve school achievement and motivation.

SPECIFIC BEHAVIORAL OBJECTIVES	VOCABULARY	LEARNING EXPERIENCES OR ACTIVITIES	DESIRED OUTCOMES
The students will be able to identify and describe the operational structure and jobs performed in producing a variety show and a radio program.	Broadcast Technician Cable Splicer Camera Man Coin Collector Directory Clerk Disc Jockey Mail Carrier News Reporter Newspaper Editor Postal Clerk Telephone Operator	The class will observe and listen to select radio and TV programs--show the film "Careers in Communication". Elicit from students their opinions of skills essential to success in various media occupations--show and discuss the filmstrip "Communicating Without Words". Develop a half hour radio program including commercials, news, weather reports, human interest stories and interviews.	The students will have a greater ability to perceive the relation between specific vocational education activities and "real" occupations.
The students will be able to identify and discuss a variety of considerations involved in choosing a career.	TV News Writer TV Producer	Through class activities (produced and performed by the students), the students will be able to sample the operations and skills required in some of the Communication and Media careers discussed in this unit.	The students will be more equipped to assess themselves in terms of personal and career goals.

The students will be able to describe at least five different ways in which English can be applied in the working world.

## COMMUNICATION AND MEDIA OCCUPATIONS

FILMS, FILMSTRIPS, AND TAPES	SOUND SLIDES DEVELOPED BY DVEP	SPEAKERS	FIELD TRIPS	CAREER LIBRARY
<p>Films:</p> <p>"Careers in Communication"</p> <p>Filmstrips:</p> <p>"Communicating Without Words"</p>	<p>Broadcast Technician Disc Jockey Newspaper Reporter TV Director TV News Writer</p>	<p>Contact: WBOE Radio Station or WJMO</p> <p>WVIZ TV Station Channel 25 368-2800, ext. 43</p> <p>The Cleveland Plain Dealer</p>	<p>Contact: TV Station WVIZ</p>	<p>Pamphlets Brochures SRA Kits Popeye Career Comics Occupational Exploration Kit Chronicle Occupational Library Occupational Outlook Handbook DOT</p>

EVALUATION: Successful attainment of objectives in this unit will be based on the ability of 85-90% of the students to write, in detail, or orally identify and describe at least 80% of the jobs listed in this unit, and list, in writing, at least three ways in which English can be applied to Communication and Media careers.

## SUGGESTIONS FOR IMPROVEMENT OF UNIT:

## ADDITIONAL INSTRUCTIONAL AND RESOURCE MATERIALS:

## COMMUNICATIONS AND MEDIA OCCUPATIONS

### ADDITIONAL LEARNING EXPERIENCES OR ACTIVITIES

SUGGESTED SUBJECT AREA: English  
SUGGESTED GRADE LEVEL : 10,11,12

1. Produce and video-tape a variety show using student creativity and talent.
2. Orally read several one act plays.
3. Use home version of TV games and quiz shows.
4. Ask students to view a play, TV show, or movie and write a critical review.
5. Students will plan and construct their own sets and make their own costumes for various productions.
6. Invite representatives from TV, radio and newspapers to conduct a panel discussion on careers in media.
7. Culminate the unit with an assembly presenting the class video-taped project.

### MATERIALS

1. Tape recorders
2. Tapes
3. Video-tape equipment
4. Movie Cameras (8mm), movie projector (8mm)
5. Building jobs (saws, hammers, nails, wood, etc.)
6. Scissors, construction paper, magic markers
7. Daily newspaper (Cleveland Plain Dealer)
8. Games: Password, The Match Game, Jeopardy, Concentration

**OCCUPATIONAL CLUSTER: Fine Arts and Humanities**  
**SPECIFIC JOB:**

**SUGGESTED SUBJECT AREA:** English  
**SUGGESTED GRADE LEVEL :** 10,11,12  
**GENERAL OBJECTIVES :**

- (1) To develop an appreciation for the heritage of working throughout the ages.
- (2) To encourage the development of self-image.
- (3) To help students develop their own sense of social and moral responsibility.
- (4) To aid each student in articulating his role in the present social order.
- (5) To develop a high degree of work habits and attitudes necessary for gainful employment.

SPECIFIC BEHAVIORAL OBJECTIVES	VOCABULARY	LEARNING EXPERIENCES OR ACTIVITIES	DESIRED OUTCOMES
<p>The students will be able to describe, in some detail, occupational opportunities in the Fine Arts and Humanities Occupational Cluster.</p> <p>The students will be able to describe and list some of the attitudes, work habits and personal qualities necessary for gainful employment.</p>	Actor Actress Artist Commercial Artist Fine Arts and Humanities Industrial Designer Interior Decorator Musician Singing Teacher	Begin the unit with posters and prints of art master-pieces to trace the movement and philosophy of civilization from East to West. Visit the Art Museum and the Museum of Natural History--emphasize career opportunities.	The students will show more positive attitudes toward their career goals and continuing education.
			<p>The students will have a more positive attitude toward self, others and the world of work.</p> <p>The students will have a greater appreciation of how school subjects relate to the occupational clusters</p>
			<p>The students will be aware of jobs available in the Cleveland community.</p>

## OCCUPATIONAL CLUSTER FINE ARTS AND HUMANITIES

FILMS, FILMSTRIPS, AND TAPES	SCOUND SLIDES DEVELOPED BY DVEP	SPEAKERS	FIELD TRIPS	CAREER LIBRARY
<p>Films:</p> <p>Design for Growing</p> <p>World Festival of Negro Arts</p>	<p>Actor Actress Commercial Artist Dancer Director Interior Decorator Musician Singer Singing Teacher</p>	<p>Contact: Museum of Natural History, Public Relations Dept., Cleveland, Ohio Cleveland Institute of Music</p>	<p>Contact: Art Museum Museum of Natural History Dearborn, Michigan, The Henry Ford Museum and Greenfield Village</p>	<p>Pamphlets Brochures SRA Kits Popeye Career Comics Occupational Exploration Kit People and Choices Career Folios DOT Chronicle Occupational Library Occupational Outlook Handbook</p>

EVALUATION: Successful attainment of objectives in this unit will be based on the ability of 80-85% of the students to: (a) write a detailed description including duties, requirements, opportunities, etc. of at least seven careers in the area of fine arts and humanities, and (b) list, in writing, at least five attitudes, work habits or personal qualities necessary for gainful employment.

## SUGGESTIONS FOR IMPROVEMENT OF UNIT:

## ADDITIONAL INSTRUCTIONAL AND RESOURCE MATERIALS:

## FINE ARTS AND HUMANITIES

### ENGLISH

GRADE LEVEL: 10,11,12

#### I. Additional Experiences or Activities

1. Read several period pieces of literature emphasizing the theme-- "The Plight of the Common Man".
2. Show movies based on novels when available.
3. Create a movie based on the theme of one of the contemporary novels as a class project.

#### II. Materials

1. Humanities prints
2. Quips and Quotes A & B
3. Reproductions of masterpieces

Cameras  
Projectors  
Screen  
Camera Lights  
Film  
Tape Recorder  
Editing Machine  
Field Trip - Buses - Dearborn, Michigan  
Henry Ford Museum  
Greenfield Village

LITERATURE FOR ENGLISH UNIT ON FINE ARTS AND HUMANITIES

Grade 10:

- (1) Short Stories-----Anton Chekov
- (2) The Good Earth-----Pearl S. Buck
- (3) Things Fall Apart-----(African Author)

Grade 11:

- (1) A Lantern In Her Hand-----Aldridge
- (2) Tobacco Road-----E. Caldwell
- (3) Me Street-----Ann Petry
- (4) The Thread That Runs So True-----Stuart
- (5) Coming of Age in Mississippi-----Ann Moody
- (6) To Be Young, Gifted and Black-----Lorraine Hansberry

Grade 12:

- (1) To Sir With Love-----Brailhwaite
- (2) Tess D'Urbervilles-----Thomas Hardy
- (3) Jane Eyre-----Bronte
- (4) The Razor's Edge-----S. Maugham

**\* OCCUPATIONAL CLUSTER: MARKETING AND DISTRIBUTION**

**JOB FAMILY:**

**SUGGESTED SUBJECT AREA:** English  
**SUGGESTED GRADE LEVEL :** 10, 11, 12  
**GENERAL OBJECTIVES :**

(1) To observe first-hand operations in the marketing and distribution departments of a major industry.

- (2) To pin-point career opportunities in the Marketing and Distribution Occupational Cluster.
- (3) To practice the speaking and writing skills paramount to marketing and distribution careers.
- (4) To promote experience in sales, display, research and survey techniques.
- (5) To assist students in assessing themselves in terms of personal and career goals.
- (6) To develop a high degree of work habits and attitudes necessary for gainful employment.

SPECIFIC BEHAVIORAL OBJECTIVES	VOCABULARY	LEARNING EXPERIENCES OR ACTIVITIES	DESIRED OUTCOMES
Through role-playing, distributing questionnaires and telephone campaigns, the students will be able to sample various skills and operations required in certain Marketing and distribution careers.	Account Manager Field Interviewer	Show film depicting various career opportunities in marketing.	The students will be able to relate marketing and distribution careers to the study of English.
The students will be able to describe and identify marketing and distribution jobs listed in this unit and relate them to the study of English.	Marketing Researcher Research Presentation Writer	Prepare a questionnaire about student reactions to products sold in the school bookstore Conduct the reaction survey and tabulate results.	The students will be aware of the duties and requirements for careers of this cluster and where to find them.
The students will be able to list and discuss a variety of considerations that enter into career choice.	Statistical Analyst Tabulator	Create displays and sales promotion posters and campaigns to increase acceptance of that product. (Use radio, commercials, and newspaper, ads, as models)	The students will show more positive attitudes toward their career goals and continuing education. The students will have a more positive attitude toward school, self, others, and the world of work.

FILMS, FILMSTRIPS, AND TAPES	SOUND SLIDES DEVELOPED BY DVEP	SPEAKERS	FIELD TRIPS	CAREER LIBRARY
<p>Films:</p> <p>The Joys of Selling</p> <p>Poster Making--Design and Techniques</p> <p>Communicating Ideas</p> <p>Careers In Art</p>	<p>Account Manager</p> <p>Field Interviewer</p> <p>Marketing Researcher</p> <p>Research Presentation Writer</p> <p>Statistical Analyst Tabulator</p>	<p>Contact:</p> <p>The American Marketing and Association Cleveland, Ohio</p>	<p>Contact:</p> <p>The American Greeting Corporation</p>	<p>Pamphlets</p> <p>Brochures</p> <p>SRA Kits</p> <p>Popeye Career-Comics</p> <p>Occupational Outlook Handbook</p> <p>People and Choices</p> <p>Career Folios</p> <p>Chronicle Occupational Library</p> <p>DOT</p>

EVALUATION: Successful attainment of objectives in this unit will be based on the ability of 80-85% of the students to write, in detail, or orally identify the five marketing and distribution jobs listed in this unit, and list, in writing, at least three considerations involved in their personal career choices.

#### SUGGESTIONS FOR IMPROVEMENT OF UNIT:

#### ADDITIONAL INSTRUCTIONAL AND RESOURCE MATERIALS:

## MARKETING AND DISTRIBUTION OCCUPATIONS

### ENGLISH

GRADE LEVEL: 10,11,12

#### I. Additional Experiences or Activities

1. Explore various sales techniques
2. Role-play the multiple sales methods to determine effectiveness of each.
3. Present telephone marketing and sales skills via telephone company kits and personnel.
4. Conduct a telephone campaign to promote a school activity (open house, concert, etc.). Follow up with a questionnaire or activity to determine reason for attendance and effect of calls.
5. Co-ordinate marketing and distribution information with a visit to the American Greetings Corporation.

#### II. Materials Needed

1. Bulletin Boards
2. Poster Boards
3. Magic Markers
4. Ditto Masters
5. Duplicating paper
6. Newsprint
7. Phone Kits
8. The Hidden Persuaders, Vance Packard

## SOCIAL STUDIES FROM GUIDANCE

We would like to suggest several facts of a good career development program which call for the special competence of the Social Studies teacher. These are, in a sense, outside the area of work laid out for use in the occupational clusters, where we are developing lesson plans for instruction about career areas and their relationship to our subject areas. These other facts of the program meet needs other than strictly informational needs.

1. Students should realize the importance of having one or two alternate career plans or contingency career plans. The Social Studies teacher is uniquely qualified to help them see the effect of job market supply and demand on career choices.
2. The Social Studies teacher can explain the Government, Local, State, and Federal, employs more people than any industry or business. Government employs workers in almost all the occupational clusters.

**OCCUPATIONAL CLUSTER: Agri-Business and Natural Resources**  
**SPECIFIC JOB: Natural Resources**

**SUGGESTED SUBJECT AREA:** Social Studies  
**SUGGESTED GRADE LEVEL :** 10, 11, 12  
**GENERAL OBJECTIVES :**

- (1) To show how social studies is related to careers in the Natural Resources.
- (2) To gain insight into the various Natural Resources fields such as forestry, oceanography, and soil conservation.
- (3) To stimulate interest in the Agri-Business and Natural Resources Occupations.
- (4) To make students aware of occupational and educational opportunities by providing a broad base of career information and explanatory experiences on which to make wise career choices.

SPECIFIC BEHAVIORAL OBJECTIVES	VOCABULARY	LEARNING EXPERIENCES OR ACTIVITIES	DESIRED OUTCOMES
<p>After participating in research projects, class discussions and field trips, etc., at least 90% of the students will be able to write detailed descriptions as to duties, requirements, job availability, etc. of jobs discussed in this Unit.</p> <p>All students will be able to orally discuss or write at least three different ways in which social studies is related to Agri-Business and Natural Resource Occupation.</p>	<p>Agri-Business Agricultural- Scientist Ecologist Farmer Forester Geologist Horticulturist Oceanographer Soil Scientist</p>	<p>Discuss conserving natural resources and occupations involved. Have a field trip to A.G. Heinrich Greenhouse, 211 E. Schaeff Road Cleveland, Ohio. Show and discuss film on our Natural Resources.</p>	<p>The students will have a more positive attitude toward self, school and continuing education.</p>
		<p>Students will research requirements for jobs listed in this Unit.</p>	<p>The students will be aware of a variety of ways in which social studies can be applied in the working world.</p>
		<p>Invite speakers from the Metropolitan Parks Division and the Ohio State University Agricultural Division to speak to the class on Agri-Business and Natural Resources Occupations.</p>	

Social Studies 10, 11, 12

AGRI-BUSINESS AND NATURAL RESOURCES

FILMS, FILMSTRIPS, AND TAPES	SOUND SLIDES DEVELOPED BY DVEP	SPEAKERS	FIELD TRIPS	CAREER LIBRARY
Films: "Forest Conservation" "Conserving Our Water Resources Today" "Waterfowl Resources in Danger"	Contact: The Ohio State University Agricultural Division Metropolitan Parks Division	Contact: Wooster Agricultural Station, Wooster, Ohio A.G. Heinrich Greenhouse, 211 East Schoef Road	Contact: Wooster Agricultural Station, Wooster, Ohio A.G. Heinrich Greenhouse, 211 East Schoef Road	Occupational Outlook Handbook Chronicle Occupational Library DOT Pamphlets Brochures SRA Kits Popeye Career Comics People and Choices - Career Folios Occupational Exploration Kit

EVALUATION:

Successful attainment of objective number one will be based on the ability of 85-90% of the students to write detailed descriptions of 90% of the jobs listed in this unit. Attainment of objective number two will be based on the ability of all students to list, in writing, at least three different ways in which social studies is related to the area of Agri-Business and Natural Resource occupations.

SUGGESTIONS FOR IMPROVEMENT OF UNIT:

ADDITIONAL INSTRUCTIONAL AND RESOURCE MATERIALS:

BUSINESS AND OFFICE  
OCCUPATIONS

SPECIFIC JOB:

**SUGGESTED SUBJECT AREA:** Social Studies

**SUGGESTED GRADE LEVEL :** 10, 11, 12

**GENERAL OBJECTIVES :** (1) To familiarize students with the requirements, duties, sources of job information, etc., of jobs in the Business and Office Occupational Cluster.

- (2) To show students how Social Studies is related to jobs in the business cluster (advertiser, accountant, Public Relations worker, receptionist etc.)
- (3) To motivate or inspire students' desire to consider the world of business as a career.
- (4) To prepare students to cope with the continued change in the world of work.

SPECIFIC BEHAVIORAL OBJECTIVES	VOCABULARY	LEARNING EXPERIENCES OR ACTIVITIES	DESIRED OUTCOMES
<p>Eighty-five to ninety percent of the students will be able to orally discuss or write detailed descriptions of all Business and Office Careers discussed in this unit.</p> <p>All students will be able to list at least ten businesses and office jobs available in the greater Cleveland area and tell where information about these jobs can be found.</p>	Accountant Advertiser Bookkeeper Cashier Clerk Electronic Computer-Operator Office Machine Operator Personnel Staff Public Relations Staff Receptionist Secretary Shipping & Receiving Clerk Stenographer Telephone Operator Typist	<p>Students will make a list and describe the different jobs included in the Business and Office Occupations cluster and show the possible contributions social studies can make.</p> <p>Have students research the requirements for business and office jobs relating to economics, geography, government, and social problems.</p>	<p>Through participation in part-time jobs, high school business classes and co-op programs, a large majority of the students will get a chance to sample some of the skills and operations required in various business and office occupations</p> <p>The students will have a more positive attitude toward self others, and the world of work.</p> <p>Students will have a detailed knowledge of the duties requirements, job source, application procedure, etc., of all jobs listed in this unit.</p>

Social Studies 10, 11, 12

OCCUPATIONAL CLUSTER, BUSINESS AND OFFICE OCCUPATIONS

FILMS, FILMSTRIPS, AND TAPES	SOUND SLIDES DEVELOPED BY DVEP	SPEAKERS	FIELD TRIPS	CAREER LIBRARY
Films:		Contact: Accountant Personnel Staff Secretary Stenographer Typist Careers--Clerical Sales Building Role	Contact: Addressograph Multigraph Co. The Cleveland Advertising Club The Plan Dealer Speakers Bureau	Occupational Outlook Handbook Chronicle Occupational Library DOT SRA Career Information Kits Pamphlets Brochures Popeye Career Comics People and Choices Career Folios
Careers in Business and Office Occupations--How Do You Get There Goodwill Ambassador				

EVALUATION: Teacher rating of objectives in this unit will be based on the ability of 85-90% of the students to write detailed descriptions or orally discuss 80-85% of the jobs listed in this unit.

SUGGESTIONS FOR IMPROVEMENT OF UNIT:

ADDITIONAL INSTRUCTIONAL AND RESOURCE MATERIALS:

OCCUPATIONAL CLUSTER : BUSINESS AND OFFICE OCCUPATIONS  
SOCIAL STUDIES

Additional Learning Experiences or Activities

Arrange a field trip to the East Ohio Gas Company.

Have students prepare and maintain bulletin boards and illustrative materials on jobs in this cluster.

Students will summarize their findings on jobs in this cluster in a notebook.

Have students write a report on a particular career in the area of business they find interesting.

**OCCUPATIONAL CLUSTER: COMMUNICATION AND MEDIA**  
**SPECIFIC JOB:**

**SUGGESTED SUBJECT AREA: Social Studies**  
**SUGGESTED GRADE LEVEL : 10, 11, 12**  
**GENERAL OBJECTIVES :** (1) To learn how Social Studies can help students successfully pursue careers such as Reporter, Photographer, Sales Representative, Program Director, Public Relations Consultant, T.V. Director, Communications Producer, Announcer and Newswriter.

- (2) To know the requirements of those occupations in the field of communication in which Social Studies can be helpful.
- (3) To know where the requirements can be found.
- (4) To promote pupil interest in Communication and Media Careers.

SPECIFIC BEHAVIORAL OBJECTIVES	VOCABULARY	LEARNING EXPERIENCES OR ACTIVITIES	DESIRED OUTCOMES
All students will be able to write or orally name and characterize in detail 95% of the jobs listed in this unit.	Auto Mechanic Broadcast Technician Cable Splicer Camera Man Coin Collector Delivery man Disc Jockey Mail Carrier Make-up Artist Morse Operator News Reporter Newspaper Editor Photoengraver Postal Clerk	Students will list different jobs in the field of communication and Show how social studies, government history, economics and social problems can be helpful.	The students will be more aware of jobs available in their community and duties, requirements, and procedures for applying for these jobs.
Through class projects, field trips and guest speakers all students will be able to sample the operations and skills required in 80-90% of the communication and media jobs listed in this unit.	Disc Jockey Mail Carrier Make-up Artist Morse Operator News Reporter Newspaper Editor Photoengraver Postal Clerk	Have students become aware of the requirements for successful careers in the area of Communication and Media.	Students will be stimulated to seek additional information on some of the jobs discussed in this unit. Some students will be able to decide whether they would like to pursue a career in the area of Communication and Media.
	Radio Station Manager Sales Representative Telephone Operator Telephone Repairman TV Producer	Arrange field trips to the Call & Post Newspaper Building, The Cleveland Plain Dealer, and WJMO Radion Station	The students will have detailed knowledge of the requirements and operations involved in each of the six job families in the communication and media cluster.

**OCCUPATIONAL CLUSTER: COMMUNICATION AND MEDIA**

Social Studies 10, 11, 12

FILMS, FILMSTRIPS, AND TAPES	SOUND SLIDES DEVELOPED BY DVEP	SPEAKERS	FIELD TRIPS	CAREER LIBRARY
Films:		Contact:		Pamphlets
Careers in Communication.	Artist Broadcast-Technician	The Plain Dealer Speakers Bureau	Contact: The Call and Post WJMO	Brochures Career Ref. Books Occupational Outlook Handbook
Television is What You Make It.	Cartoonist			Chronicle Occupational Library
Television Serves Its Community	Newswriter			
Communication and Our Town.	Reporter			
Filmstrips:				DOT
Communication, Books, Television Ideas, The Newspaper,	Video Technician			SRA Information Kits
				Popeye Career Comics People and Choices Career Folios

EVALUATION: Successful attainment of objectives in this unit will be based on the ability of 85-90% of the students to (a) submit notebook summarizations of their research on at least 10 communication and media careers. (b) submit materials and prepare a classroom bulletin board within a period of one week. (c) write detail descriptions or orally discuss at least 15 of the communication and media jobs listed in this unit.

**SUGGESTIONS FOR IMPROVEMENT OF UNIT:**

**ADDITIONAL INSTRUCTIONAL AND RESOURCE MATERIALS:**

OCCUPATIONAL CLUSTER : COMMUNICATION AND MEDIA  
SOCIAL STUDIES

Additional Learning Experiences or Activities

Have students prepare and maintain bulletin boards and illustrate materials related to communication and media occupations.

Have students submit a report on one occupation of their choice in the area of Communication and Media.

Have students maintain a notebook and summarize their general findings on Communication and Media Careers.

**OCCUPATIONAL CLUSTER: CONSTRUCTION  
SPECIFIC JOB:**

**SUGGESTED SUBJECT AREA: Social Studies**

**SUGGESTED GRADE LEVEL :** 10, 11, 12

**GENERAL OBJECTIVES :** (1) To learn how social studies is related to construction occupations such as architecture, engineering, construction occupations, and building trades in general.

- (2) To understand how such subjects as government, economics, social problems and history can prepare one for successful careers in construction occupations.

- (3) To learn what the requirements for success are.
- (4) To learn where more information about this field of work can be obtained.
- (5) To stimulate further interest in construction as a career.

<b>SPECIFIC BEHAVIORAL OBJECTIVES</b>	<b>VOCABULARY</b>	<b>LEARNING EXPERIENCES OR ACTIVITIES</b>	<b>DESIRED OUTCOMES</b>
			<b>DESIRED OUTCOMES</b>
All students will relate verbally or in writing how social studies classes are related to the world of work and name a construction career of their choice in which a knowledge of social studies is used.	Asbestos and Insulating workers Bricklayer Carpenter Cement Mason Electrician Glazier Ironworker Laborer Lather Millwright Operating Engineer Painter Plasterer Plumber Roofer Sheet Metal Worker Teamster	Students will list and describe the specific activities and responsibilities of Architects, Engineers Contractors, and Building Tradesmen.	Students will have detailed knowledge of the requirements and operations involved in jobs discussed in the Construction cluster.
Ninety percent of the students will be able to list or orally cite detailed descriptions of 95% of the jobs listed in this unit.	Through field trips, speakers, class projects, etc., all students will be able to sample some of the skills and operations of construction jobs listed in this unit.	Have students learn the requirements of the careers in No (1) above and the jobs listed in the vocabulary list and try to relate these jobs to social studies government, history and economics.	Students will be motivated to explore additional information and Cleveland job sources in careers in the Construction Cluster.

Social Studies 10, 11, 12

OCCUPATIONAL CLUSTER: CONSTRUCTION

FILMS, FILMSTRIPS, AND TAPES	SOULD SLIDES DEVELOPED BY DVEP	SPEAKERS	FIELD TRIPS	CAREER LIBRARY
Films:		Contact:	Contact!	DOT
Building Trades - The House Builders	Bricklayer	Building Trades Unions	A Construction Company currently building to arrange a visit to the building site.	Occupational outlook Handbook
Careers in the Building Trades	Carpenters	Bureau of Apprenticeship and Training Federal Bldg.		Chronicle Occupational Library
Building A House	Electricians Painter Plasterer Plumber Teamster	Federal Housing Administration		SRA Career Kit Pamphlets Brochures Popeye Career Comics People and Choices Career Folios

EVALUATION: Successful attainment of objectives in this unit will be based on the ability of 85-90% of the students to write in detail or orally identify and describe the duties, requirements, relation to social studies, etc., of 80-85% of the construction jobs listed in this unit.

SUGGESTIONS FOR IMPROVEMENT OF UNIT:

ADDITIONAL INSTRUCTIONAL AND RESOURCE MATERIALS:

**OCCUPATIONAL CLUSTER: CONSUMER AND HOMEMAKING**

**SPECIFIC JOB:**

**SUGGESTED SUBJECT AREA: Social Studies**

**SUGGESTED GRADE LEVEL : 10 11 12**

**GENERAL OBJECTIVES :** (1) To learn what relationship there is between Social Studies and the various careers such as the food industry, the clothing industry and the consumer education field.

<b>SPECIFIC BEHAVIORAL OBJECTIVES</b>	<b>VOCABULARY</b>	<b>LEARNING EXPERIENCES OR ACTIVITIES</b>	<b>DESIRED OUTCOMES</b>
			(1) To understand how such subjects as government, economics, social problems, history and geography can help prepare students for successful careers in consumer and homemaking related occupations.
(2) To learn what the requirements for successful careers in dietetics, home economics, nursing, home care, housekeeping, cooking, baking, and other related jobs are.			
(3) To learn where more information about these occupations is obtainable.			
(4) To motivate pupils to consider a career in this area.			
(5) To motivate pupils to consider a career in this area.			

## SOCIAL STUDIES 10, 11, 12 OCCUPATIONAL CLUSTER: CONSUMER AND HOMEMAKING RELATED CAREERS

FILMS, FILMSTRIPS, AND TAPES	SOUND SLIDES DEVELOPED BY DVEP	SPEAKERS	FIELD TRIPS	CAREER LIBRARY
Films:		Contact: Jane Addams Vocational School		Occupation Outlook Handbook
Nursing Care of The Sick and Injured	Home Economist	Consumer League of Ohio	East 30th & Community College Ave.	Chronicle Occupational Library
Consumer Education on Budgeting	Nursemaid	940 Engineers Bldg.	Manners Hospitality College	DOT
Consumer Education on Installation Buying		Consumer Protection Association	1620 Euclid Ave	Pamphlets
Consumer Education Retail Credit Buying		118 St Clair 44114	Emmanuel Care Center	Brochures
		241 0186	88 Carnegie Ave Cleveland, Ohio	SRA Kits
		Bakers Union of The Brotherhood of Teamsters		People and Choices - Career Folios
		East 22nd & Prospect		Popeye Career Comics
		Depar. of Consumer Affairs City of Cleveland		

EVALUATION: Successful attainment of objectives in this unit will be based on the ability of 85-90% of the students to write detailed descriptions of the duties, requirements, job sources, etc., for at least 85% of the jobs listed in this unit.

SUGGESTIONS FOR IMPROVEMENT OF UNIT:

ADDITIONAL INSTRUCTIONAL AND RESOURCE MATERIALS:

**OCCUPATIONAL CLUSTER: ENVIRONMENTAL CONTROL  
SPECIFIC JOB:**

**SUGGESTED SUBJECT AREA: Social Studies**

**SUGGESTED GRADE LEVEL :** 10, 11, 12

**GENERAL OBJECTIVES :** (1) To help students understand how Social Studies can be helpful in pursuing careers in this cluster such as Archeologist, Anthropologist, Geographer, Urban Geographer or Agronomist.

- (2) To enable students to see the relationship between these careers and Social Studies especially History, Geography.
- (3) To enable students to learn what the requirements are for a successful career in this cluster of occupations and to know where information about environmental occupations can be obtained.
- (4) To motivate students to consider preparing for a career in this area of work

SPECIFIC BEHAVIORAL OBJECTIVES	VOCABULARY	LEARNING EXPERIENCES OR ACTIVITIES	DESIRED OUTCOMES
<p>All students will be able to verbally describe or write at least three geographical factors that can affect or influence his choice of a career.</p> <p>Ninety to Ninety-five percent of the students upon completion of this unit on the Environmental Control Cluster will be able to orally describe or write detailed descriptions of 90% of the jobs listed in this unit.</p>	<p>Agronomist Anthropologist-geographer Archeologist Biologist Chemist Climatologist Laboratory Technician Meteorologist Microbiologist Physicist Urban Geographer Waste water treatment plant operator Zoologist</p>	<p>Students will list and describe the work of archeologists, geographers, and Agronomists to understand how Social Studies can help in preparing for these careers.</p> <p>Have students acquaint themselves with requirements, duties etc. of jobs listed in No (1) above.</p> <p>Arrange field trips to the National History Museum or the Cleveland Zoo</p> <p>Invite speakers from the National Weather Service, Cuyahoga Community College Humanities Department or the Human Relations Center, Kent State University</p>	<p>The students will be knowledgeable about job descriptions, training, personal and educational requirements of jobs listed in this unit.</p> <p>The students will have improved their attitudes toward vocational education and real occupations they will seek outside information about jobs in this cluster and inquire about post high school training in Environmental control occupations</p> <p>The students will be able to orally relate various ways in which Social Studies can be beneficial to a student interested in pursuing a career in the Environmental Control Cluster</p>

FILMS, FILMSTRIPS, AND TAPES	SOUND SLIDES DEVELOPED BY DVEP	SPEAKERS	FIELD TRIPS	CAREER LIBRARY
<p>Films:</p> <p>House of Man - Our Crowded Environment</p> <p>Problems of Conservation, Air Science and Technology</p> <p>Changing City</p> <p>Face of the Earth</p> <p>Erosion</p> <p>Earth Changes in its Surface</p>	<p>Geologist Geophysicist</p> <p>The National Weather Service.</p> <p>Community Development Improvement Program, City of Cleveland</p>	<p>Contact: The National Weather Service.</p> <p>Contact: The Cleveland Zoo</p>	<p>Contact: The Cleveland Zoo</p>	<p>Occupational Outlook Handbook</p> <p>Chronicle Occupational Library</p> <p>DOT</p> <p>Pamphlets</p> <p>Brochures</p> <p>SRA Kits</p> <p>Popeye Career-Comics</p> <p>People and Choices-Career Folios</p>

EVALUATION: Successful attainment of objectives (1) and (2) will be based on the ability of 85-90% of the students to list in writing at least three geographical factors that can affect one's career choice, and write in detail or orally identify and describe 80-85% of jobs listed in this unit.

#### SUGGESTIONS FOR IMPROVEMENT OF UNIT:

#### ADDITIONAL INSTRUCTIONAL AND RESOURCE MATERIALS:

**OCCUPATIONAL CLUSTER: FINE ARTS AND HUMANITIES**  
**SPECIFIC JOB:**

**SUGGESTED SUBJECT AREA:** Social Studies

**SUGGESTED GRADE LEVEL :** 10 11, 12

**GENERAL OBJECTIVES :** (1) To inform students about the duties, requirements, etc., of Humanities and Fine Arts Jobs such as that of an actor, actress, dancer, decorator and designer,

- (2) To help students understand how Social Studies is related to the Fine Arts & Humanities.
- (3) To make students aware of the employment outlook and requirements of jobs in the Fine Arts & Humanities Cluster.
- (4) To improve school achievement and motivation on the part of the students,

<b>SPECIFIC BEHAVIORAL OBJECTIVES</b>	<b>VOCABULARY</b>	<b>LEARNING EXPERIENCES OR ACTIVITIES</b>	<b>DESIRED OUTCOMES</b>
Through classroom activities (plays listening to recordings etc.), speakers and field trips, all students will be able to sample the operations and skills required in at least 90% of the Fine Arts & Humanities careers discussed in this unit	Actor Actress Commercial Artist Dancer Industrial designer Interior Decorator Singer Singing Instructor	Students will listen to musical recordings peculiar to various sections of the country.  Students will organize and produce a historical play.  Students will plan a festival of African Art.  Invite a representative from Belkin productions to talk to the class about the qualities and requirements for success in the area of Fine Arts and Humanities.	The students will have an increased ability to describe the relation between specific vocational activities and real occupations  The students will know the requirements, duties, etc., of the Fine Arts & Humanities jobs available in the City of Cleveland and how to prepare and apply for some of these jobs  The students will know the requirements in the area of Fine Arts and Humanities.
Without the aid of resource materials, all students will be able to write a detailed description of the personal duties job outlook, etc., of 90% of the fine arts & humanities jobs listed in this unit.		Show and discuss a filmstrip on the workings of a television studio.	The student will have more positive attitudes toward self, others, and the world of work.

FILMS, FILMSTRIPS, AND TAPES	SOULD SLIDES DEVELOPED BY DVEP	SPEAKERS	FIELD TRIPS	CAREER LIBRARY
Films:		Contact:	Contact:	Pamphlets
Films: Discovering the Music of Africa	Actor Actress	Karamu House	Karamu House	Brochures
Discovering the Music of Latin America	Dancer	The Playhouse	A Television Studio	SRA Kits
Frederic Douglas - The Home on Cedar Hill	Industrial Designer	The Plain Dealer Speakers Bureau		Occupational Outlook Handbook
American Vision	Interior Decorator			Chronicle Occupational Library
Marian Anderson	TV Studio			
Changing Art in a Changing World				Popeye Career Comics
				People and Choices Career Folios
				DOT

EVALUATION: Successful attainment of objectives (1) and (2) will be based on the ability of 85-90% of the students to (a) organize and produce a historical play that will be presented in class or for the student body. (b) Write detailed descriptions of 80% of the jobs listed in this unit.

## SUGGESTIONS FOR IMPROVEMENT OF UNIT:

## ADDITIONAL INSTRUCTIONAL AND RESOURCE MATERIALS:

**OCCUPATIONAL CLUSTER: HEALTH OCCUPATIONS**  
**SPECIFIC JOB:**

**SUGGESTED SUBJECT AREA:** Social Studies  
**SUGGESTED GRADE LEVEL :** 10, 11, 12  
**GENERAL OBJECTIVES :** (1) To show the importance of health careers in everyday life.

- (2) To show requirements for success in health careers.
- (3) To show how Social Studies can be an aid to the development of a health career.
- (4) To stimulate interest in the field of health careers.
- (5) To help students acquire needed information for job hunting applications, job interviews and post secondary training.

SPECIFIC BEHAVIORAL OBJECTIVES	VOCABULARY	LEARNING EXPERIENCES OR ACTIVITIES	DESIRED OUTCOMES
All students will be able to list and write or verbally describe 90% of the health careers listed in this unit and list places in the greater Cleveland area that offer post high school training and/or jobs in the various health careers discussed in this Unit.	Anesthesiologist Circulation Technologist Dental Hygienist Dental Technician Dietary Technician Doctor Laboratory Technician Nurse Nurse's aide Optometrist Orderly Physical Therapist Physicians assistant X-Ray Technician	Show and discuss the health career film, "Horizons Unlimited"	The students will have detailed knowledge of the vast number of Health Careers available in the greater Cleveland area, training required, benefits where to get additional information
Through guest speakers, classroom activities, visual aids etc., all students will be able to sample the skills and operations required in 90-95% of the health careers listed in the Health Career Occupational Cluster.		Invite a guest speaker from Mt. Sinai or the Veterans' Hospital to speak to class students about careers in health.	The students will be more aware of how school subjects can serve as pathways to career exploration.
		Show and discuss the filmstrip series Health Careers Part I-IV	The students will have more positive attitudes towards self, others, school, and continuing education.
		Have students obtain journals from the library on the health field of their interest.	Invite a speaker from the Greater Cleveland Hospital Assoc to speak to the students.

Social Studies 10, 11, 12

## OCCUPATIONAL CLUSTER: HEALTH OCCUPATIONS

FILMS, FILMSTRIPS, AND TAPES	SOUND SLIDES DEVELOPED BY DVEP	SPEAKERS	FIELD TRIPS	CAREER LIBRARY
Films:				
Health Careers I - IV	Dietitian	Contact:	Contact:	Occupational Outlook Handbook
Good Health Practices	Doctor	Mt. Sinai Hospital and/or Veterans Hospital	Cleveland Clinic Foundation	Chronicle Occupational Library
Community Media Health and You	Librarian			
	Nurse	Greater Cleveland Hospital Assoc 1001 Huron Rd	DOT	
	Nutritionist		Pamphlets	
	Pharmacist	Health Division, City of Cleveland	Brochures	
			SRA Kits	
			Popeye Career Comics	
			People and Choices-Career Folios	

EVALUATION: Successful attainment of objectives in this unit will be based on the ability of 85-90% of the students to write in detail or orally identify and describe 80-90% of the health careers listed in this unit and name at least one establishment in the city of Cleveland where an individual could obtain such a career.

## SUGGESTIONS FOR IMPROVEMENT OF UNIT:

## ADDITIONAL INSTRUCTIONAL AND RESOURCE MATERIALS:

**OCCUPATIONAL CLUSTER: HOSPITALITY AND RECREATION**  
**SPECIFIC JOB:**

**SUGGESTED SUBJECT AREA:** Social Studies

**SUGGESTED GRADE LEVEL :** 10, 11, 12

**GENERAL OBJECTIVES :** (1) To learn how Social Studies can help students prepare for careers such as recreation leader, social worker, hotel manager, and others that may be classified as hospitality and recreation occupations.

- (2) To understand how such subjects as government, social problems, economics and history can help prepare for successful careers in this cluster of occupations.
- (3) To learn what the requirements are for success in this area.
- (4) To be able to obtain information about hospitality and recreation occupations.
- (5) To promote student interest in considering a career in this area of endeavor.

<b>SPECIFIC BEHAVIORAL OBJECTIVES</b>	<b>VOCABULARY</b>	<b>LEARNING EXPERIENCES OR ACTIVITIES</b>	<b>DESIRED OUTCOMES</b>
At least 90-95% of the students will be able to list or orally cite the jobs discussed in this unit (duties, requirements, job outlook, where to apply for job etc.)	Baggage Porter Bartender Bell Boy Bell Captain Bus Boy Dishwasher Doorman Life Guard Manager Motion Picture Projectionist Playground Instructor Reservation Clerk Waiter	Students will list and describe the specific features of the work of social workers in settlement houses, recreation leaders and programmers, hotel managers, and hosts and hostesses.  Students will learn requirements of careers listed in No. (1) above.	The students will be more aware of how school subjects can serve as pathways to career exploration.  The students will have detailed knowledge of jobs in this cluster and they will seek additional information on their own.

		Through field trips, tours, guest speakers, end classroom activities, all students will be able to sample some of the operations and skills required in various hospitality and recreation jobs discussed in this unit.	Arrange field trips to Karamu House, Manners Hospitality College and The Salvation Army.
		Invite speakers from the Hiram House Camp, employment agencies, and the School of Applied Social Science, Case Western Reserve.	Those students considering co-op jobs will be able to decide whether they would like to pursue a job in the area of hospitality and recreation

Social Studies 10, 11, 12

OCCUPATIONAL CLUSTER: HOSPITALITY AND RECREATION			
FILMS, FILMSTRIPS, AND TAPES	SOUND SLIDES DEVELOPED BY DVEP	SPEAKERS	FIELD TRIPS
Films: "On time work and Leisure" "Social Worker"  Filmstrip, "If you're not going to College"	Recreation Leader	Contact: Hiram House  School of Applied Social Science, Case Western Reserve University  Hospitality Management Cuyahoga Community College  Recreation Department City of Cleveland	Contact: Karamu House, YMCA and YWCA  Phyllis Wheatley Assoc. Manners Hospitality College  The Salvation Army 59th and Hough Ave. Cleveland, Ohio  SRA Kits  Popeye Career Comics  People and Choices Career Folios

EVALUATION: Successful attainment of objectives (1) and (2) will be based on the ability of 85-90% of the students to write detailed descriptions and orally discuss the duties, requirements, etc., of 80-85% of the jobs listed in this unit.

SUGGESTIONS FOR IMPROVEMENT OF UNIT:

ADDITIONAL INSTRUCTIONAL AND RESOURCE MATERIALS:

OCCUPATIONAL CLUSTER, HOSPITALITY AND RECREATION  
Social Studies

Additional Learning Experience or Activities

Have students keep up-to-date bulletin boards showing material pertaining to employment in hospitality and recreation occupations.

Require students to keep notebooks and summarize finding and job information on hospitality and recreation careers.

Students will submit a detailed report on the hospitality and recreation career of their choice.

Test students on their understanding of how geography, government, economics and social problems can be helpful in their choice of a career.

**OCCUPATIONAL CLUSTER: Manufacturing  
SPECIFIC JOB:**

**SUGGESTED SUBJECT AREA:** Social Studies  
**SUGGESTED GRADE LEVEL :** 10, 11, 12  
**GENERAL OBJECTIVES :** (1) To gain information concerning available jobs in manufacturing such as engineers, mechanics, electricians, plant workers, and chemists.

- (2) To show the relationship of Social Studies to occupations in manufacturing.
- (3) To give students the requirements for success in manufacturing.
- (4) To show how natural resources play a part in manufacturing.

<b>SPECIFIC BEHAVIORAL OBJECTIVES</b>	<b>VOCABULARY</b>	<b>LEARNING EXPERIENCES OR ACTIVITIES</b>	<b>DESIRED OUTCOMES</b>
All students will be able to orally discuss or write detailed descriptions (duties, requirements, job availability, etc.) of at least ten different manufacturing jobs available in greater Cleveland area.	Bricklayer Dispatcher Draftsman Electrician Engineers (electrical, mechanical, aerospace) File Clerk Inspector Machinist Pattern Maker Sewing Machine-Operator Sheet Metal Worker Shipping & Receiving Clerk Time Clerk Tool & Die Maker Welder	Show and discuss the film "Careers in Industry". Have students research what manufacturing means to the community, city, state and national life. Students will prepare a bulletin board showing various occupations in manufacturing.	The students will have a more positive attitude toward self, others and the world of work. Through discussions and class performance the students will indicate a better understanding of the interrelation between the production, management and service area of business and industry.
All students will be able to orally discuss at least three different ways in which social studies can be applied in various manufacturing occupations.		Students will consult and compare journals from different vocational schools to compare requirements, course of study and quality of the schools.	The students will be more aware of their personal and career goals.

Social Studies 10, 11, 12

OCCUPATIONAL CLUSTER: MANUFACTURING

FILMS, FILMSTRIPS, AND TAPES	SOUND SLIDES DEVELOPED BY DVEP	SPEAKERS	FIELD TRIPS	CAREER LIBRARY
Films: "Careers in Industry"	Contact: Republic Steel Co.  A small business (teacher's choice)	Contact: Addressograph Multigraph, Babbitt Road  Warner & Swasey Co.	Contact: Occupational Outlook Handbook Chronicle Occupational Library People and Choices Career Folios Popeye Career Comics	Pamphlets Brochures SRA Kits DOT

**EVALUATION:** Successful attainment of objective one will be based on the ability of 85-90% of the students to write in detail or orally discuss at least ten manufacturing careers. Evaluation of objective two will be that students be able to cite at least three ways in which social studies can be applied in various manufacturing careers.

**SUGGESTIONS FOR IMPROVEMENT OF UNIT:**

**ADDITIONAL INSTRUCTIONAL AND RESOURCE MATERIALS:**

**OCCUPATIONAL CLUSTER: MARKETING AND DISTRIBUTION**  
**SPECIFIC JOB:**

**SUGGESTED SUBJECT AREA:** Social Studies

**SUGGESTED GRADE LEVEL :** 10, 11, 12

**GENERAL OBJECTIVES :** (1) To learn how social studies can help students pursue successful careers in such jobs as Marketing Research, Public Relations, Sales, Real Estate, Insurance.

- (2) To know the requirements of those occupations in which social studies can be helpful
- (3) To know where the requirements can be found.
- (4) To stimulate interest in Marketing and Distribution Occupations as a career.

<b>SPECIFIC BEHAVIORAL OBJECTIVES</b>	<b>VOCABULARY</b>	<b>LEARNING EXPERIENCES OR ACTIVITIES</b>	<b>DESIRED OUTCOMES</b>
All students will be able to list at least four different ways in which a knowledge of social studies can be helpful in pursuing a career in the area of Marketing and Distribution.	Auto Parts Repairman Auto Salesman Attendant Cashier Clerk Insurance Salesman Marketing Personnel Public Relations Receiving and Shipping Clerk Researcher Routemen Service Station	Students will list the various jobs included in the marketing and distribution cluster and show the contributions that social studies can make toward a successful career.  Have students research the requirement especially those relating to economics, geography, government, history, and social problem.	The students will have a more positive attitude toward self, others, and the world of work.
Through research assignments and classroom discussion, etc., all students will be able to sample some of the skills and operations required in various marketing and distribution jobs.		Show and discuss the film "The Joys of Selling"	The students will have detailed knowledge as to duties, requirements and how to apply for jobs in the area of marketing and distribution.  Through part-time jobs, co-op programs and activities in the classes some of the students will get a chance to sample some of the skills and operations required in some of the marketing and distribution jobs listed in this unit.

Invite speakers from A.W. Fenton Inc., The Wellman Co., The American Marketing Association.

Social Studies 10, 11, 12

Occupation Cluster: Marketing and Distribution

FILMS, FILMSTRIPS, AND TAPES	SOUND SLIDES DEVELOPED BY DVEP	SPEAKERS	FIELD TRIPS	CAREER LIBRARY
Films: "The Joys of Selling"	Contact: A. W. Fenton Inc. Society National Bank Bldg. 127 Public Square 861-2344	Contact: Sears Robuck and Company 795-2223	Contact: Sears Robuck and Company 795-2223	Occupational Outlook Handbook Chronicle Occupational Library DOT Pamphlets Brochures Books on Careers SRA Kits Popeye Career Co

EVALUATION: Successful attainment of objectives in this unit will be based on the ability of 80-85% of the students to write at least four ways in which a knowledge of social studies can be helpful in pursuing a career in the area of marketing and distribution, and write in detail or orally identify and describe at least 80% of the jobs listed in this area.

SUGGESTIONS FOR IMPROVEMENT OF UNIT:

ADDITIONAL INSTRUCTIONAL AND RESOURCE MATERIALS:

OCCUPATIONAL CLUSTER, MARKETING AND DISTRIBUTION  
SOCIAL STUDIES

Additional Learning Experiences or Activities

Arrange a field trip to Sears Roebuck & Company.

Have students prepare and maintain bulletin boards with materials related to these careers

Have students keep an up-to-date notebook on marketing and distribution occupations.

Students will turn in a report on an occupation in this cluster that he/she might consider as a career.

**OCCUPATIONAL CLUSTER: Personal Services**  
**SPECIFIC JOB:**

**SUGGESTED SUBJECT AREA:** Social Studies

**SUGGESTED GRADE LEVEL :** 10,11,12

**GENERAL OBJECTIVES :** (1) To find out how Social Studies--especially government, economics and social problems--can help students prepare for careers in personal services occupations.

- (2) To learn what the requirements are for success in such careers as cosmetology, beauty operator, barber, and other personal service jobs.
- (3) To find out where and how specific information about these careers can be obtained.
- (4) To stimulate further interest in these careers.

<b>SPECIFIC BEHAVIORAL OBJECTIVES</b>	<b>VOCABULARY</b>	<b>LEARNING EXPERIENCES OR ACTIVITIES</b>	<b>DESIRED OUTCOMES</b>
85-90% of the students will be able to orally explain or write detailed descriptions of 90% of the Personal Service jobs mentioned in this Unit.	Babysitter Barber Beautician Beauty Operator Building Custodian Caretaker Companion Cosmetologist Governess Housekeeper Laundress Maid Odd Job Man Valet	Students will list and describe, in detail, the work activities of jobs in the Personal Service Cluster.  Plan field trips to Jane Addams Vocational High School.  Through field trips, films, class reports and actual observation of people working in personal service careers, etc. the students will be able to sample some of the operations and skills required in a variety of Personal service jobs.	Hopefully, as a result of class discussions, reports, etc. the students will be aware of the requirements for successful pursuit of careers discussed in this Unit.  The students will be more aware of how high school subjects can relate to a career cluster.  The students will have a greater ability to describe the relationship between specific vocational activities and <u>real</u> occupations.  Show and discuss the films, <u>Careers in Personal Services</u> and <u>Beauty for a Career</u> .

## Social Studies 10, 11, 12

## PERSONAL SERVICES

FILMS, FILMSTRIPS, AND TAPES	SOUND SLIDES DEVELOPED BY DVEP	SPEAKERS	FIELD TRIPS	CAREER LIBRARY
Films: "Beauty for a Career" "Careers in Personal Services"	Contact: Hough Bakeries-- Catering Service	Contact: Jane Addams Vocational High School	Contact: Jane Addams Vocational High School	Occupational Outlook Handbook Chronicle Occupational Library DOT Pamphlets Brochures SRA Kits People and Choices - Career Folios Popeye Career Comics

EVALUATION: Successful attainment of objectives in this unit will be based on the ability of 85-90% of the students to write, in detail, or orally describe at least 90% of the jobs listed in this unit.

## SUGGESTIONS FOR IMPROVEMENT OF UNIT:

## ADDITIONAL INSTRUCTIONAL AND RESOURCE MATERIALS:

**OCCUPATIONAL CLUSTER: Public Service**  
**SPECIFIC JOB:**

**SUGGESTED SUBJECT AREA: Social Studies**

**SUGGESTED GRADE LEVEL : 10, 11, 12**

**GENERAL OBJECTIVES : (1) To show available occupations in Public Services.**

- (2) To show requirements for careers in Public Services.
- (3) To gain an understanding of the relationship of Social Studies to Public Services.
- (4) To improve school achievement and motivation.

SPECIFIC BEHAVIORAL OBJECTIVES	VOCABULARY	LEARNING EXPERIENCES OR ACTIVITIES	DESIRED OUTCOMES
<p>All students will be able to write and describe in detail the duties, requirements, job outlook and availability of at least ten of the Public Service jobs discussed in this Unit.</p>	<p>Aquarist Coin Collector Curator Engine and Pump-Crew Fire-Rescue Squad Man Judge</p>	<p>Show and discuss the film, "The City". Students will list careers that they would classify as public service careers--the teacher will add to this list, discussion will follow.</p>	<p>The students will be more aware of public service jobs available in the city of Cleveland, where to find them and proper procedures for applying for these jobs on a part-time or full-time basis.</p>
<p>Through speakers, field trips and class discussions the students will be able to sample the operations and skills required in the majority of jobs listed in this Unit.</p>	<p>Law Librarian Lawyer Meter Reader Playground Attendant Probation Officer Recreation Director Sewage Plant Attendant Telephone Installer and Repairman Telephone Operator</p>	<p>Have a speaker from the police department speak to students on careers in police work. Have someone from the Civil Service Commission speak to students on careers in Civil Service. Show and discuss the filmstrip, "Our City Government."</p>	<p>The students will be more equipped to assess themselves in terms of personal and career choices. The students will show a more positive attitude toward their career goals and continuing education.</p>

**Social Studies 10, 11, 12****OCCUPATIONAL CLUSTER: PUBLIC SERVICE**

FILMS, FILMSTRIPS, AND TAPES	STUDENT SLIDES DEVELOPED BY DVEP	SPEAKERS	FIELD TRIPS	CAREER LIBRARY
Films: "The City" "Our City Government" "A Day With Fireman Bill" "Social Worker"	Assistant Chief Chief Dog Warden Fireman Institutional Guard Meterman Patrolman	Cleveland Police Department--Public Relations Dept. U.S. Federal Civil Service Commission of Cleveland	Contact: The Service Director for the city of Cleve- land	Occupational Out- look Handbook Chronicle Occupa- tional Library DOT People and Choices Career Folios Pamphlets Brochures SRA Kits Popeye Career Comics

**EVALUATION:** Successful attainment of objectives one and two will be based on the ability of 80-85% of the students to write detailed descriptions of at least 80% of the public service jobs listed in this unit.

**SUGGESTIONS FOR IMPROVEMENT OF UNIT:****ADDITIONAL INSTRUCTIONAL AND RESOURCE MATERIALS:**

**OCCUPATIONAL CLUSTER: TRANSPORTATION**  
**SPECIFIC JOB:**

**SUGGESTED SUBJECT AREA:** Social Studies

**SUGGESTED GRADE LEVEL :** 10, 11, 12

**GENERAL OBJECTIVES :** (1) To gain information about some specific jobs involving Social Studies that are included in Transportation Occupation such as, Pilot, Co-Pilot, Stewards, and Stewardesses Air-Traffic, Controllers, Ship Officers, and Travel Agents.

- (2) To learn in what particulars, Geography, Government, and Economics for example are related or involved in this field.
- (3) To become acquainted with the requirements of the jobs in transportation occupations,
- (4) To know where specific information about these occupations can be found,
- (5) To encourage students interested in the field of transportation to consider it as a career.

SPECIFIC BEHAVIORAL OBJECTIVES	VOCABULARY	LEARNING EXPERIENCES OR ACTIVITIES	DESIRED OUTCOMES
At least 90% of the students will be able to orally discuss or write detailed descriptions of at least 5 jobs in each of the four different areas of transportation (land, air, water, rail)-descriptions will include job duties, requirements how to apply for part-time and full-time jobs, etc.	Airline Dispatcher Block Operator Flight Engineer Machinist Marina Attendant Mechanic Merchant Seaman Pilot Reservation Clerk Ship Pilot Shipping Clerk Sky Cap Stewardess Ticket Agent Trackmen Truck Driver Longshoreman	Students will list and describe specifically the jobs that may be classified as transportation occupations that require or are related to Social Studies  Students will used resources in career library and school library to research requirements and availability of jobs listed in No. (1) above.	The students will have detailed knowledge of jobs in the four different areas of transportation and how jobs in the transportation cluster influenced the growth of Cleveland
All students will be able to write at least four different ways in which the four different transportation areas can be related to Social Studies--the students will do this in no more than 20 minutes.		Invite speakers from Greyhound Bus Co., Cleveland World Port, Penn Central Railroad, Cleveland Transit Arrange a field trip to Hopkins International Airport and/or Greyhound Bus Station.	The students will have added knowledge and insights with which to continue assessing their personal and career goals

Have students prepare and Maintain bulletin boards, keep a notebook and/or submit reports on these jobs

## OCCUPATIONAL CLUSTER TRANSPORTATION

Social Studies 10, 11, 12	FILMS, FILMSTRIPS, AND TAPES	SOUND SLIDES DEVELOPED BY DVEP	SPEAKERS	FIELD TRIPS	CAREER LIBRARY
Films:	Block Operator	Contact:	Greyhound Bus Co.	Hopkins International Airport	Occupational Outlook Handbook
Careers in Transportation Seaport	Longshoremen Machinist	Department of Transportation--Federal Bldg.	Trans-Airport	Greyhound Bus Station	Chronicle Occupational Library
Filmstrips:	Trackmen	Pan American Air-Lines	Pan American Air-Lines	DOT	
Transportation Crisis	Truck Driver	Cleveland World Port--241-8004	Cleveland Transit System 621-8601	Pamphlets	
			Penn Central R.R. Terminal Tower	Brochures	
	Transportation by Water			SRA Kits	
	Transportation on by Air			Popeye Career Economics	
				People and Choices--Career Folios	

EVALUATION: Successful attainment of objectives (1) and (2) will be based on the ability of 85-90% of the students to write in detail or orally identify the duties, requirements, relationship to social studies, etc., of at least five jobs in each of the four different areas of transportation. (Land, air, water, rail).

## SUGGESTIONS FOR IMPROVEMENT OF UNIT:

## ADDITIONAL INSTRUCTIONAL AND RESOURCE MATERIALS:

## MATHEMATICS FROM GUIDANCE

We would like to point out a general area of importance to career development in which Mathematics teachers have much to offer. The general discipline involved in the study of Mathematics -- following a problem through to a successful conclusion -- analyzing, interpreting, speed, accuracy, spatial visualization -- is much needed in the development of most careers.

**AGRI-BUSINESS AND NATURAL-  
OCCUPATIONAL CLUSTER: RESOURCES  
SPECIFIC JOB:**

**SUGGESTED SUBJECT AREA:** Mathematics  
**SUGGESTED GRADE LEVEL :** 10, 11, 12  
**GENERAL OBJECTIVES :** (1) To introduce students to jobs available in agriculture and natural resources

- (2) To give students ideas about educational and training requirements and salary ranges
- (3) To teach how mathematics is used in some of these jobs
- (4) To assist students in determining the types of careers they may decide to pursue
- (5) To make students aware of occupational and educational opportunities by providing a broad base of career information and explanatory experiences in which to make wise career choices.

SPECIFIC BEHAVIORAL OBJECTIVES	VOCABULARY	LEARNING EXPERIENCES OR ACTIVITIES		DESIRED OUTCOMES
		ACTIVITIES	OUTCOMES	
The students will be able to identify, describe, and discuss the duties, requirements, etc., of the jobs listed in this unit.	Cutting Machine-Operator Draftsman Drill Operator Driller Extension Service-Worker Farmer (Diary) Geologist Horticulturist Machinist Mining Engineer Technician	Students will make bulletin board showing how mathematics relates to career in the Agri Business and Natural Resource Cluster.	The students will have a more positive attitude toward vocational education.	The students will be aware of jobs available in the Cleveland area and where to find them.
The students will be able to perform various math operations discussed in class.		Teach and discuss unit related to (1) problems of the farmer (2) input, output and profit and loss, (3) the petroleum industry.	Students will know how to perform some of the operations required in jobs discussed in this unit.	Students will have a more positive attitude toward self, work, and continuing education.
The students will be able to list a variety of ways in which jobs discussed in this unit relates to math.		Plan field trip to Holden Arboretum and the Standard Oil Company.	Post Test: Career types of problem-solving taught in this unit.	
The students will be able to list and discuss a variety of considerations that enter into career choices.				

**INSTRUCTIONAL AND RESOURCE MATERIALS**

<b>FILMS, FILMSTRIPS, AND TAPES</b>	<b>SOUND SLIDES DEVELOPED BY DVEP</b>	<b>SPEAKERS</b>	<b>FIELD TRIPS</b>	<b>CAREER LIBRARY</b>
<p>Films:</p> <p>Our Natural Resources</p> <p>Man Uses and Changes the Land</p>	<p>Cutting Machine Operator Draftsman Driller</p> <p>Farmer (dairy, livestock etc )</p> <p>Mechanic Horticulturist Technician</p>	<p>Contact: Standard Oil Company Speaker's Bureau 170 Midland Bldg Cleveland Ohio 575-5549</p>	<p>Contact: Holden Arboretum Standard Oil Company Company--Main Office</p> <p>Popeye Career Comics</p> <p>Occupational Outlook Handbook</p> <p>People and Choices Career Folios</p>	<p>Pamphlets Brochures SRA Kits</p> <p>DOT</p> <p>Chronicle Occupational Library</p>

**EVALUATION:**Successful attainment of objectives in this unit will be based on the ability of 80-85% of the students to (a) write in detail or orally describe at least 8 of the jobs listed in this unit, and write at least one way in which each of the jobs is related to math. (b) correctly solve at least 75-80% of post test math problems.

**SUGGESTIONS FOR IMPROVEMENT OF UNIT:**

Additional instructional resource materials:

## BUSINESS AND OFFICE OCCUPATIONS

### MATHEMATICS

#### General Information

List of job clusters will be given to each student.

The following meaning is to be given to the phrase "Teach a Unit":

The teacher will give background material and solve sample problems after which the students will be given problems to solve. Students will be told which kind of worker solves these particular kinds of problems. Questions will be answered during the teaching session.

A quiz is to be given after each specific type of problem solving is learned and a comprehensive test is to be given when the cluster is completed.

The following is to be included as one of the questions on each comprehensive test.

Choose a job within the cluster and give the following information about it:

1. Name and describe the duties of the job.
2. Tell whether the job is professional or paraprofessional, skilled or unskilled and tell whether it requires formal or on-the-job training.
3. Discuss salary ranges.
4. Tell how this particular job uses math, then describe and solve a sample problem.

The remainder of the test will be mathematical problems of the type taught in the unit.

Note: Ask guest speaker to include information as to whether there is both a professional and paraprofessional level, and whether there are skilled, semi-skilled and unskilled positions in the Business and Office Occupations Cluster. Salary ranges and demand and/or over-supply of workers in specific jobs should also be discussed.

**OCCUPATIONAL CLUSTER: BUSINESS & OFFICE OCCUPATIONS**  
**SPECIFIC JOB: TIONS**

**SUGGESTED SUBJECT AREA: Mathematics**

**SUGGESTED GRADE LEVEL : GENERAL OBJECTIVES :**

- (1) To acquaint students with some business jobs that regularly use Mathematics.
- (2) To introduce students to the type of Math used in these jobs.
- (3) To give students practice in some of these Mathematical activities.
- (4) To help students to understand that all educational cultural experiences affect personal development and career development.
- (5) To provide opportunities for students to examine personal and career goals.

<b>SPECIFIC BEHAVIORAL OBJECTIVES</b>	<b>VOCABULARY</b>	<b>LEARNING EXPERIENCES OR ACTIVITIES</b>	<b>DESIRED OUTCOMES</b>
The students will be able to list and describe various Businesses and Office jobs that depend on Math to some degree.	Accountant Advertiser Bookkeeper Cashier Clerk Electronic Computer Operator Office Machine Operator Receptionist Shipping & Receiving Clerk Secretary Stenographer Telephone Operator Typist	Show and discuss the film "Careers in Business and Office Occupations" Invite speaker to discuss information about training and education required for various business jobs. A question and answer period will follow.	The students will be more aware of how school subjects such as Math relate to various types of careers.
The students will be able to solve business related Math problems.		The teacher will teach a unit on business related mathematical problem solving: (a) budgets and percentages, (b) tax problems including take home pay, federal city, and state taxes, (c) profit-loss problems, making change, counting money etc...	The students will have a greater ability to describe the relation between specific vocational activities and real occupations.
Through classroom activities, films, speakers, etc. the students will be able to sample the operations and skills required in jobs listed in this unit.			The students will have a more positive attitude toward self, others, the world of work and continuing education.
The students will be able to list duties, requirements and where to find jobs listed in this unit.		Post test	

**OCCUPATIONAL CLUSTER BUSINESS & OFFICE OCCUPATIONS**

NATIONAL 10, 11, 12

FILMS, FILMSTRIPS, AND TAPES	SOUND SLIDES DEVELOPED BY DVEP	SPEAKERS	FIELD TRIPS	CAREER LIBRARY
Films:  Careers in Business and Office Education	Accountant  Cashier  Office Machine Operator  Personnel Staff  Secretary	Contact:  Case Western Reserve University  Speaker's Bureau 1701 Midland Bldg Cleveland, Ohio 575-5549	Contact:  Greyhound Computer Corp 2203 Superior Ave 861-1300	Pamphlets  Brochures  SRA Kits  Occupational Outlook Handbook  People and Choices Career Folios  Chronicle Occupational Library  DOT

EVALUATION: Successful attainment of objectives in this unit will be based on the ability of 85-90% of the students to write in detail or orally identify and describe 80% of the jobs listed in this unit. Teacher rating of post test will be that at least 85-90% of the students correctly answer 80% of post test math problems.

SUGGESTIONS FOR IMPROVEMENT OF UNIT:

ADDITIONAL INSTRUCTIONAL AND RESOURCE MATERIALS:

**OCCUPATIONAL CLUSTER: Construction**  
**'SPECIFIC JOB':**

**SUGGESTED SUBJECT AREA:** Mathematics  
**SUGGESTED GRADE LEVEL :** 10,11,12  
**GENERAL OBJECTIVES :**

- (1) To introduce students to some of the different construction jobs and types of construction, i.e. domestic, commercial, bridges, roadways, etc.
- (2) To introduce students to some of the materials used, salary ranges and training and educational requirements for specific jobs.
- (3) To introduce students to the types of mathematical problems solved or encountered by construction workers.
- (4) To develop a high degree of work habits and attitudes necessary for gainful employment.

<b>SPECIFIC BEHAVIORAL OBJECTIVES</b>	<b>VOCABULARY</b>	<b>LEARNING EXPERIENCES OR ACTIVITIES</b>	<b>DESIRED OUTCOMES</b>
The students will be able to list ways in which the jobs listed in this Unit are dependent on Mathematics.	Bricklayer Carpenter Cement Mason Electrician Laborer Millwright Painter Plasterer Plumber Roofers Sheet Metal Worker Teamster	Show and discuss films, "Careers in Building Trades" and "Building a House".  Discuss training and educational requirements for specific jobs, apprenticeships, beginning salaries for craftsmen and their helpers.	The students will have a greater ability to describe the relation between specific vocational activities and real occupations.
Through field trips, classroom activities and speakers, the students will be able to sample the operations and skills involved in a variety of construction occupations.		Students will have a more positive attitude toward vocational education.	
The students will be able to list and identify a variety of construction careers available in his/her community and cite factors that influence the selection of a career.		Discuss and relate school subjects to jobs: Shop Math, Wood and Metal Shop, Mechanical Drawing, etc.	The students will have a more positive attitude towards self, others and the world of work.
		Practice working problems related to construction. (Background work in area, volume, and board feet should be taught)	

Mathematics 10, 11, 12

COMPUTATIONAL CLUSTER: CONSTRUCTION

FILMS, FILMSTRIPS, AND TAPES	SOUND SLIDES DEVELOPED BY DVEP	SPEAKERS	FIELD TRIPS	CAREER LIBRARY
Films: "Building a Home" "Careers in Building Trades"	Bricklayer Carpenter Electrician Painter Plasterer Plumber Teamster	Contact: The Apprenticeship Information Center 579-7802  Recruitment and Planning Program 10609 Euclid Ave. 795-3900	Contact: The Apprenticeship Information Center 579-7802  The Urban League of Cleveland, 861-4200	Pamphlets Brochures SRA Kits Popeye Career Comics Occupational Outlook Handbook Chronicle Occupational Library People and Choices Career Folios DOT

**EVALUATION:** Successful attainment of objectives in this unit will be based on the ability of 80-90% of the students to correctly solve at least eight out of ten construction problems dealing with math, and write detailed descriptions of the duties, requirements, training, benefits, etc. of 85% of the jobs listed in this unit.

**SUGGESTIONS FOR IMPROVEMENT OF UNIT:**

**ADDITIONAL INSTRUCTIONAL AND RESOURCE MATERIALS**

**OCCUPATIONAL CLUSTER: Environmental Control**  
**SPECIFIC JOB:**

**SUGGESTED SUBJECT AREA:** Mathematics  
**SUGGESTED GRADE LEVEL :** 10,11,12  
**GENERAL OBJECTIVES :**

- (1) To let students know about some of the various jobs and professions within environmental control.
- (2) To inform students of the levels of employment, salary ranges and demand and/or over-supply for workers in specific jobs.
- (3) To make students aware of occupational and educational opportunities by providing a broad base of career information and explanatory experiences on which to make wise career choices.

<b>SPECIFIC BEHAVIORAL OBJECTIVES</b>	<b>VOCABULARY</b>	<b>LEARNING EXPERIENCES OR ACTIVITIES</b>	<b>DESIRED OUTCOMES</b>
The students will be able to list ways in which workers who studied this unit use Mathematics in their jobs.	Astronomer Chemist Geodesists Geophysics Hydrologist Radiation Seismiologist	Show and discuss transparencies dealing with soil depletion, flooding and pollution.	The students will have a greater knowledge of jobs available in the area of environmental control.
The students will be able to list and discuss the duties, requirements, etc. of various jobs dealing with environmental control.		Teach unit on meteorology (reading weather maps, temperature, extremes and averages).	The students will be aware of ways in which math can be used in any occupation.
The students will be able to perform some of the math skills required in various jobs related to environmental control.		Teach scientific notation and if possible, the use of slide rules for multiplication and division.	The students will know where to go to find information on any kind of job.
		Discuss the relationship between Metric and English units.	The students will have a more positive attitude toward self, school and continuing education.
		Teach scale measurements and topography map reading.	
		Students will study and complete problems dealing with ratios (include Mendelian ratios)	

FILMS, FILMSTRIPS, AND TAPES Films:	SOUND SLIDES DEVELOPED BY DVEP	SPEAKERS	FIELD TRIPS	CAREER LIBRARY
"Conserving Our Water Resources" "Crooked River Dies--Cuyahoga River"	Chemist Geologist Geophysicist Oceanographer	Contact:  The Environmental Protection Agency Cleveland, Ohio 333-7000	Natural History Museum  Water Filtration Plant	Brochures Pamphlets SRA Kits Popeye Career Comics Occupational Outlook Handbook People and Choices Career Folios Chronicle Occupational Library DOT
"Good Riddance Pollution"				

EVALUATION: Successful attainment of objectives in this unit will be based on the ability of 80-85% of the students to:  
 (a) list, in writing, at least three ways in which workers in the jobs listed in this unit use math,  
 (b) write detailed descriptions of duties, requirements, etc. of at least five environmental control jobs, and (c) solve at least seven out of ten problems dealing with the use of the slide rule, metric system and ratios, etc.

## SUGGESTIONS FOR IMPROVEMENT OF UNIT:

## ADDITIONAL INSTRUCTIONAL AND RESOURCE MATERIALS:

**HOMEMAKING AND RELATED  
OCCUPATIONAL CLUSTER: OCCUPATIONS  
SPECIFIC JOB:**

**SUGGESTED SUBJECT AREA: Mathematics**  
**SUGGESTED GRADE LEVEL : 10, 11 12**  
**GENERAL OBJECTIVES : (1) To give students information about various jobs, the salary ranges, training requirements and availability of jobs.**

- (2) To give students practice in working mathematical problems relevant to those jobs.
- (3) To provide opportunities for students to examine personal and career choices.
- (4) To develop a high degree of work habits and attitudes necessary for gainful employment.

<b>SPECIFIC BEHAVIORAL OBJECTIVES</b>	<b>VOCABULARY</b>	<b>ACTIVITIES</b>	<b>LEARNING EXPERIENCES OR</b>	<b>DESIRED OUTCOMES</b>
The Students will be able to correctly use a thermometer.	Chef Cook	Students will study unit on recipe measurements - this includes increasing and decreasing measurements.	Students will practice using and reading thermometers and measuring tapes.	The students will be knowledgeable about the duties, salaries, etc., of jobs discussed in this unit.
Students will be able to use the metric system.	Cutter Designer Dietitian		Teacher will teach unit dealing with time clocks, hourly workers and piece work rates.	The students will be able to list or discuss the basic skills and operations involved in jobs listed in this unit.
The student will be able to list and describe ways in which math can be used in careers listed in this unit.	Home Economist Marker		The class will discuss and complete problems dealing with measuring height and weight, using English and Metric units	Students will show more positive attitudes toward their career goals and continuing education.
The students will be able to identify requirements, duties etc., of jobs discussed in this unit and where to find these jobs.	Metric System Nutritionist		Post Test- Students will complete math related problems dealing with careers discussed in this unit.	Post Test- Students will complete math related problems dealing with careers discussed in this unit.
The students will be able to discuss factors that influence career choice,	Pattern Maker Tailor			

**Mathematics 10, 11, 12**

**OCCUPATIONAL CLUSTER : HOMEMAKING AND RELATED OCCUPATIONS**

FILMS, FILMSTRIPS, AND TAPES	SOUND SLIDES DEVELOPED BY DVEP	SPEAKERS	FIELD TRIPS	CAREER LIBRARY
Films "Cooking Measuring" "How to Measure for Your Dress" "Metric System"	Cook Cutter Designer Marker  Pattern Maker  Tailor	Contact; Metropolitan Jobs Council 1375 Euclid Ave Cleveland Ohio 861-6100  Occupational Outlook Handbook	Contact; Director of Modern Home Makers The Tom Davis Agency Cleveland Ohio 621-6093  People and Choices Career Folios  DOT	Pamphlets Brochures SRA Kits Popeye Career Comics  Chronicle Occupational Library

**EVALUATION:** Successful attainment of objectives in this unit will be based on the ability of 85-90% of the students to  
 (a) answer at least 85% of post-test problems dealing with the use of thermometers, the metric system etc., (b) write in detail or orally describe at least 80% of the jobs listed in this unit, and describe how math is used in these careers.

**SUGGESTIONS FOR IMPROVEMENT OF UNIT:**

**ADDITIONAL INSTRUCTIONAL AND RESOURCE MATERIALS:**

**OCCUPATIONAL CLUSTER: PUBLIC SERVICE**  
**SPECIFIC JOB:**

**SUGGESTED SUBJECT AREA:** Mathematics  
**SUGGESTED GRADE LEVEL :** 10 11, 12  
**GENERAL OBJECTIVES :** (1) To give students knowledge of the variety of jobs listed under public service.

- (2) To give students information about educational training requirements and salary ranges.
- (3) To give students practice in solving mathematical problems relevant to specific public service jobs.
- (4) To improve school achievement and motivation.
- (5) To assist students in assessing themselves at this stage in their development in terms of personal and career goals.

<b>SPECIFIC BEHAVIORAL OBJECTIVES</b>	<b>VOCABULARY</b>	<b>LEARNING EXPERIENCES OR ACTIVITIES</b>	<b>DESIRED OUTCOMES</b>
The students will be able to identify a variety of considerations involved in choosing a career.	Cable Splicer Coin Collector Fireman Load Dispatcher Meter Reader Policeman Stationary Engineer Stock Clerk Telephone Operator	Teach and encourage class participation on unit dealing with computing long distance phone charges.	The students will have knowledge of various mathematical concepts and operations.
The students will be able to list various ways workers discussed in this unit used math on their jobs.	The students will be able to compute monthly bills, change or convert recipe measurements, and convert from the English to the Metric System.	Teach unit on meter reading and computing monthly bills.	The students will be more aware of how knowledge and operations learned in class will help them on various jobs.
The students will be able to list annual salary to monthly, weekly and hourly rates	The students will have a knowledge of the requirements and operations involved in a variety of Public Service Jobs.	Discuss salary ranges and convert from annual salary to monthly, weekly and hourly rates	Post-Test

The students will be able to list and describe various public service jobs available in their communities.

**Mathematics 10, 11, 12**

**OCCUPATIONAL CLUSTER: PUBLIC SERVICE**

FILMS, FILMSTRIPS, AND TAPES	SCOUND SLIDES DEVELOPED BY DVEP	SPEAKERS	FIELD TRIPS	CAREER LIBRARY
<p>Films:</p> <p>Careers in Public Service</p>	<p>Cable Splicer Coin Collector Fireman Load Dispatcher Meter Reader Stationary Engineer Telephone Operator Stock Clerk Welding Engineer</p>	<p>Contact: Director of Public Service City of Cleveland 694-2231</p>	<p>Contact: Ohio Bell Telephone Co Cleveland Water Department (Div of Water and Heat) Municipal Light and Power Plant Cleveland Fire Dept Main Station</p>	<p>Brochures Pamphlets SRA Kits Popeye Career Comics Occupational Outlook Handbook People and Choices Career Folios DOT Chronicle Occupational Library</p>

**EVALUATION:** Successful attainment of objectives in this unit will be based on the ability of 85-90% of the students to  
 (a) write in detail or orally describe at least 8 out of 10 public service jobs and state how these jobs are related to math. (b) correctly answer 85-90% of post test mathematical problems.

**SUGGESTIONS FOR IMPROVEMENT OF UNIT:**

Additional INSTRUCTIONAL AND RESOURCE MATERIALS:

MATHEMATICS - PUBLIC SERVICE

POST TEST

GRADE LEVEL: 10,11,12

Match the following public service occupations with their minimum educational requirements:

<u>Occupations</u>	<u>Minimum Educational Requirements</u>
1. detective <u>c</u>	a. college degree
2. FBI Agent <u>a</u>	b. high school diploma plus special training
3. federal government examiner <u>a or b</u>	c. high school diploma
4. fire fighter <u>c</u>	d. less than high school
5. librarian <u>a</u>	
6. policeman <u>b or c</u>	
7. probation officer <u>a</u>	
8. telephone installer <u>c or b</u>	
9. telephone operator <u>c or d</u>	
10. service representative for public utilities <u>c</u>	

**OCCUPATIONAL CLUSTER: Transportation**  
**SPECIFIC JOB:**

**SUGGESTED SUBJECT AREA:** Mathematics  
**SUGGESTED GRADE LEVEL :** 10, 11, 12  
**GENERAL OBJECTIVES :** (1) To make students aware of the many jobs existing within the area of transportation.

- (2) To make students aware of the salary range in some of the occupations.
- (3) To give students information about educational and/or training requirements for specific jobs in the area of air, rail, water, or land transportation.
- (4) To provide opportunities for students to examine personal and career goals.

SPECIFIC BEHAVIORAL OBJECTIVES	VOCABULARY	LEARNING EXPERIENCES OR ACTIVITIES	DESIRED OUTCOMES
<p>Through class participation, research and observation of various transportation workers, the students will be able to sample some of the skills and operations required in various transportation careers.</p>	Airline Dispatcher Airplane Mechanic Air Traffic Controller Bus Driver Craftsman Flight Engineer Foremen Locomotive Engineer Motor Vehicle Mechanic Pilot - Copilot Steward Stewardess Taxi Driver Traffic Agents and Clerks	Give students a list of transportation occupations. Have each student choose a job they might like to hold and have them research the job.	The students will have some idea of the variety of jobs available in the area of transportation and whether he has an interest in this area.
<p>The students will be able to list a large number of jobs in the four different areas of transportation--they will also be able to discuss duties, requirements, training, salaries, job outlook, etc. of jobs in transportation.</p>		Students will form groups and each group will research jobs in the four different areas of transportation--class reporting and discussion will follow (reports should include training, educational requirements, duties, etc.)	The students will have a more positive attitude toward "real" occupations.
<p>The students will be able to assess and discuss their future career goals to some degree.</p>		Show and discuss films related to this cluster.	The students will have a knowledge of the requirements and operations involved in jobs discussed in this Unit.

FILMS, FILMSTRIPS, AND TAPES	SOUND SLIDES DEVELOPED BY DVEP	SPEAKERS	FIELD TRIPS	CAREER LIBRARY
<p>Films:</p> <p>"Careers in Transportation"</p> <p>"Working With Scale"</p>	<p>For air or rail transportation; contact: REA Express, 1325 St., Clair Avenue Cleveland, Ohio 241-1260</p>	<p>Contact: Cleveland Hopkins Airport</p> <p>The Greyhound Bus Station</p> <p>The Yellow Cab Company Cleveland, Ohio</p> <p>CTS</p>		<p>Pamphlets Brochures People and Choices Career Folios SRA Kits Occupational Outlook Handbook Chronicle Occupational Library DOT</p>

**EVALUATION:** Teacher evaluation of this unit will be based on the ability of 80-85% of the students to write detailed descriptions of duties, requirements, job outlook, etc. of 85-90% of the transportation jobs listed in this unit, and solve at least seven out of ten math problems dealing with transportation by land, rail, air or water.

## SUGGESTIONS FOR IMPROVEMENT OF UNIT:

## ADDITIONAL INSTRUCTIONAL AND RESOURCE MATERIALS:

## MATHEMATICS - TRANSPORTATION

### TRANSPORTATION-RELATED MATH PROBLEMS

GRADE LEVEL: 10,11,12

1. On any given day, the approximate number of flights scheduled at Hopkins International Airport by the major carriers are as follows:

TWA:	40 flights
United:	55 flights
Northwest:	35 flights
Eastern:	25 flights
American:	75 flights
Smaller commercial airlines:	<u>70 flights</u>
Total:	300 flights

- a. Of the 300 total flights scheduled, find the per cent utilized by each category above.
- b. Draw a bar graph to depict the above information.
2. As maintenance foreman for a Chrysler repair facility, you must check your men's payroll. Compute the following payroll:

NAME	HOURS WORKED	HOURLY RATE	SALARY
Jack Perkins	40	\$ 3.25	
Phil Jackson	38	3.35	
Joseph Johnson	39	3.55	
John Phillips	40	3.88	
Paul Anderson	37½	3.80	
Robert Andrews	35	4.25	
<b>Total</b>			

3. Enrichment

Conduct your own traffic or facility usage survey. Students may work in teams of two or three persons each. Collect data, organize it, and if possible, graph the results. You may make up your own survey, or use a suggestion below.

Some possible examples are:

- a. Conduct a traffic survey on a frequently used street. Record

## TRANSPORTATION-RELATED MATH PROBLEMS

GRADE LEVEL: 10,11,12

the number of cars, trucks and buses which pass you during a given time period (from 10 to 30 minutes). You may even want to record your data at different times to get a broader picture. Then organize your data in a chart and make a graph of it.

- b. Record the number of vehicles crossing a four-way intersection at which there is a traffic light. Follow the procedure outlined in (a) above, and then include your own observations as to whether the light is being efficiently used. For example, if one road is used much more frequently than the other, perhaps only a stop sign is necessary, or perhaps a longer light cycle for one street would be better.

MATHEMATICS - TRANSPORTATION

POST TEST

GRADE LEVEL: 10, 11, 12

1. Name any two occupations normally found in each of these transportation categories.
  - a. air
  - b. land
  - c. sea
  - d. rail
2. Using any of the eight occupations named above, or any other transportation occupation, list at least one job for each of the following educational levels:

Minimum Educational Requirement

college degree

high school diploma plus  
special schooling

high school diploma

less than a high school diploma

Occupation (sample answers)

air traffic controller

stewardess, ground radio  
operator

airline ticket agent

sky cap, mechanic

3. Match the following transportation occupations with their applicable minimum educational requirements:

- |                                    |               |  |
|------------------------------------|---------------|--|
| 1. air traffic controller          | <u>c</u>      | a. college degree                              |
| 2. airline pilot, copilot          | <u>c</u>      | b. some college work (no degree)               |
| 3. airline radio operator          | <u>d</u>      | c. high school diploma and<br>special training |
| 4. airline dispatcher              | <u>b</u>      | d. high school diploma                         |
| 5. airline stewardess              | <u>c</u>      | e. less than high school diploma               |
| 6. bus driver, local               | <u>e or d</u> |  |
| 7. airline traffic agent and clerk | <u>d</u>      |  |
| 8. bus driver, long distance       | <u>e or d</u> |  |
| 9. aerospace engineer              | <u>a</u>      |  |
| 10. flight engineer                | <u>b or c</u> |  |
| 11. airplane mechanic              | <u>c</u>      |  |
| 12. automotive mechanic            | <u>d</u>      |  |
| 13. railroad brakeman/conductor    | <u>e or d</u> |  |
| 14. travel agent                   | <u>d</u>      |  |
| 15. truck driver, local            | <u>e</u>      |  |
| 16. truck driver, long distance    | <u>e</u>      |  |
| 17. taxicab driver                 | <u>e</u>      |  |

## SCIENCE

## GUIDANCE

We would like to point out a general role which science teachers can play in a good career development program.

Since science and technology are causing very quickening changes in employment and career patterns, the science teacher is well equipped to help all students to appreciate these rapidly changing career patterns and the importance of good background preparation.

The scientific method, being the tool of the scientist, might well be applied to all facets of human endeavor. It is important that young people recognize problems and reach satisfactory conclusions. This is as important in career development as in any other area of life.

## SCIENCE

GRADE LEVEL: 10,11,12

### AGRI-BUSINESS AND NATURAL RESOURCES

#### I. Introduction

With the continual increase of the world's population, man will soon find that his supply of food and natural resources is not inexhaustable. Even today, we find extensive research going on, trying to increase food production and to better use our dwindling supply of natural resources. In both of these fields the need for scientifically trained workers is on the increase.

In the agricultural fields, because of the increased scale and complexity of modern farming, farmers are turning more and more to off-farm sources of technology. Thus, the number of people needed in agricultural related occupations is ever increasing. All fields of science are encompassed in these career opportunities. These careers run from agricultural engineers, to geneticists, to rural sociologists.

In the field of natural resources, career opportunities are found in a variety of interests. There are needs for engineers in the mining and natural gas processing occupations. The increased awareness of the shortage of natural resources will make available new opportunities for many different, yet science related, occupations.

Agri-Business and Natural  
Resources

**OCCUPATIONAL CLUSTER:**  
**SPECIFIC JOB:**

**SUGGESTED SUBJECT AREA:** Science

**SUGGESTED GRADE LEVEL :** 10,11,12

**GENERAL OBJECTIVES :** (1) To have the students become aware of the problems facing the world in both a shortage of food and resources, whether or not they choose a career in these fields.

- (2) To assist students in becoming aware of the career opportunities available in the area of agri-business and natural resources.
- (3) To dispel the belief that agriculture means "being a farmer".
- (4) To enable students to imagine how certain careers might help alleviate some of these problems.

<b>SPECIFIC BEHAVIORAL OBJECTIVES</b>	<b>VOCABULARY</b>	<b>LEARNING EXPERIENCES OR ACTIVITIES</b>	<b>DESIRED OUTCOMES</b>
After viewing films, class discussions and group research on Agri-Business and Natural Resource Occupations, each student will be able to orally discuss and list duties, requirements, job outlook, etc. of at least 85% of the careers discussed in this Unit.	Agricultural-Engineer Agricultural-Economist Entomologist Geneticist Geologist Horticulturist Microbiologist Mineralogist Natural-Gas Engineer Petroleum Engineer Soil Scientist Veterinarian	Pre-test Students will list careers which are related to agriculture and natural resources. Add to the students' list and show how science is directly related to the various careers listed.	The students will be more aware of the variety of interesting jobs in the area of Agri-Business and Natural Resources. The students will be more equipped to assess themselves in terms of personal and career goals. The students will have a more positive attitude toward self, others and the world of work.

## AGRI-BUSINESS AND NATURAL RESOURCES

SCIENCE 10, 11, 12	FILMS, FILMSTRIPS, AND TAPES	SOUND SLIDES DEVELOPED BY DVEP	SPEAKERS	FIELD TRIPS	CAREER LIBRARY
Films:	"Our Natural Resources"	Agricultural Economist Agricultural Engineer Geneticist Horticulturist Soil Scientist	Contact: The Ohio University Agricultural Division	Contact: The Wooster Agricultural Station, Wooster, Ohio	Brochures Pamphlets Occupational Outlook Handbook SRA Kits Popeye Career Comics People and Choices Career Folios Chronicle Occupational Library DOT

EVALUATION: Successful evaluation of objective one will be based on the ability of 85-90% of the students to write detailed descriptions or oral discussions of the duties, requirements, etc. of at least 85% of the jobs listed in this unit. Teacher rating of pre-test and post test will be that at least 80-85% of the students correctly answer 75-80% of pre-test items and 85-90% of the post test items.

## SUGGESTIONS FOR IMPROVEMENT OF UNIT:

## ADDITIONAL INSTRUCTIONAL AND RESOURCE MATERIALS:

## SCIENCE

GRADE LEVEL: 10,11,12

### BUSINESS AND OFFICE OCCUPATIONS

#### I. Introduction

Scientific research will prove to be of little value, even when directed by the most learned investigators and performed by the most skilled technicians, if records are not carefully and accurately kept, reports prepared, and final results made available to others. Here is the point at which a scientific secretary enters the picture.

Clerical assistants are first and foremost trained in the techniques and skills of secretarial work. It is possible to get such a job in science with no formal training in the sciences, but this inexperience may very well prove to be something of a handicap. Your chances of landing such a job will be much better if you have a working knowledge of the science.

**OCCUPATIONAL CLUSTER: Business and Office Occupations**  
**SPECIFIC JOB:**

**SUGGESTED SUBJECT AREA:** Science  
**SUGGESTED GRADE LEVEL :** 10,11,12  
**GENERAL OBJECTIVES :**

- (1) To help students gain a knowledge of business occupations related to science.
- (2) To inform the students of the basic requirements that workers in science oriented businesses should command.
- (3) To help students develop a greater understanding of the various aspects of the occupations related to them.
- (4) To help students understand the business qualifications for various jobs in the scientific field.

<b>SPECIFIC BEHAVIORAL OBJECTIVES</b>	<b>VOCABULARY</b>	<b>LEARNING EXPERIENCES OR ACTIVITIES</b>	<b>DESIRED OUTCOMES</b>
The students will be able to orally discuss at least 90% of the business jobs discussed in this Unit and how these jobs relate to science.	Bookkeeper Cashier Computer Programer File Clerk Medical Librarian Medical Secretary Receptionist Shipping and Receiving Clerk Typist	Arrange class activities that will provide students with the basic materials to supplement the curriculum as prescribed by the business department.	The students will be more aware of how people working in various scientific fields rely on the people skilled in business and office procedures.
85-90% of the students, upon the completion of the study of this Unit, will be able to orally cite or write detailed descriptions of at least ten Business and Office jobs that are related to science.		Conduct a series of lessons on the understanding of science and other science related terms.	The students will have added information and experiences on which to base their future career choices.
		Plan field trips to various medical and other science oriented businesses, emphasis will be placed on clerical and administrative jobs.	The students will be able to list and describe various scientific and business related careers.
		Invite a speaker from a local concern to speak to class and acquaint the students with first hand information about hospital and related enterprises.	

## BUSINESS AND OFFICE OCCUPATIONS

FILMS, FILMSTRIPS, AND TAPES	SOUND SLIDES DEVELOPED BY DVEP	SPEAKERS	FIELD TRIPS	CAREER LIBRARY
"Careers in Business and Office Occupations"	<p><b>Cashier</b> Office Machine Operator <b>Secretary</b></p> <p><b>Typist</b></p>	<p>Contact: The Sherwin Williams Chemical Plant--Public Relations Office</p>	<p>Contact: The Urban League of Cleveland--Public Relations Office</p>	<p>Brochures Pamphlets SRA Kits Occupational Outlook Handbook People and Choices Career Folios Chronicle Occupational Library DOT</p>

EVALUATION: Successful attainment of objective number one will be based on the ability of at least 85-90% of the students to write, in detail, or orally discuss the requirements, duties, etc. of 90-95% of the jobs listed in this unit and explain how these jobs are related to science.

## SUGGESTIONS FOR IMPROVEMENT OF UNIT:

## ADDITIONAL INSTRUCTIONAL AND RESOURCE MATERIALS:

## SCIENCE

GRADE LEVEL: 10,11,12

### CONSTRUCTION AND MANUFACTURING OCCUPATIONS

#### I. Introduction

Science can best be related to careers in construction and manufacturing by discussing various fields of engineering. Both the construction and manufacturing industries rely upon the engineer to convert resources into beneficial goods and services.

The construction engineers deal with the conversion of designs or plans into reality. He deals with the purchasing of materials, the equipment needed to be used and he must at all times consider the time and cost factor.

The manufacturing (Production) engineer plan, supervise and evaluate the making of whatever product or products their company provides. They deal with many technical phases of operation and test the manufactured product to insure that the standards or specifications are met. If the students' career choice is in these fields, the necessity of a good science background is unquestionable.

**OCCUPATIONAL CLUSTER: Construction & Manufacturing**  
**SPECIFIC JOB:**

**SUGGESTED SUBJECT AREA:** Science  
**SUGGESTED GRADE LEVEL :** 10,11,12  
**GENERAL OBJECTIVES :** (1) To help students gain a knowledge of the various, science related, careers in the construction and manufacturing fields.

- (2) To inform students of the various requirements that workers in these fields must meet.
- (3) To have students be able to understand the planning, research and testing that goes on before a product is put on the market.
- (4) To have the students be able to solve job related problems faced by career engineers in the construction and manufacturing business.

<b>SPECIFIC BEHAVIORAL OBJECTIVES</b>	<b>VOCABULARY</b>	<b>LEARNING EXPERIENCES OR ACTIVITIES</b>		<b>DESIRED OUTCOMES</b>
		<b>Pre-test</b>	<b>--</b>	
Upon completion of this Unit, at least 90% of the students will be able to list the sequence of events that would occur before a new building has been constructed and made ready for occupancy.	Aerospace Engineers Ceramic (nonmetallic) Engineers Civil Engineers Construction Electrical Engineer Industrial Engineer Manufacturing Mechanical Engineer Metallurgical Engineers Mining Engineers	Have the students make a list of products they use everyday and discuss how an engineer might have approached the production of these products.	Post test	The students will have a more positive attitude toward self, school and continuing education.
All students will be able to write or orally discuss the job requirements, duties, benefits, availability, etc. of at least 90% of jobs discussed in this Unit.		Show a film depicting how an engineer approaches a problem in construction or manufacturing a product.		The students will be aware of the requirements, training, etc. needed for various construction and manufacturing jobs. Students will also know where to go to seek information about these jobs.
		Students will make a list of products that will be needed in the future.		The students will be more equipped to assess themselves in terms of personal and career goals.
				Have students pick one of these future products and attempt to formulate a plan for the production of this futuristic product.

FILMS, FILMSTRIPS, AND TAPES	SOUND SLIDES DEVELOPED BY DVEP	SPEAKERS	FIELD TRIPS	CAREER LIBRARY
Films: "Careers in Industry" "Careers in the Building Trades"	Chemical Engineer Electrical Engineer Industrial Engineer Mechanical Engineer	Contact: The Apprenticeship Information Center 579-7802	Contact: The Republic Steel Company  The Jones & Laughlin Steel Company	Brochures Pamphlets SRA Kits Popeye Career Comics Occupational Outlook Handbook Chronicle Occupational Library People and Choices Career Folios DOT

EVALUATION: Successful attainment of objectives in this unit will be based on the ability of 85-90% of the students to write, in detail, or orally describe the duties, requirements, opportunities, etc. of at least five construction jobs and five manufacturing jobs. Teacher rating of pre-test and post test will be that 80-85% of the students correctly answer 70-75% of pre-test items and 80-85% of post test items.

## SUGGESTIONS FOR IMPROVEMENT OF UNIT:

## ADDITIONAL INSTRUCTIONAL AND RESOURCE MATERIALS:

## SCIENCE

GRADE LEVEL: 10,11,12

### ENVIRONMENTAL CONTROL OCCUPATIONS

#### I. Introduction

Would you like a job monitoring the health of the community? Are your grades in science good? Is your over-all school average good? Would you mind spending part of your working time giving talks to schools and civic groups? Would you like to participate in planning health programs?

Inevitably, scientists at some stage of their career become involved in research affecting the lives of others. A concern of the environment and how its neglect affect man today and what the consequences will be like in the future is a problem that we must prepare for.

Who are ecologists? Whether he focuses attention upon the individual, the population, or the community, the ecologist is primarily concerned with the whole ecosystem. He must have a thorough understanding of morphology, physiology, genetics, psychology, etc., before he can really function as an effective leader in a community.

The long range effects of mistreating natural phenomenon is the basis for managing the control of our surroundings. A large group of the scientists in this field explore for new sources of fuels. Some scientists perform basic research to increase scientific knowledge. Others work mainly in applied research and use the knowledge gained from this research to solve practical problems.

SCIENCE - ENVIRONMENTAL CONTROL

PRE-TEST

GRADE LEVEL: 10,11,12

1. What is Environmental Control?
2. Name some of the different jobs in Environmental Control.
3. Why is there a need for Environmental Control?
4. Name some animal or plant that we need to be more concerned about in Environmental Control.
5. What are some favorable and unfavorable results of Environmental Control?
6. What are some of the benefits in choosing a career in this field and in the profession?
7. Why is Environmental Control important?
8. What is conservation?
9. Is there a relationship between conservation and environmental control?
10. Does over-population create problems in our efforts to carry out environmental controls?

**OCCUPATIONAL CLUSTER: ENVIRONMENTAL CONTROL**  
**SPECIFIC JOB:**

**SUGGESTED SUBJECT AREA:** Science  
**SUGGESTED GRADE LEVEL :** 10, 11, 12  
**GENERAL OBJECTIVES :** (1) To introduce to the students the various career prospects in the environmental fields.

- (2) To inform the students of the requirements that are needed for careers in the environmental fields
- (3) To inform the students of the importance of the ecological fields, hopefully instilling an appreciation of these fields regardless of whether or not the students choose to prepare themselves for a career in ecology after high school.
- (4) To have the students possess the ability to resolve problems that are faced by ecologists in today's complex society.

SPECIFIC BEHAVIORAL OBJECTIVES	VOCABULARY	LEARNING EXPERIENCES OR ACTIVITIES	DESIRED OUTCOMES
Students will be able to orally discuss at least five different ways in which the advancements discussed in the activities have been both beneficial and detrimental to man and his environment.	Biologist Botanist Environmental Engineer Forester Game Warden  Geologist Park Ranger Soil Conservation	Pre Test  Students will list various scientific advancements and describe how the advancements have been both beneficial and detrimental to man and his environment.  Allow students to make suggestions and plans which would alleviate the detrimental effects of this new technology yet not hinder mankind's needed progress.	The students will have a greater knowledge of the duties, requirements etc., of environmental control.
At least 80% of the students will be able to identify and describe at least ten different occupations that have changed or developed recently in response to the need to improve man's use of the environment. With the aid of brochures, Pamphlets and Popeye Career Comics at least 80% of the students will be able to identify jobs in Cleveland.			The students will have a greater interest in their community and jobs that exist therein.
		Show a film that concerns itself with the problems (social and economic) that face people in environmental control positions.	The students will have a more positive attitude toward school and continuing education.
			The students will have a greater knowledge of the requirements and operations involved in jobs related to the environment.
			Post test

Science 10, 11, 12

OCCUPATIONAL CLUSTER: ENVIRONMENTAL CONTROL

FILMS, FILMSTRIPS, AND TAPES	SOUND SLIDES DEVELOPED BY DVEP	SPEAKERS	FIELD TRIPS	CAREER LIBRARY
Films:		Contact:	Contact:	
Science and Technology		The Republic Steel Corp P O Box 6778 Cleveland Ohio	Air Pollution Control Office 2735 Broadway Cleveland Ohio	Brochures
Face of the Earth				Pamphlets
Scientists At Work		The Cleveland Speaker's Bureau 574-4194	SRA Kits	

EVALUATION: Successful attainment of objectives in this unit will be based on the ability 80-90% of the students to write detailed descriptions or orally discuss at least 10 environmental control careers. Teacher evaluation of pre-test and post test will be that at least 80-85% of the students correctly answer at least 75-80% of pre test items and 85-90% of post test items.

SUGGESTIONS FOR IMPROVEMENT OF UNIT:

ADDITIONAL INSTRUCTIONAL AND RESOURCE MATERIALS:

## OCCUPATIONS RELATED TO SCIENCE

### HEALTH OCCUPATIONS

#### I. INTRODUCTION

The health fields offer a variety of careers to suit individual interests, talents and skills. More than 300 separate identifiable kinds of work are found among medical and health professions and occupations. Although some require a baccalaureate degree or more, the majority call for a shorter training period. For example, the community colleges offer associate degree programs in more than 40 health-related fields. Many other jobs need only high school graduation and on-the-job training.

#### II. HEALTH OCCUPATIONS

##### A. Earn While You Learn

Medical lab technician  
Certified lab assistant  
Pathologist assistant

##### B. The Therapies

Rehabilitation therapist  
Physical therapist  
Occupational therapist

##### C. Careers In The Health Field

Doctor  
Registered Nurse  
Practical Nurse  
Orderly  
Dentist

##### D. Emergency Technicians

Inhalation therapist  
Cardiopulmonary technician  
Medical Emergency Technician

##### E. Keeping Records

Medical Secretaries  
Medical Transcribers  
General Clerical Personnel

##### F. Communications

Medical Record Librarian  
Receptionist  
Executive Secretary

**OCCUPATIONAL CLUSTER: HEALTH OCCUPATIONS**  
**SPECIFIC JOB:**

**SUGGESTED SUBJECT AREA: Science**

**SUGGESTED GRADE LEVEL : 10, 11, 12**

**GENERAL OBJECTIVES :** (1) To develop the understandings of how to maintain and improve one's health and share in the responsibility for protecting the health of the community.

- (2) To utilize a scientific approach in solving problems dealing with society and human welfare.
- (3) To gain a better understanding of the meaning and purpose of health occupations and a truer sense of values.
- (4) To acquire salable skills in the health sciences which will enable students to assume a productive role in the economic world.

<b>SPECIFIC BEHAVIORAL OBJECTIVES</b>	<b>VOCABULARY</b>	<b>LEARNING EXPERIENCES OR ACTIVITIES</b>	<b>DESIRED OUTCOMES</b>
			Pre-Test
After engaging in classroom discussions and performing experiments relative to certain areas of health, at least 85-90% of the students will be able to write or discuss the duties, requirements, job description etc., of at least 80% of the health careers discussed in this unit.	Dietary Technician Dental Assistant Dental Hygienist Dentist Doctor Inhalation Therapist Laboratory Technician Medical Librarian Nursing aid Orderly Optometrist Physical Therapist X-Ray Technician	Reacher will lead discussion in explaining the various fields in the health cluster  Students will perform experiments related to field in the cluster (e.g. Blood analysis, urine analysis, job care for bed patients), discussion will follow.  Students will read and discuss various pamphlets, brochures, games etc., related to health careers	The students will have a more positive attitude toward school, continuing education and the world of work.  The student will be more aware of their abilities and interests and whether he would like to pursue a job in the area of health careers  The students will have a greater knowledge of the skills and operations involved in various Health Careers discussed in this unit.
As a result of reading pamphlets brochures, and performing experiments, at least 80% of the students will be able to perform some of the basic skills and the operations involved in any four of the occupations discussed in this unit.			Students will set up a career information center in the school or the science department.

## OCCUPATIONAL CLUSTER: HEALTH OCCUPATIONS

SCIENCE 10, 11, 12	FILMS, FILMSTRIPS, AND TAPES	SOUND SLIDES DEVELOPED BY DVEP	SPEAKERS	FIELD TRIPS	CAREER LIBRARY
Films:			Contact:	Contact:	
Health Careers	Dietitian	The Greater Cleveland Hospital Association	The Greater Cleveland Hospital Association		Brochures
Careers in Health (Cleveland Public Library)	Dentist				Pamphlets
	Doctor				SRA Kits
	Nurse				Occupational Outlook Handbook
	Physical Therapist				
	X-Ray Technician				Popeye Career Comics
					People and Choice Career Folios
					DOT
					Chronicle Occupational Library

EVALUATION: Teacher rating of this unit will be based on the ability of 80-85% of the students to successfully complete objectives (1) and (2). Teacher rating of pre and post test will be that at least 80-85% of students correctly answer 75-80% of pre test items and 80-85% of post test items.

## SUGGESTIONS FOR IMPROVEMENT OF UNIT:

## ADDITIONAL INSTRUCTIONAL AND RESOURCE MATERIALS:

## SCIENCE

GRADE LEVEL: 10,11,12

### HOSPITALITY AND RECREATION OCCUPATIONS

#### I. Introduction

The need for parks, forests and recreational areas increases yearly, as an ever growing population provided with the utmost in transportation continues to materialize, resulting in a greater demand for more places of leisure. This demand creates an even greater need for the protection and preservation of our precious natural resources.

The National Conference on State Parks lists over one hundred occupations for state park systems, and the same would be true of federal, county and city parks.

For the person with a desire to help restore, conserve and improve the resources of nature, and maintaining this form of recreation, there is a richly rewarding career in parks and recreation.

Hospitality and  
OCCUPATIONAL CLUSTER: Recreation  
SPECIFIC JOB:

SUGGESTED SUBJECT AREA: Science  
SUGGESTED GRADE LEVEL : 10,11,12  
GENERAL OBJECTIVES : (1) To help the students gain a knowledge of occupations related to recreation.

- (2) To inform the students of the various requirements of workers in the recreational areas.
- (3) To provide opportunities for the students to develop greater understanding of the various aspects of recreational occupations and how they relate to science.
- (4) To help reveal to the students the importance of careful career planning in accordance with interest, knowledge and developed skills.

SPECIFIC BEHAVIORAL OBJECTIVES	VOCABULARY	LEARNING EXPERIENCES OR ACTIVITIES	DESIRED OUTCOMES
All students will be able to write or list at least five different considerations that would enter into their personal career choices.	Archeologist Artist Biologist Forester Game Warden Landscape Architect Life Guard Naturalist Park Planner Park Ranger Recreation Leader Writer	Pre-test  Students will read and discuss materials related to recreation occupations.	The students will have a greater knowledge of Hospitality and Recreation jobs and where to find part-time and full-time jobs in this area.
As a result of small group interactions, research, class discussions and field trips, at least 85% of the students will be able to orally discuss or list the requirements, duties job outlook, etc. of at least ten of the thirteen jobs discussed in this Unit.		Provide for small groups interactions that will enhance the students' knowledge relative to positions held in park and recreational fields.	The students will be able to verbalize their awareness of the importance of early preparation for future career goals.

FILMS, FILMSTRIPS, AND TAPES	SOUND SLIDES DEVELOPED BY DVEP	SPEAKERS	FIELD TRIPS	CAREER LIBRARY
<p>Tapes:</p> <p>"Recreation Worker"</p> <p>"Park Director"</p>	<p>Contact: Federal Job Information Center Federal Building Cleveland, Ohio</p>	<p>Contact: Cleveland Metropolitan Parks Division Main Office</p> <p>The Thurgood Marshall Recreation Center</p>		<p>Brochures Pamphlets SRA Kits Popeye Career Comic Occupational Outlook Handbook People and Choices Career Folios Chronicle Occupational Library DOT</p>

EVALUATION: Attainment of objective one will be based on the ability of all students to list, in writing, at least four considerations that would enter into their personal career choices. Successful attainment of objective number two will be based on the ability of 80-85% of the students to write, in detail, or orally identify and describe at least 85-90% of the jobs listed in this unit. Teacher rating of pre-test will be that at least 80% of the students correctly answer 75-80% of pre-test items.

#### SUGGESTIONS FOR IMPROVEMENT OF UNIT:

ADDITIONAL INSTRUCTIONAL AND RESOURCE MATERIALS:

## SCIENCE

GRADE LEVEL: 10,11,12

### MARINE SCIENCE OCCUPATIONS

#### I. Introduction

Within fifty years, man will move onto and into the sea--occupying it and exploiting it as an integral part of his need for recreation, minerals, food, waste disposals, military and transportation operations and eventually for actual living space!

With such an expanding and as yet virgin job territory, it would be of benefit for the young person to consider a career in the marine sciences. Whether his interests lie in private industry or public service, new and exciting fields will be opening up in these fields. Man may be starting to turn away from his exploration of space and concentrate his efforts on the exploration of his own planet, the majority of which is the, as of yet, untapped regions of the oceans.

SCIENCE - MARINE SCIENCE

PRE-TEST

GRADE LEVEL: 10,11,12

1. What is oceanography?
2. Name some of the different jobs in oceanography.
3. Why is there a need for oceanography?
4. Have you ever been to Lake Erie?
5. Name five plants or animals or rocks that you found there.
6. What is the job of an oceanographer?
7. What benefits are there in an oceanographic career?
8. Do you know someone who is a biologist or chemist?
9. Name three marine plants or animals?
10. Why is the ocean important?

**OCCUPATIONAL CLUSTER: Marine Science Occupations**  
**SPECIFIC JOB:**

**SUGGESTED SUBJECT AREA:** Science  
**SUGGESTED GRADE LEVEL :** 10,11,12  
**GENERAL OBJECTIVES :** (1) To help the students know the various fields open in Oceanography.

- (2) To inform the students of the specific duties of and the requirements for careers in this Unit.
- (3) To inspire an appreciation in the students of the important role science will play in the new fields opening up in Oceanography.
- (4) To have the students be able to see the problems and formulate elementary solutions.

SPECIFIC BEHAVIORAL OBJECTIVES	VOCABULARY	LEARNING EXPERIENCES OR ACTIVITIES	DESIRED OUTCOMES
After reading and discussing the Popeye Career Comics on Marine Science occupations, at least 90% of the students will be able to orally discuss or write the duties, requirements, job outlook, etc. on 85% of the Marine Science jobs discussed in this Unit.	Biologist Marine Biologist Marine Engineer Marine Geologist Marine Photographers Oceanographers	Pre-test ----- Post Test  Have students present views on the need and possibility of man turning to the sea for his basic needs.	The students will be more equipped to assess themselves in terms of personal and career goals.  Students will be inspired to seek and read career material obtained from the guidance office, the library or any other source.  The students will be more knowledgeable about the duties, requirements, job sources, etc. of jobs discussed in this Unit.
Through class projects, films, research and class discussions, at least 90% of the students will be able to sample (in a general sense) at least three different skills and operations involved in activity number five.		Show a film which depicts a marine scientist in his daily routine.  Have the students work on a problem, the solution to which will be directly related to man's working in and with the oceans. (Refer to Popeye Career Comics--Marine Science)	

## MARINE SCIENCE OCCUPATIONS

FILMS, FILMSTRIPS, AND TAPES	SOUND SLIDES DEVELOPED BY DVEP	SPEAKERS	FIELD TRIPS	CAREER LIBRARY
Films: "Exploring the Ocean" "What's Under the Sea"	Marine Biologist Marine Geologist Marine Meteorologist Oceanographer	Contact: Case Western Reserve University, Dept. of: Geology, Biology, Chemistry, Physics	Contact: Natural Science Museum	Brochures Pamphlets SRA Kits Occupational Outlook Handbook Chronicle Occupational Library People and Choices Career Folios DOT

EVALUATION: Successful attainment of objective number one will be based on the ability of 85-90% of the students to write detailed descriptions of 85% of the Marine Science jobs listed in this unit. Attainment of objective number two will be based on the ability of 80-85% of the students to demonstrate any two operations involved in activity number five in this unit. Teacher rating of pre and post test will be that at least 80-85% of the students correctly answer 70-75% of pre-test items and 80-85% of post test items.

## SUGGESTIONS FOR IMPROVEMENT OF UNIT:

## ADDITIONAL INSTRUCTIONAL AND RESOURCE MATERIALS:

## SCIENCE

GRADE LEVEL: 10,11,12

### PUBLIC SERVICE OCCUPATIONS

#### I. Introduction

Approximately nine million people work in areas which may be classified as public servants. As the career's name indicates, the public servant is in constant contact with other people. It goes without saying therefore, that people in these occupations need a good background and knowledge of general health practices.

The application of science in this field is obvious. Certainly cooks, waiters, and waitresses need to possess a knowledge of communicable diseases. Career's such as policemen and firemen often are placed in situations where a knowledge of the physiology of the human body and of first-aid can be the determining factor in life or death. Occupations such as barbers and beauticians need a certain knowledge of the human body and the effects on it by different stimuli. It should now be obvious that a knowledge of the sciences plays an integral part in a public servant's career.

SCIENCE - PUBLIC SERVICE

PRE-TEST

GRADE LEVEL: 10,11,12

1. What does the term Public Service mean when it is applied to the field of science?
2. Name some of the different jobs in Public Service.
3. Have you ever used a public service related to the science field?
4. Why is there a need for Public Service Occupations?
5. How does the field of Public Service aid us in our diverse life styles?
6. Do you know someone who performs a Public Service in the science field?
7. What basic skills are needed in order to become employed in Public Service?
8. What future needs must a public service provide?
9. How would you evaluate a public service program?
10. What suggestions would you incorporate in the objectives of the Public Service Program?

**OCCUPATIONAL CLUSTER: Public Service  
SPECIFIC JOB:**

**SUGGESTED SUBJECT AREA:** Science      ↵  
**SUGGESTED GRADE LEVEL :** 10,11,12  
**GENERAL OBJECTIVES :** (1) To help students gain a knowledge of the various fields open in the public service area.

- (2) To let the students know the requirements for various occupations in the public service fields.
- (3) To develop in the student an awareness that the public servant needs a background in the sciences, due to the nature of the work.
- (4) To enable the students to use their scientific knowledge in possible job situations that might arise during a career as a public servant.

<b>SPECIFIC BEHAVIORAL OBJECTIVES</b>	<b>VOCABULARY</b>	<b>LEARNING EXPERIENCES OR ACTIVITIES</b>		<b>DESIRED OUTCOMES</b>
		<b>Pre-test</b>	<b>Post test</b>	
After participating in class discussions, reading pamphlets, brochures, etc., all of the students will be able to write or orally discuss and describe at least ten different public service jobs.	Barber Beautician Cook Fireman Nurses Nurses' Aide Policeman Practical Nurse Public Health-Officer Public Safety Aide Registered Nurse Stewardess Waiter Waitress	Have students list reasons why public servants need a good background and knowledge in physiology and health practices.	Point out to students additional public service occupations and how these jobs relate to science.	The students will be more aware of public service jobs in the city of Cleveland and where to find them.
All students will be able to list at least three different ways in which science is related to public service jobs.		Show and discuss a film dealing with public servants in action, pointing out instances where a knowledge of science is required in performing a specific job.	After this Unit, the students should have gained a knowledge of science and how it relates to public service jobs.	The students will have a greater knowledge of the interrelations between production, management and service areas of business and industry.
At least 80% of the students will be able to list or discuss job descriptions, places of employment, job outlook, etc. for 90% of the jobs discussed in this Unit.		Take field trip to a barber college and beauty school.		

FILMS, FILMSTRIPS, AND TAPES	SOUND SLIDES DEVELOPED BY DVEP	SPEAKERS	FIELD TRIPS	CAREER LIBRARY
"Career in Public Service"	Dog Warden Fireman Institutional Guard Policeman Public Safety Aide Supervisor Water Department	Jane Addams High School, Home Economics Department The Cleveland Fire Department, Main Station Cleveland Police Department, 621-1234	Contact: Jane Addams Vocational High School, Beauty Culture Department Cleveland Police Dept. 621-1234	Brochures Pamphlets SRA Kits Popeye Career Comics Occupational Outlook Handbook People and Choices Career Folios Chronicle Occupational Library DOT

EVALUATION: Successful attainment of objectives in this unit will be based on the ability of 80~85% of the students to: (a) write, in detail, or orally describe the duties, requirements, job outlook, places of employment etc. of at least ten of the public service jobs listed in this unit, and (b) orally discuss at least three ways in which science can be related to certain public service jobs. Teacher rating of pre-test and post test will be that at least 80-85% of students correctly answer 75-80% of pre-test items and 85-90% of post test items.

SUGGESTIONS FOR IMPROVEMENT OF UNIT:

ADDITIONAL INSTRUCTIONAL AND RESOURCE MATERIALS:

## BUSINESS EDUCATION

### Guidance

In addition to the function of imparting specific occupational information about business careers, the business education teacher is especially well qualified to develop the skills related to job application: How to type good application letters, how to apply for a job, and the like. Role played interviews, with emphasis on manners, proper dress, and voice modulation could be employed as a teaching technique.

Business education offers excellent training in the area of human relations. This is an important phase in the career development of all young people.

SUMMARY ON THE BUSINESS EDUCATION DEPT.  
AND HOW IT RELATES TO ALL CLUSTERS

In writing up the different subjects in Business Education and how they relate to the occupational clusters, it has been decided that all of the occupational clusters will have some type of office set-up in order to demonstrate how a business functions.

It is necessary to make students aware of the fact that typing, business, bookkeeping, shorthand, business machines, and Business English are the basic foundations not only for the world of work, but for family life as well.

(Example)

Family Budget--Typing of Letters--Taking Telephone messages, and last, but not least, adding machines to take care of income taxes at the end of each year.

OCCUPATIONAL CLUSTER: BUSINESS AND OFFICE  
SPECIFIC JOB:

SUGGESTED SUBJECT AREA: Bookkeeping

SUGGESTED GRADE LEVEL : 11, 12

GENERAL OBJECTIVES : (1) To help students gain a knowledge of the duties and requirements for jobs in the

Business and Office Occupational Cluster

- (2) To explore jobs related to Bookkeeping.
- (3) To develop a citizen with salable and marketable skills.
- (4) To explore the related jobs that can be found in Bookkeeping, as it relates to business and office work.
- (5) To develop a high degree of work habits and attitudes necessary for gainful employment.

SPECIFIC BEHAVIORAL OBJECTIVES	VOCABULARY	LEARNING EXPERIENCES OR ACTIVITIES		DESIRED OUTCOMES
		Pre-Test		
The students will be able to demonstrate their knowledge of proper record keeping by doing related volunteer work in their school, in a business firm or in a mock firm established in the classroom.	Accountant Assets Bookkeeper Cashier Liabilities Proprietorship Receptionist Secretary Shipping and Receiving Clerk Stenographer	Discuss the importance of record keeping in maintaining an organized home and office. Students will research a specific industry study methods of record keeping and why. (grocery store, insurance company, Dr., etc.) Invite a speaker from a local company to discuss the job opportunities available and related to bookkeeping.		The students will have a detailed knowledge of how to keep current and efficient records any why this is necessary.
The students will be able to cite detailed knowledge of the duties, requirements, opportunities in jobs listed in this unit.		Show the students how to keep complete records in a systematic fashion and where to find a job in the skills he has learned.		The students will have sufficient skills to hold a part-time or summer job doing work related to this cluster Students will have a more positive attitude toward vocational education

Post-Test

		OCCUPATIONAL CLUSTER: BUSINESS AND OFFICE		
11-12	FILMS, FILMSTRIPS, AND TAPES	SOUND SLIDES DEVELOPED BY DVEP	SPEAKERS	FIELD TRIPS
Films: Careers-Clerical	Accounting - Basic Procedures	Accountant	Contact:  Central National Bank of Cleveland (Subject, Banking Finances and Economics)	Contact:  Central National Bank of Cleveland, Ohio  SRA Kits  Popeye Career Comics  DOT  Occupational Outlook  Chronicle Occupational Library

EVALUATION: Teacher rating of objective (1) will be that 85-90% of the students will complete various classroom activities dealing with recordkeeping. Attainment of objectives (2) and (3) will be based on the ability of 85-90% of the students to write in detail or orally describe 90% of the jobs listed in this unit, and name at least one business establishment that employs individuals in the job areas listed. Teacher rating of pre test and post test will be that 80-85% of the students correctly answer 75-80% of the pre test items and 85-90% of post test items.

#### SUGGESTIONS FOR IMPROVEMENT OF UNIT:

ADDITIONAL INSTRUCTIONAL AND RESOURCE MATERIALS:

## BUSINESS AND OFFICE OCCUPATIONS

### BOOKKEEPING

GRADE LEVEL: 10,11,12

#### Pre-test

1. Name the various fields a bookkeeper could work in.

ans: Accounting firms, business and industry, government, teaching, independent practice.

2. Solve the problem below:

John Doe, a sales proprietor, runs a grocery store. He has \$7000 in bills per month, \$6000 of income each month. What is his profit or loss and what suggestion would you give him towards better management?

3. Classify the following unarranged accounts into the following three classifications:

(1) Assets

(2) Liabilities

(3) Ownership

cars, rent, water, gasoline, John Brown & Sons, Pete Miller, owner, clothing, house, building

#### Post Test

You are now in business for yourself. Set up the books for your hardware store.

\*Show all assets, liabilities, proprietorship, income, cost and expense.

BUSINESS AND OFFICE OCCUPATIONS  
BOOKKEEPING

Materials Needed

1. Data-Processing Lab:

- (a) Keypunch
- (b) Sorter
- (c) Correlator
- (d) Accounting Machine
- (e) Interpreter
- (f) Typewriter
- (g) Forms: Invoices, Statements, Purchase Orders
- (h) Accounting Dictionaries
- (i) Practice Sets
- (j) Cash Register
- (k) Punch Cards

**OCCUPATIONAL CLUSTER: BUSINESS AND OFFICE  
SPECIFIC JOB:**

**SUGGESTED SUBJECT AREA:** Business English

**SUGGESTED GRADE LEVEL :** 12

**GENERAL OBJECTIVES :** (1) To help the student gain a knowledge of occupations related to Business English

- (2) To give students the requirements needed to perform various occupations in Business English.
- (3) To enable students to understand how Business and Office occupations relate to Business English.
- (4) To assist students in understanding the qualifications for various jobs in the Business family.
- (5) To develop the area of human relations.

<b>SPECIFIC BEHAVIORAL OBJECTIVES</b>	<b>VOCABULARY</b>	<b>LEARNING EXPERIENCES OR ACTIVITIES</b>	<b>DESIRED OUTCOMES</b>
The students will be able to identify and describe some of his personal traits and ideals and relate them to his career interest.	Accountant Advertiser Bookkeeper	Discuss all phases of an interview such as (1) data sheet, social security, pen (pencil), typing eraser.	The students will have a greater understanding of how Business and Office Occupations relate to Business English
The students will be able to identify high school courses required for entry into business schools, colleges or jobs.	Business English Cashier	Develop skills related to job applications--Role-play interviews discuss manners, proper dress, voice modulation.	The students will have a more positive attitude toward Vocational education
The students will be able to demonstrate their skills and knowledge by (1) correctly comparing and writing business letters; (2) listing proper techniques and procedures for job interviews. (3) correctly completing a sample job application.	Electronic Computer Operator Receptionist Secretary Stenographer Typist	Introduce grammar for the purpose of business letter writing, enunciation and pronunciation, composing letters, arranging materials systematically and spelling.	The students will know proper procedures and techniques for getting and keeping a job
		Set aside an educational bonus day in which students will play cards with Business English vocabulary words.	The students will show more positive attitudes toward their Career goals and continuing education.

FILMS, FILMSTRIPS, AND TAPES	SOUND SLIDES DEVELOPED BY DVEP	SPEAKERS	FIELD TRIPS	CAREER LIBRARY
<p>Films:</p> <p>Do's and Don'ts of an Interview</p> <p><u>Sound Tapes:</u></p> <p>World of Work--Getting a Job ( 20 Tapes)</p> <p>Your Job Interview</p> <p>The Application</p>	<p>Contact:</p> <p>Whiting Business College</p> <p>Dyke College</p> <p>Urban League</p>	<p>Pamphlets</p> <p>Brochures</p> <p>SRA Kits</p> <p>Popeye Career Comics</p> <p>DOT</p>	<p>Occupational Outlook Handbook</p>	<p>Chronicle Occupational Library</p>

EVALUATION: Attainment of objectives in this unit will be based on the ability of 85-90% of the students to (a) correctly write and address two business letters. (b) write in detail or orally discuss the proper procedures and techniques for job interviews, (c) write detailed descriptions of 85% of the jobs listed in this unit, and (d) correctly complete at least two sample job applications.

#### SUGGESTIONS FOR IMPROVEMENT OF UNIT:

ADDITIONAL INSTRUCTIONAL AND RESOURCE MATERIALS:

## BUSINESS AND OFFICE OCCUPATIONS

### BUSINESS ENGLISH

#### I. Additional Activities or Experiences

1. Emphasize Communications: good neighbor games, listening games, reading, writing and word command games.
2. Students will make a business office bulletin board: (a) research the occupation, (b) learn the product, (c) show all phases of the business structure of the industry.
3. Invite a speaker from a local company.

#### II. Post test

Administer the SRA or the Kuder occupational interest survey to measure the students' abilities and interest.

#### III. Materials

1. Ten copies of English on the Job by Carlin and Halder
2. Records
3. Record Players
4. Tapes
5. Workbooks
6. Bulletin Board Paper
7. Stencils
8. Typewriter
9. Adding Machine
10. Paper

**Business and Office Occupations**  
**OCCUPATIONAL CLUSTER:**  
**SPECIFIC JOB : OFFICE MACHINE OPERATOR**

**SUGGESTED SUBJECT AREA: Office Machines**

**SUGGESTED GRADE LEVEL :** 12

**GENERAL OBJECTIVES :** (1) To help students gain a knowledge of occupations related to an office machine operator

- (2) To inform students of the duties, requirements and skills required for various office machine jobs.
- (3) To prepare the student for skills he will need such as spelling, reading, punctuating, speaking, composing, and transcribing on a dictaphone.
- (4) To give the students practical knowledge by requiring him to work with a department chairman.

<b>SPECIFIC BEHAVIORAL OBJECTIVES</b>	<b>VOCABULARY</b>	<b>LEARNING EXPERIENCES OR ACTIVITIES</b>	<b>DESIRED OUTCOMES</b>
The students will be able to cite detailed descriptions of the duties, skills and qualifications required for office machine operators and related Business and Office Occupations.	Dictaphone  Office Machine Operator	Pre-test  Students will list the various operations an office machine operator would perform on a machine (adding subtraction, multiplication, division).	The students will have a more positive attitude toward school and future employment.
The students will be able to perform the duties in an office machine area. Many students will have sufficient skills to obtain jobs in this area.		Students will work in groups to determine the need for positions listed in No. (1).	The students will know how to operate various machines used in this unit.
To show the difference between speed and accuracy, the students will be able to solve mathematical problems on paper and then on calculator or adding machine.		Show visual aids to point out the operations that were missed in the student listing.	The students will be aware of job sources in the Cleveland community and the world of work.
		Invite a speaker from a local company to talk to students on opportunities and skills needed to obtain this position.	

FILMS, FILMSTRIPS, AND TAPES	SOUND SLIDES DEVELOPED BY DVEP	SPEAKERS	FIELD TRIPS	CAREER LIBRARY
<p><b>Films:</b> Careers--Clerical Typewriter in Business</p> <p><b>Office Machine Operator</b></p>	<p>Contact: Local Company</p> <p>Cleveland Board of Education East 6th Street</p> <p>Quincy Woodhill</p>	<p>Contact: Local Office</p> <p>IBM</p> <p>Cleveland Board of Education East 6th Street</p> <p>Quincy Woodhill</p>	<p>Field Trips</p>	<p>Pamphlets Brochures</p> <p>SRA Kits</p> <p>Popeye Career Comics</p> <p>Occupational Outlook Handbook</p> <p>People and Choices Career Follios</p> <p>DOT</p> <p>Chronicle Occupational Library</p>

**EVALUATION:** Successful attainment of objectives (1), (2), and (3) will be based on the ability of 85-90% of the students to (a) write detailed descriptions of various duties, skills, etc., required for one interested in becoming an office machine operator. (b) correctly operate at least five different types of office machines--Teacher will observe students' ability to operate the machines (adding machine, calculator, duplicating machine, electric and manual typewriters). Teacher evaluation of pre test and post test will be that least 85% of the students correctly answer 75-80% of pretest items and 85-90% of post test items.

**SUGGESTIONS FOR IMPROVEMENT OF UNIT:**

ADDITIONAL INSTRUCTIONAL AND RESOURCE MATERIALS:

OCCUPATIONAL CLUSTER, BUSINESS AND OFFICE OCCUPATIONS  
Office Machine Operator

Additional Learning Experiences or Activities

Plan a field trip to a local office that is nationally known that depicts the operation, requirements and related jobs.

Have students solve mathematical problems on paper and then on the machine to show the difference between speed and accuracy.

Show students the various manual and electric machines and how they operate (rotary calculator, 10 key printing calculator, electronic adding equipment, full key adding and listing machines).

Each student will be assigned to a department with the machines to gain experience.

**Post-Test**

Materials Needed

1. Mimeograph Machine
2. Office Practice Sets
3. Transparencies
4. Stencils AB Dick
5. Dry Master
6. Dictaphone
7. Dictaphone tapes
8. Filing Kits
9. Business Law Texts
10. Legal paper 8½ by 13"

BUSINESS AND OFFICE OCCUPATIONS

OFFICE MACHINE OPERATORS

GRADE LEVEL: 10,11,12

Pre-test

1. Work out this problem for Company A on the 10 key and attach your tape to the answer:

Problem: Mr. Jones paid on his account \$43.75. He originally owed \$155.32.

2. Add the following unarranged numbers: 5675, 43702.02, 3785.99, .06, 357,  $\frac{1}{2}\%$ .

Post Test

1. Name the four basic operations on the adding machine.
2. Calculate the following problems on the 10 key, Full key, Rotary, Electronic Calculator given a five minute time limit.

1. 734572

5%

$\frac{1}{2}\%$

34782

532

Sub Total

47657

1000000000

Total

2a. 725 / 3747689

b. 1.72 / 75.342

3. 734562

x 9.76

4. 605.75

3.72

4.32

5.07

67.77

15002.03

(Find the Credit Balance)



**OCCUPATIONAL CLUSTER: BUSINESS AND OFFICE  
SPECIFIC JOB:**

**SUGGESTED SUBJECT AREA:** Shorthand  
**SUGGESTED GRADE LEVEL :** 11, 12

- GENERAL OBJECTIVES :**
- (1) To give students requirements for various occupations in which shorthand is used.
  - (2) To develop a high degree of work habits and attitudes necessary for gainful employment.
  - (3) To assist students in assessing themselves at this stages in their development in terms of personal and career goals.
  - (4) To help students develop a greater understanding of the various aspects of the Business and Office Cluster and how shorthand relates to them.
  - (5) To establish and maintain effective communication with business, industry, labor, and other community resources.
  - (6) To help students gain a knowledge of occupations related to Business and Office Occupations.

<b>SPECIFIC BEHAVIORAL OBJECTIVES</b>	<b>VOCABULARY</b>	<b>LEARNING EXPERIENCES OR ACTIVITIES</b>	<b>DESIRED OUTCOMES</b>
The students will be able to list a variety of places where Business and Office related jobs can be found.	Executive Secretary  Male Secretary  Secretary	Pre-Test  Introduce and discuss the major careers that shorthand offers (Secretary, executive secretary, shorthand reporter etc.).	The students will be aware of places in the Cleveland Community where Business and Office related jobs can be found.
The student will be able to perform certain duties as taking direct dictation, transcribing, composing letters and messages, operating duplicators and calculators and typing with speed and accuracy.	Shorthand Reporting  Stenographer	Show the nature of work shorthand has to offer men and women-- (a) Taking direct dictation (b) Transcribing (c) Operate duplicators and calculators. (d) Compose letters and messages (e) Typing with speed and accuracy.	The students will have a greater ability to describe the relation between specific vocational activities and "real" occupations
The students will be able to assess themselves in terms of personal and career goals.		Show visual aids on shorthand careers and have one day of the week devoted to proper work.	The students will be aware of the requirements and qualifications for jobs discussed in this unit.

## OCCUPATIONAL CLUSTER: BUSINESS AND OFFICE

FILMS, FILMSTRIPS, AND TAPES	SOUND SLIDES DEVELOPED BY DVEP	SPEAKERS	FIELD TRIPS	CAREER LIBRARY
Films:	Personnel Staff Secretary Stenographer	Contact: IBM or NCR	Contact: IBM or NCR	Pamphlets Brochures SRA Kits Popeye Career 'Comics
Just a Secretary				DOT
Receptionist				Occupational Outlook Handbook
How About of Fine Work				Chronicle Occupational Library

EVALUATION: Successful attainment of objective (1) will be based on the ability of 85-90% of the students to write a list of at least five business establishments where business and office jobs can be found. Attainment of objective (2) will be based on the ability of 85-90% of 11th graders to take shorthand dictation at 80 words per minute with a minimum of three errors and the same percentage of senior students to take dictation at 120 words per minute with a minimum of two errors. Teacher rating of pretest and post test will be that at least 80-85% of the students correctly answer 75-80% of pre test items, and 85-90% of post test items.

## SUGGESTIONS FOR IMPROVEMENT OF UNIT:

## ADDITIONAL INSTRUCTIONAL AND RESOURCE MATERIALS:

OCCUPATIONAL CLUSTER- BUSINESS AND OFFICE OCCUPATIONS  
SHORTHAND

Additional Learning Experiences or Activities

Have students solve human relations problems such as getting along with their neighbors, and everyday irritations that confront a human being.

Have each student work with a teacher in the school or in industry that would give him the related work experience needed.

**Post-Test**

## BUSINESS AND OFFICE OCCUPATIONS

### SHORTHAND

GRADE LEVEL: 10,11,12

#### Pre-test

Directions-Answer each question in a complete sentence.

1. Name five different occupations a shorthand student could enter.
2. What pay would you expect when you pass a test at:

<u>Words a Minute</u>	<u>Hourly rate</u>
80 wam _____	_____
90 wam _____	_____
100 wam _____	_____
110 wam _____	_____
120 wam _____	_____

3. What would you contribute to an office if you were hired?
4. Underline the following:

To what extent would you be willing to do the work to advance in the company. 70% 80% 90% 100%

5. If it were 80% or below what would you do with the other percent of your time?

#### Field Trip

To IBM or NCR

#### Post Test

1. You are now equipped to be a secretary for a lawyer. What duties can and will you perform?

OCCUPATIONAL CLUSTER: BUSINESS AND OFFICE

\* SPECIFIC JOB:

**SUGGESTED SUBJECT AREA:** Typing  
**SUGGESTED GRADE LEVEL :** 10, 11, 12  
**GENERAL OBJECTIVES :** (1) To give each student a thorough knowledge of the keyboard, parts of the machine and proper typing techniques to enable him to pursue a career in Business and Office Occupations.

- (2) To prepare the student for job demands of tomorrow and to enable him to meet the requirements and competition in the world.
- (3) To build the students' speed and accuracy in order that they may produce mailable work at the average expected rate.
- (4) To help students to be able to distinguish the various occupations a typist can pursue (e.g., junior typist, senior typist, clerk typist, secretary)
- (5) To acquaint the students with the various places of employment.
- (6) To help the students gain knowledge of the qualifications, advancements and requirements that relate to a typist in business and the office.

<b>SPECIFIC BEHAVIORAL OBJECTIVES</b>	<b>VOCABULARY</b>	<b>LEARNING EXPERIENCES OR ACTIVITIES</b>	<b>DESIRED OUTCOMES</b>
	Clerk Typist	Pre-Test	The students will have a more positive attitudes toward real occupations.
	Executive Typist Junior Typist Secretary	Have an executive typist come into the classroom and discuss the various duties and requirements and other pertinent information that may assist the class.	The students will continue to develop salable skills in the area of Business and Office occupations.
	Senior Typist Typist	Plan a trip to IBM to show students how secretaries perform in the offices and how they must produce given work each day.	The students will show more positive attitude toward their career goals and continuing education.
		Role-playing, Have each student demonstrate the role of a secretary	The students will be aware of various job available in the city of Cleveland
		Explain the parts of a typewriter and teach the keyboard by repeated drills of skill builders, reach-stroke practices, conditioning practices, speed and accuracy drills	The students will be able to correctly operate machines used in class.

# Typing 10, 11, 12

## OCCUPATIONAL CLUSTER : BUSINESS AND OFFICE OCCUPATIONS

FILMS, FILMSTRIPS, AND TAPES	SOUND SLIDES DEVELOPED BY DVEP	SPEAKERS	FIELD TRIPS	CAREER LIBRARY
<p>Films:</p> <p>Typewriter in Business</p> <p>Typing Skills--Building Speed</p> <p>Typing Skills--Daily Job Techniques.</p> <p>Right at the Typewriter</p>	<p>Typist</p>	<p>Contact: An executive Typist</p>	<p>Contact: IBM Multigraph --Typing Pool</p>	<p>Pamphlets Brochures SRA Kits Popeye Career Comics Occupational Outlook Handbook People and Choices Career Folios Chronicle Occupational Library DOT</p>

EVALUATION: Teacher evaluation of objectives in this unit will be based on the ability of 85-90% of the students to be able to write at least three considerations involved in their career choice, and write a detailed description or orally identify and describe all jobs listed in this unit. Teacher rating of typing skills will be that at least 70-75% of the 10th graders be able to type 35-40 words/min. with a minimum of five errors; 75-80% 11th graders will be able to type at least 45 word/min. with a minimum of three errors and 85-90% of 12th graders type at least 60-65 words/min. with a minimum of 3 errors. 85-90% of students should correctly answer 75-80% of pretest items and 80-90% of post test items.

SUGGESTIONS FOR IMPROVEMENT OF UNIT:

ADDITIONAL INSTRUCTIONAL AND RESOURCE MATERIALS:

**OCCUPATIONAL CLUSTER, BUSINESS AND OFFICE  
Senior High  
Typing**

**Additional Learning Experiences or Activities**

**Build endurance by giving only ten minute timings and time production work.**

**Give the students a chance to work at their own rate by assigning various jobs that will be done at a specific time, such as, Business forms, Accounting reports, envelopes, legal documents, manuscripts, letters, tabulations, carbons, stencils, masters, and composing their own messages.**

**See that each student has equal time on the manual and electric machines, and that each duplicates his own work with carbons, masters, and stencils.**

**Set up laboratory in which each student manages the lab for a week. In the lab, a small fee will be charged for typing work around the school**

**Post-Test**

## BUSINESS AND OFFICE OCCUPATIONS

### TYPING

GRADE LEVEL: 10,11,12

#### Pre-Test

1. List at least three jobs a person with typing skills might enter; explain the duties, requirements, etc. of any one of the three jobs listed.
2. List ten positive characteristics a typist should portray.
3. Produce the given materials in 35 minutes:
  - a. Medium, block letter on page 14.
  - b. Tabulate the three columns on page 23.
  - c. Type the master before you, a one page manuscript, and reproduce it.

#### Materials

1. Film
2. Charts
3. Tapes
4. Keyboard Chart (chalkboard size)
5. Mini keyboard for students
6. Stencils
7. Masters
8. Texts
9. Brushes to clean the typewriter
10. Posters

**OCCUPATIONAL CLUSTER: FINE ARTS & HUMANITIES**  
**SPECIFIC JOB:**

**SUGGESTED SUBJECT AREA:** Home Economics  
**SUGGESTED GRADE LEVEL :** 10, 11, 12  
**GENERAL OBJECTIVES :** (1) To enable pupils to become familiar with the kind of work involved in the job of interior design (or interior decorating).

- (2) To make students aware of personal and educational requirements demanded in order to qualify for a position in interior design.
- (3) To enable students to gain information concerning the routes or levels through which one must expect to travel in order to reach top positions in the area of interior design.
- (4) To gain knowledge concerning the better areas for location good positions in interior design, as well as, some specific job possibilities in close proximity and possible earning.
- (5) To expose students to material that will help them gain insight to the possible future out-look for a career in interior design.

<b>SPECIFIC BEHAVIORAL OBJECTIVES</b>	<b>VOCABULARY</b>	<b>LEARNING EXPERIENCES OR ACTIVITIES</b>	<b>DESIRED OUTCOMES</b>
	Interior Decorator	Pre-Test	The students will be aware of interior design and related careers available in the Cleveland community.
The students will be able to identify and describe the various duties, personal and educational requirements of careers in the area of interior decorating.	Interior Designer	Students will read publications on interior design careers.  Students will view visual aids discussing the duties, requirements, training, etc., in this career area.	Students will have detailed knowledge of the duties requirements, and the various jobs an interior decorator or interior designer might perform.
The students will be able to cite ways in which home economics can prepare one for interior design and related careers.		Invite speakers from local businesses to give up-to-date information on interior design careers.  Plan field trip to an interior design company.	The students will have a more positive attitude toward their career goals and continuing education.

**Home Economics 10, 11, 12**

**OCCUPATIONAL CLUSTER : FINE ARTS & HUMANITIES**

FILMS, FILMSTRIPS, AND TAPES	SOUND SLIDES DEVELOPED BY DVEP	SPEAKERS	FIELD TRIPS	CAREER LIBRARY
Films: Why Study Home Economics	Interior decorator Interior Designer Metropolitan Jobs Council -- National Alliance of Businessmen men 1375 Euclid Avenue, Cleveland, Ohio 861-6100	Contact: Metropolitan Jobs Council, The National Alliance of Businessmen 1375 Euclid Avenue, Cleveland, Ohio 861-6100	Contact: Metropolitan Jobs Council, The National Alliance of Businessmen 1375 Euclid Avenue, Cleveland, Ohio 861-6100	Pamphlets Brochures SRA Kits Popeye Career Comics Occupational Outlook Handbook
			Contact: Local Department Store May Company Halles	Decorating with Ingenuity (20 Transparencies) DOT

**EVALUATION:** Successful attainment of objectives in this unit will be based on the ability of 85-90% of the students to write detailed descriptions of the two jobs listed in this unit, and write at least three ways in which these careers are related to the study of home economics and fine arts & humanities careers. Teacher rating of pre test and post test will be that at least 80% of the students correctly answer 75-80% of pre test items, and on the post test gain at least a 10% accuracy increase over their initial scores on the pre test.

**SUGGESTIONS FOR IMPROVEMENT OF UNIT:**

**ADDITIONAL INSTRUCTIONAL AND RESOURCE MATERIALS:**

**OCCUPATIONAL CLUSTER: Health Occupations**  
**SPECIFIC JOB:**

**SUGGESTED SUBJECT AREA:** Home Economics  
**SUGGESTED GRADE LEVEL :** 10,11,12  
**GENERAL OBJECTIVES :** (1) To develop a citizen with salable and marketable skills.

- (2) To become aware of employment trends and outlook in Health occupations.
- (3) To create self-awareness of students' aptitudes.
- (4) To give students information relative to where various health careers can be found.

SPECIFIC BEHAVIORAL OBJECTIVES	VOCABULARY	LEARNING EXPERIENCES OR ACTIVITIES	DESIRED OUTCOMES
The students will be able to list and describe the duties, requirements, benefits, etc. of various health careers discussed in this Unit.	Dental Assistant Dentist Dietary Technician Dietitian Licensed Practical Nurse	Students will list and discuss, in detail, jobs such as that of dietitian, nutritionist, practical nurse, household workers for hospitals and old people homes and day care center.	The students will be able to further assess themselves in terms of personal and career goals.
The students will be able to list agencies in the greater Cleveland area that provide help to job seekers.	Medical Records- Librarian Medical Records- Secretary Nurse's Aide Nutritionist Physical Therapist Registered Nurse X-Ray Technician	Students will survey the need for jobs listed in #1 by looking at want ads, touring various institutions, and securing aid of employment agencies and school counselors.	The students will have more knowledge about health careers-- qualifications, requirements, duties, and how to prepare for a specific job in the health field.

Home Economics 10, 11, 12

FILMS, FILMSTRIPS, AND TAPES	SOUND SLIDES DEVELOPED BY DVEP	SPEAKERS	FIELD TRIPS	CAREER LIBRARY
<p>Films:</p> <p>"Health Careers"</p> <p>"Careers in Health"</p>	<p>Dentist Dietitian Doctor Medical Records - Librarian Medical Records - Secretary Nurse Nutritionist Pharmacist Physical Therapist X-Ray Technician</p>	<p>Contact:</p> <p>Dietitian at Cuyahoga Community College</p> <p>The Greater Cleveland Hospital Association</p>	<p>Contact:</p> <p>Cleveland Clinic Dietary Kitchen Health Museum</p>	<p>Brochures Pamphlets SRA Kits Popeye Career Comics Occupational Outlook Handbook People and Choices - Career Folios Chronicle Occupational Library DOT</p>

**EVALUATION:** Successful attainment of objectives one, two and three will be based on the ability of 80-85% of the students to: (a) write, in detail, or orally describe at least ten health careers, (b) list, in writing, at least five agencies in the greater Cleveland area that provide help to job seekers, and (c) list, in writing, at least five factors that would influence their career choice.

**SUGGESTIONS FOR IMPROVEMENT OF UNIT:**

**ADDITIONAL INSTRUCTIONAL AND RESOURCE MATERIALS:**

OCCUPATIONAL CLUSTER: Homemaking Related  
 SPECIFIC JOB: Butcher or Meat Cutter

SUGGESTED SUBJECT AREA: Home Economics  
 SUGGESTED GRADE LEVEL : 10,11,12  
 GENERAL OBJECTIVES : (1) To improve school achievement and motivation.

- (2) To enable students to become familiar with the work involved and skills required for butchers.
- (3) To expose students to materials that will help them gain insight into future job possibilities.

SPECIFIC BEHAVIORAL OBJECTIVES	VOCABULARY	LEARNING EXPERIENCES OR ACTIVITIES	DESIRED OUTCOMES
The students will be able to describe, in detail, occupational opportunities in the area of meat cutting and butchering.	Butcher Meat Cutter	The students will read and discuss pamphlets related to the duties, requirements, benefits, etc. of a job as a butcher or a meat cutter.	The students will have a better understanding of the need for continued education or training in various career areas.
Through observations, research and class discussions, the students will be able to sample the operations and skills required for one interested in becoming a butcher or meat cutter.		Students will listen to speaker from the Kroger Company.	The students will be familiar with the duties, requirements, benefits, etc. of jobs listed in this Unit.
The students will be able to list and describe various duties, personal qualifications, benefits, job outlook, etc. for a career as a butcher or a meat cutter.		Students will visit the Kroger Company to observe butchers and meat cutters in action.	Students will make a bulletin board dealing with meat cutting and related jobs.
			Students will write compositions and hold discussions on jobs listed in this Unit. (POST TEST)

FILMS, FILMSTRIPS, AND TAPES	SOUND SLIDES DEVELOPED BY DVEP	SPEAKERS	FIELD TRIPS	CAREER LIBRARY
		Contact:  The Kroger Company Cleveland, Ohio 248-1500	Contact:  The Kroger Company Cleveland, Ohio 248-1500	Pamphlets Brochures SRA Kits Popeye Career Comics Occupational Outlook Handbook Chronicle Occupational Library People and Choices Career Folios DOT

EVALUATION: Successful attainment of objectives in this unit will be based on the ability of all students to write detailed descriptions or orally discuss job descriptions, training, etc. of jobs as a meat cutter and a butcher. Teacher rating of the post test will be that 90-95% of students correctly answer 85-90% of post test items.

## SUGGESTIONS FOR IMPROVEMENT OF UNIT:

## ADDITIONAL INSTRUCTIONAL AND RESOURCE MATERIALS:

CLUSTER: HOMEMAKING RELATED OCCUPATIONS  
PRE-TEST FOR SRA 192

1. What does a butcher do in his work?
2. What skills should a butcher have?
3. Where do most butchers work?
4. What are the outlooks for the meatcutting trade?
5. What training is required of a butcher?
6. What is the earning potential of a butcher?
7. Is the meatcutting trade closed to any sex? Why? Why not?
8. Why is the advantage of being a butcher relevant to the needs of mankind?
9. What are the disadvantages of the same question above?
10. Does the future thoughts centered on taking our food from the ocean place any barriers on the meatcutting trade?

CLUSTER: HOMEMAKING RELATED OCCUPATIONS

SUBJECT: HOME ECONOMICS

Fact Sheet

SRA 192

GRADE LEVEL: 10,11,12

1. Butcher or Meatcutter--A trained specialist, either male or female, that prepares meat and fish for commercial or retail usage.
2. Training--Because of the influence of unions, a Journeyman Butcher must serve two to three years as an apprentice.
3. Employment--Slaughter Houses, packing houses, retail markets, wholesale markets and neighborhood markets employ the bulk of meatcutters.
4. Future--Meat, being the most single important item of the diet shows that there will always be a need for competent butchers.
5. Earnings--Union scale keeps the salary level of the meatcutter on a comparable level with any skilled trade--1963 - \$118.00 weekly.
6. Additional Information

Amalgamated Meatcutters and Butcher Workmen of North America  
2800 North Sheridan Road  
Chicago, Illinois

American Meat Institute  
59 East Van Buren Street  
Chicago, Illinois

OCCUPATIONAL CLUSTER: Homemaking Related  
 OCCUPATIONAL SUBJECT: Occupations  
 SPECIFIC JOB: Caterer

SUGGESTED SUBJECT AREA: Home Economics  
 SUGGESTED GRADE LEVEL : 10,11,12  
 GENERAL OBJECTIVES : (1) To develop a high degree of work habits and attitudes necessary for gainful employment.

- (2) To enable students to familiarize themselves with the duties, requirements, training, etc. involved in catering and related jobs.
- (3) To improve school achievement and motivation.
- (4) To expose students to material that will help them gain insight into the possible future outlook for catering and related careers.

SPECIFIC BEHAVIORAL OBJECTIVES	VOCABULARY	LEARNING EXPERIENCES OR ACTIVITIES	DESIRED OUTCOMES
The students will be able to evaluate catering careers in terms of its contribution to society, rather than its prestige stereotype.	Cake Decorator Caterer Cook	Pre-test  Students will read publications on catering and related job opportunities.  Use visual aids to discuss duties and opportunities in the catering field.	The students will be aware of catering jobs available in greater Cleveland.
The students will be able to list and describe duties, requirements, job outlook, etc. of jobs in the catering field.		Invite speaker from Cuyahoga Community College to discuss catering field.	The students will have a more positive attitude toward self, others and the world of work.
Through field trips, panel discussions and speakers, the students will sample the skills and operations involved in the catering business.		Plan panel discussion involving students who have completed further research in the catering field.	The students will have a better understanding of the interrelations between the production, management and service area of business and industry.
The students will be able to discuss and list various factors that influence career choice.			The students will be more aware of how school subjects relate to careers.

**Home Economics 10, 11, 12****HOMEMAKING RELATED OCCUPATIONS - Caterer**

FILMS, FILMSTRIPS, AND TAPES	SOUND SLIDES DEVELOPED BY DVEP	SPEAKERS	FIELD TRIPS	CAREER LIBRARY
Films: "Patterned for Dining" "Presentation of Food and Beverages"	Contact: Cuyahoga Community College--Hospitality Management Department or Hough Bakeries Dearing's Catering	Contact: Director of Hospitality Management Program Cuyahoga Community College or Hough Bakeries	Brochures Pamphlets SRA Kits Popeye Career Comics Occupational Outlook Handbook Chronicle Occupational Library or DOT	

**EVALUATION:** Teacher evaluation of pre-test will be that at least 85-90% of the students correctly answer 80-85% of the pre-test items. Evaluation of this unit will also be based on the ability of 80-85% of the students to write detailed descriptions or orally discuss the jobs listed in this unit and perform at least two activities required of each of the jobs listed.

**SUGGESTIONS FOR IMPROVEMENT OF UNIT:****ADDITIONAL INSTRUCTIONAL AND RESOURCE MATERIALS:**

HOMEMAKING RELATED OCCUPATIONS

HOME ECONOMICS

GRADE LEVEL: 10,11,12

Caterer Test

1. Basically, what does a caterer do in his daily work?
2. Is there any special training required of a caterer?
3. Name three types of caterers and describe their duties.
4. Is there any future for the field of catering?
5. Does the salary potential of caterers compare with most of the service industries and how?
6. Is catering more conducive to a person who wants to get ahead or better suited for a person with no particular insight in his future?
7. Will there always be a need for qualified caterers and how?
8. Has the catering service changed any in the past twenty years and how?
9. Compare a qualified caterer with a food store worker.
10. Where can a prospective caterer seek employment and why?

Hospitality and  
Recreation Cluster  
SPECIFIC JOB: Waiter - Waitress

**SUGGESTED SUBJECT AREA:** Home Economics

**SUGGESTED GRADE LEVEL :** 10, 11, 12

**GENERAL OBJECTIVES :** (1) To familiarize students with job requirements, benefits, and related information about careers as a waitress or waiter.

- (2) To improve student's attitudes toward "real" occupations.
- (3) To acquaint students with experience of the world of work.
- (4) To develop a high degree of work habits and attitudes necessary for gainful employment.

SPECIFIC BEHAVIORAL OBJECTIVES	VOCABULARY	LEARNING EXPERIENCES OR ACTIVITIES	DESIRED OUTCOMES
The students will be able to list and discuss a variety of considerations that enter into career choice.	Bartender Car-hops Counter-men Soda Fountain Worker Tray Girls Waiter Waitress	Students will discuss the duties, responsibilities, etc. of various hospitality jobs.  Use visual aids to give further information on jobs discussed in this Unit.  Plan a field trip to the Manners Hospitality School.	The students will have a more positive attitude towards "real" occupations and so called "low prestige" jobs.  The students will be more aware of how school subjects can be related to opportunities that exist throughout life.  The students will be knowledgeable about duties and requirements for jobs as a waiter or waitress and the student will know where to go to find these jobs.
Through class activities, field trips and role-playing, the students will be able to sample the skills and operations involved in performing the duties of a waiter or a waitress.			The students will be able to discuss several aspects of the dignity of work.  The students will be able to perform some of the jobs listed in this Unit. (waiter, waitress, etc.)

Post test

**Home Economics 10, 11, 12**

<b>FILMS, FILMSTRIPS, AND TAPES</b>		<b>HOSPITALITY AND RECREATION CLUSTER - Waiter - Waitress</b>	
<b>SOUND SLIDES DEVELOPED BY DVEP</b>	<b>SPEAKERS</b>	<b>FIELD TRIPS</b>	<b>CAREER LIBRARY</b>
Bartender Waitress	Contact:  Manners Hospitality School, Euclid Ave., East Cleveland, Ohio 44112  Cuyahoga Community College, Dept. of Hospitality Management	Contact:  Manners Hospitality School, East Cleveland, Ohio 44112	Pamphlets Brochures SRA Kits Popeye Career Comics Occupational Outlook Handbook People and Choices Career Folios Chronicle Occupational Library DOT

**EVALUATION:** Successful attainment of objectives in this unit will be based on the ability of 80-85% of the students to write detailed descriptions, orally discuss and perform two duties performed in each of the careers listed in this unit. Teacher evaluation of the post test will be that at least 85-90% of the students correctly answer 90-95% of post test items.

**SUGGESTIONS FOR IMPROVEMENT OF UNIT:**

**ADDITIONAL INSTRUCTIONAL AND RESOURCE MATERIALS:**

CLUSTER: HOSPITALITY AND RECREATION  
SUBJECT: HOME ECONOMICS

WAITERS AND WAITRESSES

1. Includes filling water glasses, write out order, figured totals, served food, clean tables, and refilled ketcup and mustard containers.

2. Training

Most beginning waiters and waitresses learn their work on the job. Training programs are starting to develop and are greatly needed. Manners hospitality schools are highly developed. High school vocational courses in food serving are found in most high schools. Poise, good grooming, and even public speaking can be useful.

3. Where to find jobs

Employers frequently hire teen-agers without previous experience to work as busboys and waitresses in luncheonettes, drive-ins, and other small restaurants.

Newspaper ads, employment agencies, and state employment bureaus, hospitals, department stores, and railroad and bus stations are also possible places of employment.

Summer resorts and hotels recruit students for help during vacation periods.

4. Earnings

Waiters and waitresses work from 40 to 48 hours a week (often split shifts), in the evening and Sundays and holidays.

Actual wages are not very high since a large part of their income is made up of tips. The average in 1963 was 93 cents for men and 83 cents for women. Tips vary, but generally they account for from  $\frac{1}{2}$  to  $\frac{2}{3}$  of the worker's income.

Advantages and Disadvantages

Variety of new experiences and new faces. Sometimes the waiter serves interesting and well known people. Much satisfaction is working as part of a smooth-running team of cooks, countermen, busboys, and waitresses.

Meals are usually given. Opportunities for employment are available to all ages, and on a part time basis. Uniforms usually provided.

Disadvantages

Sometimes work must be done under conditions of great pressure. Customers can be unreasonable and unpleasant. Working on your feet can be fatiguing. Workers may suffer slight injuries.

5. Related Occupations

Carhops, soda fountain workers, coundermen, tray girls.

6. Additional Information:

Council on hotels, restaurant, and institutional education: Statler Hall, Ithaca, New York

CLUSTER: HOSPITALITY AND RECREATION  
SUBJECT: HOME ECONOMICS  
POST TEST  
WAITERS AND WAITRESSES

GRADE LEVEL: 10,11,12

1. Why are salaries for waitresses usually low?
2. What are the general wages per hour?
3. What do you need to work as waiter and waitresses?
4. What does a waitress usually wear? On her hair? Feet?
5. What are some of her duties?
6. What are some of the advantages of working as a waitress?
7. What is one of the fringe benefits?
8. What are the chances of advancement for a busboy? Waiter?
9. What should a waiter look for while the customers are eating?
10. What are the personal requirements?
11. What training is needed? Where can you get it?
12. Where would you look for a job?
13. What are the opportunities for advancement?
14. What are usually the hours?
15. What are the earnings?
16. What are the advantages and disadvantages?
17. What related jobs are available?

Marketing and Distribution

OCCUPATIONAL CLUSTER:

SPECIFIC JOB: Frozen Food Industry  
Workers

SUGGESTED SUBJECT AREA: Home Economics

SUGGESTED GRADE LEVEL : 10,11,12

GENERAL OBJECTIVES : (1) To establish and maintain effective communication with business, industry, labor and other community resources.

- (2) To familiarize students with the duties, requirements, benefits, salaries, etc. of jobs in the food service industry.
- (3) To encourage interested students to enroll in Food Service and related programs in their school.
- (4) To develop a citizen with salable and marketable skills.

SPECIFIC BEHAVIORAL OBJECTIVES	VOCABULARY	LEARNING EXPERIENCES OR ACTIVITIES	DESIRED OUTCOMES
Those students working in co-op programs will be able to evaluate the program and describe it to others.	Arrangers Field Worker Filling Machine Operator Inspector Line Worker Mechanics Sorters Trimmers Vinery Operators	Students will read publication and other materials related to jobs in the frozen food industry.  Students will discuss requirements, job description, future development, etc. in the frozen food industry.  Visit one of the Kroger or A&P companies to familiarize students with frozen food careers and acquaint them with the setting in which this type of work takes place.	The students will have a greater ability to describe the relation between specific vocational activities and "real" occupations.  Most of the students will have had an opportunity to sample some of the skills and operations performed by food service workers.  The students will know the requirements, duties, training needed and various jobs available in the Frozen Food industry.

FILMS, FILMSTRIPS, AND TAPES	SOUND SLIDES DEVELOPED BY DVEP	SPEAKERS	FIELD TRIPS	CAREER LIBRARY
Films: "Careers in Sales" "Lets Keep Food Safe to Eat"	Marketing Researcher Statistical Analyst	Contact: A & P Food Stores Cleveland, Ohio 475-7700  The Kroger Company Cleveland, Ohio 248-1500  A Frozen Foods Processor	Contact: A & P Food Stores Cleveland, Ohio 475-7700  or  The Kroger Company Cleveland, Ohio 248-1500  Royal Ridge Poultry Farm, Ridge Road  Stoeffers Frozen Foods Solon, Ohio	Pamphlets Brochures SRA Kits Popeye Career Comics Occupational Outlook Handbook People and Choices Career Folios Chronicle Occupational Library DOT

EVALUATION: At least 85-90% of the students will be able to write, in detail, or orally describe the duties, training, job outlook, etc. of 90% of the frozen food industry jobs listed in this unit. All students enrolled in Co-op programs will be able to write a detailed description and explanation of the program in which they are receiving work training and experience.

#### SUGGESTIONS FOR IMPROVEMENT OF UNIT:

#### ADDITIONAL INSTRUCTIONAL AND RESOURCE MATERIALS:

## MARKETING AND DISTRIBUTION

### HOME ECONOMICS

GRADE LEVEL: 10,11,12

#### Frozen Foods Industry Workers

##### 1. Description of job.

Food is processed from the field to the frozen state. There are fieldworkers, viner operators, and mechanics, line workers, inspectors, filling machine operators. Some foods require arrangers (asperagus). Trimmers remove bruises, eyes, or deformities from produce before it's blanched. Sorters separate a crop by size or quality. For frozen eggs, egg breakers and egg separators.

##### 2. Requirements and Preparation

Most of the workers are girls and women. Skill is self required. Employees are trained on the job. High School Education desirable. College training desirable for refrigeration engineers, bacteriologist, food technologists chemists, physicists, biochemists, home economist, experimental lab workers and technicians.

##### 3. Advancement

Not too much hope for unskilled workers, but technically trained people will be advancing.

##### 4. Wages

Average wage for 40 hours week is \$75 to \$90. Overtime during harvest session. Some fringe benefits for full-time workers.

##### 5. Future

Research under way to find improved methods of freezing. Liquid nitrogen newest development. Future astronauts on routine flights to moon will certainly depend on frozen foods for appealing and flavorful nourishment.

##### 6. Additional Information

Institute of Food Technologist  
176 West Adams Street  
Chicago, Illinois 60603

NOTICE

Please note that although no materials are missing from this guide, all pages following page 449 are incorrectly numbered.

Page 449 should be followed by page 450, however, it is followed by page 500.

MARKETING AND DISTRIBUTION

HOME ECONOMICS

GRADE LEVEL: 10,11,12

Frozen Food Industry Workers

Post Test

1. What does the home freezer allow you or a working mother to do?
2. When did commercial freezing start in America, by whom?
3. What foods were first used, then what followed?
4. Where are most freezing and processing plants located.
5. What ready to eat items have become popular in the last few years?
6. What is the leading frozen fruit, and from where do we import it?
7. Describe three (3) freezing methods.
8. Trace the Lima Bean from the plant to the freezer.
9. What jobs are available in a freezing plant?
10. What are the educational requirements for working there?
11. What are the wages?
12. What are the chances of advancement?
13. What improvements are in store for the freezing industry?
14. Where can you write for more information on the freezing industry?

SUGGESTED SUBJECT AREA: Home Economics  
 SUGGESTED GRADE LEVEL : 10, 11, 12  
 GENERAL OBJECTIVES : (1) To improve school achievement and motivation.

- (2) To help students acquire the necessary information for job hunting, applications and interviews or post secondary training.
- (3) To help students develop an awareness of job possibilities in the greater Cleveland area.
- (4) To make students aware of the duties, requirements, job outlook, etc. for food store workers.
- (5) To develop a high degree of work habits and attitudes necessary for gainful employment.

SPECIFIC BEHAVIORAL OBJECTIVES	VOCABULARY	LEARNING EXPERIENCES OR ACTIVITIES	DESIRED OUTCOMES
The students will be able to discuss in detail the relationship between home-economics and jobs for which they can prepare as a student.	Carry-out-Boy Cashier Chain Store Checker Manager Open Air Market Stock Boy Wrapper	Students will make bulletin board dealing with various Food Store jobs.	The students will have a knowledge of the requirements and skills required for Food Store Workers.
The students will be able to list and discuss duties, requirements, job outlook, etc. of Food Store Workers.		Students will complete research and hold panel discussions on the duties, requirements, training, etc. for jobs listed in this Unit.	The students will be more equipped to assess themselves in terms of ability, interests and personal characteristics relative to future plans.
		Students will invite speakers from one of the major food chains in Cleveland. Plan field trip to local food company.	The students will have a more positive attitude toward self, others and the world of work.
		Role-play an interview for a food store worker.	
		Write composition on the Food Store career of your choice.	
		Post test	

## MARKETING AND DISTRIBUTION - Food Store Workers

FILMS, FILMSTRIPS, AND TAPES	SOUND SLIDES DEVELOPED BY DVEP	SPEAKERS	FIELD TRIPS	CAREER LIBRARY
Films:	Contact:	Contact:	Contact:	
"Salesmanship--Career Opportunities"	Account Manager Accountant Cashier Marketing Researcher	A&P Stores, Public Relations Department, Cleveland, Ohio, 475-7700	A&P Stores, 475-7700 Fisher-Fazio Foods 292-7000	Pamphlets Brochures SRA Kits Popeye Career Comics Occupational Outlook Handbook People and Choices Career Follies Chronicle Occupational Library DOT
		Fisher-Fazio Employment Manager 292-7000	Kroger Company 248-1500	
		The Kroger Company 248-1500	Pick-N-Pay Super Market, Inc. 17000 Rockside 587-7100	

EVALUATION: Attainment of objectives one and two will be based on the ability of 85-90% of the students to write at least two paragraphs describing and naming various jobs home economics may prepare them for and write detailed descriptions of duties, requirements, etc. of all jobs listed in this unit. Teacher evaluation of post test will be that at least 85-90% of students correctly answer 80-90% of post test items.

## SUGGESTIONS FOR IMPROVEMENT OF UNIT:

MARKETING AND DISTRIBUTION

HOME ECONOMICS

GRADE LEVEL: 10,11,12

Food Store Workers

1. Food store workers are employed in areas of service to the public.... carry out boys, checkers, wrappers, managers, stock boys, cashiers, etc.
2. Training is provided by the store or supermarket and the more responsible positions are taught in post high school institutions.
3. Employment areas, nationwide food chains, neighborhood stores employ the mass of food store workers and the opportunity for advancement is excellent for the person that shows interest in his work and wants to get ahead.
4. Outlook - the number of food store workers will not increase proportionately with population due to mechanization, yet there will still be a need for food store workers.
5. Earnings - wages vary according to geographical location and as of 1966 the range was a minimum of \$1.51 to \$2.48 hourly.
6. Additional Information

National Association of Food Chains  
1725 I Street N.W.  
Washington, D.C.

Retail Clerks International Association  
Connecticut Avenue N.W.  
Washington, D.C.

MARKETING AND DISTRIBUTION

HOME ECONOMICS

Food Store Workers

Post Test

1. Name three types of food store workers and tell what they do.
2. Where is one trained to become a food store worker?
3. Where can one look for a job as a food store worker?
4. Is there any room for advancement and how?
5. What are the earnings of a food store worker?
6. Has the food store worker changed in the past fifty years, how?
7. Compare an open air market to a chain store.
8. How many food store workers were there in 1966?
9. Where are most food stores located -- urban or suburban areas? Why?
10. Is there going to be an increase or decrease in the number of food store workers?

**OCCUPATIONAL CLUSTER: Transportation**  
**SPECIFIC JOB: Airline Stewardess**

**SUGGESTED SUBJECT AREA:** Home Economics  
**SUGGESTED GRADE LEVEL :** 10,11,12  
**GENERAL OBJECTIVES :**

- (1) To familiarize students with the kind of work involved in careers with the airlines.
- (2) To make students aware of personal and educational requirements and routes or levels through which one must travel if he is interested in a career with the airlines.
- (3) To improve school achievement and motivation.
- (4) To develop a high degree of work habits and attitudes necessary for gainful employment.

<b>SPECIFIC BEHAVIORAL OBJECTIVES</b>	<b>VOCABULARY</b>	<b>LEARNING EXPERIENCES OR ACTIVITIES</b>	<b>DESIRED OUTCOMES</b>		
			The students will be able to identify high school courses that would be helpful to one interested in working as a steward or stewardess.	The students will be able to role-play the requirements, duties, etc. of an airline steward or stewardess.	The students will be able to role-play correct interview and job application procedures.
Airline Stewardess	Pre-test	Students will make a bulletin board dealing with air transportation and the work of a stewardess.	Students will complete library research on the training, requirements, job outlook, etc. for a job as a stewardess.	Students will listen to an airline stewardess from one of the major airlines.	Students will view and discuss film on careers in air transportation.
					Post test (same as pre-test)

## TRANSPORTATION - Airline Stewardess

FILMS, FILMSTRIPS, AND TAPES	SOUND SLIDES DEVELOPED BY DVEP	SPEAKERS	FIELD TRIPS	CAREER LIBRARY
Films: "Air Transportation"	Contact: American Airlines Public Relations Dept., 861-8229	Contact: Cleveland Hopkins Airport	Contact: Airlines Training School, Division of Whiting College	Pamphlets Brochures SRA Kits Occupational Out- look Handbook Popeye Career Comics Chronicle Occupational Library DOT

EVALUATION: Teacher evaluation of pre-test and post test will be that at least 80-85% of the students correctly answer 75-80% of pre-test items and 85-90% of post test items. Successful attainment of objectives in this unit will be based on the ability of 85-90% of the students to write a detailed description of the duties, training, benefits, etc. of a career as an airline stewardess or steward and list, in writing, at least three high school subjects that would be beneficial to one in an airline career.

## SUGGESTIONS FOR IMPROVEMENT OF UNIT:

## ADDITIONAL INSTRUCTIONAL AND RESOURCE MATERIALS:

TRANSPORTATION

HOME ECONOMICS

GRADE LEVEL: 10,11,12

Information Sheet

AIRLINE STEWARDESSES

1. What an Airline Stewardess Does

Stewardesses are hired mainly to take care of the passengers. Pick up passenger lists and join flight crew for a briefing. Check food supply, reading material, rest rooms, and other facilities. Hostess stands at the door of the plane to greet passengers. Makes sure that seat belts are fastened and gives safety instructions. Helps care for small children and babies, distributes reading material and pillows and keeps the cabin in order. Serves beverages on some flights serves meals, Sometimes serves cocktails. Record keeping duties, minor medications. At the end of a flight, she bids the passengers good-by. Fills out flight records.

2. Requirements

Attractive looking girls with pleasant personalities. Poised, tactful, resourceful  
Applicants must be 20 to 27 yrs. old, 5'2" to 5'8", and must have a good vision, 140 lbs. maximum.  
Minimum educational requirement is graduation from high school. Some airlines require at least 2 years college.  
Sometimes airlines have special requirements, such as foreign language, and also that they be eligible and willing to fly abroad.

3. Training

Most airlines have their own training schools.

4. Starting and Advancing

Stewardesses can advance to jobs as first stewardess or purser, supervising stewardess, stewardess instructor, or recruiting representative. When they do not wish to fly any more, they can obtain jobs in sales or Public Relations.

**TRANSPORTATION-HOME ECONOMICS**  
**Information Sheet**  
**Airline Stewardesses**

**5. Working Conditions**

Irregular hours, may work nights and holidays, weekends.  
Their flying time is usually limited to eighty five hours a month  
in addition they spend 35 hours on ground duties.  
Salaries \$375 to \$460 a month plus flight pay.

**6. Advantages**

Opportunity to travel and meet many people.  
Living conditions are pleasant.  
Stewardesses enjoy good hotel accomodations when they make over-night stops.  
Generous vacation time, sick leave, and other fringe benefits.  
The stewardess is usually given travel permits at reduced fare on other lines, and this is extended to members of her family.

**Disadvantages**

Work is hard. She must handle heavy trays and serve full-course meals or snacks.  
Space is restricted, yet she must act skillfully and quickly. She is on her feet a good deal of her time.  
Stewardess must be on call, ready to work at inconvenient times.  
She works Sundays and holidays. Often she is away from home for days.

**7. Air Transport Association of America**  
1000 Connecticut Avenue - N.W.  
Washington, D.C.

**TRANSPORTATION**

**HOME ECONOMICS**

**AIRLINE STEWARDESSES**

**Post Test**

**GRADE LEVEL: 10,11,12**

1. What are the duties of an airline stewardess?
2. What are the requirements of applicants?
3. What is the maximum age requirement?
4. What is the minimum and maximum height and weight requirement?
5. What is the minimum age requirement?
6. Where can you get necessary training?
7. What are the chances of advancement?
8. What are the working conditions?
9. What are the salaries?
10. What are the advantages?
11. What are the disadvantages?
12. Where can you get additional information?

**HOME ECONOMICS  
INFORMATION SHEETS**

**Buyer**

**Cooks and Chefs**

**Dress Designers**

**Home Economist  
Interior Designer  
Models**

**Sewing Machine Operators**

**Upholsterers**

BUYER  
INFORMATION SHEET

1. A buyer may be employed by a department store, a specialty shop, a mail order house, or a large chain of stores. She may be a resident buyer which means that she remains permanently in a buying center--probably New York--studying the market and assisting visiting buyers. As a department store buyer, she will select merchandise to be sold by the store, develop sales techniques, keep accurate records, maintain a well balanced stock of goods and see that her department functions harmoniously.

The buyer is assisted by the merchandizing manager, directly above her, and by the assistant buyer who is usually delegated the more routine aspect of the job.

2. The work is complicated and demanding: An example of a day in the life of a buyer. The day may start with a telephone call from a manufacturer asking her to extend a delivery date. Afterward, she may practice a bit of public relations by personally handling a complaint from an irate customer. Then, she might handle plans for an approaching holiday sale or tour the stock room checking possible mark downs. Later she may go to the advertising department to read ads for tomorrow's newspaper. Finally after the store is closed, she may conduct a sales staff meeting.

Stress and tension are always present in the buyer's job. Retailing is highly competitive and success is measured according to the profit shown by each department.

A buyer travels extensively. She may even go abroad.

3. Physical requirements: A buyer should have a friendly, outgoing manner. She should be a mature poised person--one who inspires confidence in others. Consistant good judgement is vital too.
4. A college education is not necessary but it puts a beginner in a better position to succeed. If one attends college, she might major in merchandising, textiles, fashion design, advertising or several other related areas.
5. Earnings--Buyers earnings vary greatly according to the kind of store they work for. Executive trainees in large cities make from \$75 to \$90 per week. Experienced buyers often earn from \$10,000--\$30,000 yearly.

## HOME ECONOMICS

GRADE LEVEL: 10,11,12

### COOKS AND CHEFS

#### 1. Job Description

Chefs are usually trained in vocational schools in Europe and earn \$25,000 a year.

Cooks are trained in kitchens by chefs or in vocational schools. There are 3,000,000 cooks and chefs employed in the United States. Most chefs are men, but in schools and hospitals, the organization may be headed by a woman. More than half of all cooks are women--the highest paid jobs are held by men.

Head cook or chef is in direct charge of the kitchen. He supervises the entire staff. He may do no cooking himself, but he is familiar with all jobs done. He sees to the arrangement and garnishing of food. He should be familiar with various cuts and grades of meat and may be responsible for boning and trimming.

In a modern restaurant, the cook broils, bakes, roasts, and fries meat and other food. He may have his specialty.

Roast Cook--prepares all hot sauces, stews, and braised and sauteed meats.

Pastry Cook--bakes pies, cakes, and fancy pastries, puddings and custards, and ice cream as well.

Short Order Cook--works in drive-ins, lunch counters. They cook ready to order food such as hamburgers, minute steaks, and french fried potatoes.

Working Conditions: Some are modern and air conditioned, but some are hot and have small kitchens. The work is physically demanding, hours are irregular, and cooks are greatly in demand.

Requirements: Physical stamina to work on one's feet for long hours without rest, free of communicable disease, close attention to personal cleanliness, keen sense of smell and taste, good grasp of figures, (arithmetic), and Educational training.

### Cooks and Chefs

Informal on-the-job training, apprenticeship, and trade-school education.  
Graduates of trade schools have the best chance. The Culinary Institute of America in New Haven, Connecticut and the Washburne Trade School in Chicago, are two of the best. It is good to work in a restaurant as a dish worker or waiter.

### Earnings.

Daily Union rates in the city--\$14.60 for pantry to \$26.29 for assistant chef. Salary may reach \$200.00 with chefs in large restaurants reaching as much as \$25,000.

### Future Prospects

With the expansion of the quantity food service business, openings will increase in number.

### Additional Information

Hotel and Restaurant Employment & Bartenders  
International Union  
6 East Foruth Street  
Cincinnati, Ohio 45215

## HOME ECONOMICS

### DRESS DESIGNERS INFORMATION SHEET

GRADE LEVEL: 10,11,12

1. The dress designers is at the heart of the fashion industry and as such originates styles and fashion trends. A designer usually specializes in creating garments for certain age groups, such as children, misses or women.
2. Although dress designing is essentially a women's field, it offers opportunities for men as well.
3. The greatest number of dress designers work for manufacturer who make clothes on a mass production basis. Many work for specialty apparel shops or custom departments of large stores such as Marshall Fields, etc. Large numbers are employed by companies that manufacture accessories such as hand-bags, shoes and hats.
4. The fashion industry is the third largest industry in the U.S. The future outlook is excellent.
5. A dress designer must know how to draft pattern, cut fabrics, fit, drape and sew a garment. Unless she knows how to perform each step, she cannot supervise all the details or produce an original model.
6. Personal qualifications - talent and stamina. A strong sense of color and form, a flair for unusual design, must be able to get along well with people, must be flexible and willing to compromise, must have good business sense.
7. Educational Requirements. Firms employing designers usually expect them to have a college degree or from two-four years of training at a school specializing in dress design. Some firms conduct apprentice training programs.
8. Earnings: The beginning dress designer earns from \$65.00 to \$85.00 a week. As she gains experience and is given more responsibility, her salary may range from \$6,000 - \$20,000 year. Top level designers earn as much as \$50,000 - \$100,000 yearly.

HOME ECONOMIST  
INFORMATION SHEET

1. There is no field of work that offers a wider variety of career possibilities than home economics. It draws upon many sciences and arts to promote the health and welfare of individuals and families. Specifically, home economics is concerned with family relationships and finances, nutritional principles and food preparation, clothing and textiles, housing and household equipment.
2. The major career fields in home economics are (1) Teaching, (2) extension service, (3) business, (4) institutional management and dietetics, (5) health (6) welfare and (7) research.

More than half of all home economists are teachers. Most of them teach homemaking in secondary schools, many work in colleges and adult education programs, and some in nursery and elementary schools. College teachers train professional home economists, write textbooks, and do research.

The Federal Government employs home economists in a career known as Home Demonstration Agent.

In business, a home economist may work with a utility company demonstrating the use and care of household equipment, helping homemakers plan kitchen and laundry centers for their homes or she may work as test director in an experimental kitchen perfecting new types of ready-prepared foods or developing recipes. Manufacturer's consultants investigate consumer needs and brings them to the attention of the management. They also work out new ways of bringing the firms products to the attention of the public. Home Economists are designers, buyers, fashion co-ordinators and customer advisors in retail fabrics, clothing, household equipment, and home furnishing industries.

The Home Economist with a background in communications might obtain a job in publishing (magazines such as Vogue, Bazaar, etc.) with newspapers and book publishers. Also radio and television on womens' programs.

Home economists who have specialized in institutional management and dietetics are known as dietitians. They work in hospitals, restaurants, clubs, hotels, schools and the armed forces.

In public and private welfare work, the home economist advises families about nutrition, clothing and finances.

In research, the home economist may work for a university, hospital, government agency, or business.

3. Working Conditions:

Most home economists work 48 hours a week or less. Paid vacations are included in nearly all home economics' jobs.

4. Requirements:

Personal poise, a good cultural background, leadership, ability, accuracy, imagination, patience and keen powers of observation.

5. Education requirements: A bachelor's degree in home economics from an accredited college or university.
6. Earnings: \$7,200 to well beyond \$14,000 (1967 earnings)
7. Future outlook: Excellent.

Book: Home Economics As A Profession  
by Mildred Thurow Tate  
Webster Division - McGraw Hill

## INTERIOR DESIGNER

### INFORMATION SHEET

1. The creative work of interior designers and/or interior decorators enhances the attractiveness of our homes and other buildings. They plan the functional arrangement and color of interior space and coordinate the selection of furniture, draperies and other fabrics, floor coverings and interior accessories.
2. Formal training in this area is becoming increasingly important though in the past it has not been necessary. The minimum educational requirements today is a completion of a 2 or 3 year course at a recognized school or institute specializing in interior design. Also a 4-year college course leading to a bachelors degree with a major in interior design is a good background.
3. Designers work in private homes usually from furniture stores and large department stores. They also work in large commercial buildings, hotels, restaurant chains, antique dealers, some set stages used for motion picture and television. Some even design furniture and accessories to be used in interiors. Some work for their own private business.
4. Hours of work for decorators are long and irregular. Their work is usually adjusted to suit the needs of their clients.
5. Membership in either the American Institute of Interior Designers (AID) or the National Society of Interior Designers (NSID), both professional societies, is a recognized mark of achievement in this profession.
6. A slow but steady increase in employment of interior designers and decorators is anticipated through the 1970's.
7. Many interior decorators with average skills in the field earn only moderate incomes (according to 1967 information) from \$5,000 - \$7,500 a year. Talented decorators earn from \$12,000 - \$25,000 yearly. Many work on commission.
8. Additional information may be obtained from:  
National Society of Interior Designers, Inc.  
Suite 700, 157 West 57th Street  
New York, New York 10019

Excellent book - Doyle, Robt. Interior Design Copyright 1970

## INTERIOR DESIGNER

### Pre-Test

GRADE LEVEL: 10,11,12

1. What kind of work is done by an interior designer?
2. What are the educational qualifications required in order to become an interior designer?
3. Where (the kind of business and better locations in the U.S.A.) would an interior designer find employment?
4. What are some of the possible working conditions that might be expected in this kind of work?
5. What kinds of earnings would one expect in this kind of work?
6. What is the future employment outlook for an interior designer?
7. Where would one find additional information on careers in the area of interior design.
8. Is interior design geared for males or females?
9. Would positions in interior design be more available in large cities or smaller communities?

MODELS  
INFORMATION SHEETS

1. Yes, modeling is exciting, but what you may not know is that only about three hundred of the thousands and thousands of young women who earn their living as models ever get into the really glamourous part of it. Behind every glamour shot are hours of physical work under hot studio lights or out in the weather that leaves all but the hardiest cold.
2. New York is the best place to find jobs because it is where the magazines and fashion editors are--and because seventh avenue is the garment center of the world. Other cities have garment centers (notable Dallas, Chicago, St. Louis, Los Angles, Milwaukee, Cleveland, and Kansas City), but New York is the place where the high fashion models work.
3. A model should have other training because her fashion career as a model is short-lived. High school courses in home economics, dancing, drama, and music are good for developing poise and personality. Self improvement acquired by daily exercise, conscientious skin care, general cultural development, self discipline are all helpful for the world model. Almost all professional models agree that attending the average modeling school is almost worthless. People in business maintain that your time and money are better spent taking composites or pictures to a good modeling agency. Composites are black and white glossy photographs of you in several poses.
4. A good place to begin is with the department store.
5. High fashion models are frequently classified by type. The Ultra-sophisticated, The Gamin, The Outdoor American, The Chic Young Mother.
6. Earnings: Vary according to type and place. Some models make as low as \$10 and \$15 per hour where others as much as \$100 per hour.
7. Future outlook - Very short life. A model is old before 25 years of age.

SEWING MACHINE OPERATORS  
INFORMATION SHEET

1. These workers use electric sewing machines. The machines are heavier and faster than home models. They work on dresses, suits, shirts, sleepwear, underwear, gloves, etc. They also work on curtains and draperies, furniture, and automobile upholstery, leather, plastic and canvas products, etc.
2. Where jobs are found: Sewing machine workers work in garment factories. New York is the center of the nation's apparel industry. Other major garment manufacturing centers are Philadelphia, Chicago, Baltimore, Boston, Rochester (N.Y.) Cleveland, Cincinnati, St. Louis and Los Angeles.
3. The shops in which these operators work are generally clean, well ventilated and well lighted. There is a constant noisy hum and vibration from the operation of the many sewing machines. They work under constant pressure because they are paid according to the number of pieces they produce. The work week is thirty-five to forty hours weekly.
4. Requirements: There is no age limit--good eye sight is needed, finger dexterity and eye-hand-foot coordination. The work is not physically hard, but it is sedentary and monotonous.
5. Education and experience: Although there is no specific educational requirements, a high school education is preferred. Experience is seldom required, most shops are willing to train operators.
6. Jobs are found through newspaper ads and through direct application to a company employing sewing machine operators. Occasionally, an operator advances to a designer. An exceptional employee may become production manager.
7. Earnings: Earnings vary widely, depending on the job performed, the specific industry, the size and location of the plant, and the extent of the unionization.
8. Future outlook - very good

**UPHOLSTERER**  
**INFORMATION SHEET**

1. An upholsterer's duties covers all activities involved in covering a piece of furniture. Most factories and large custom shops divide work into sections: Making base, installing spring's and inserting fillings and padding and covering the piece with material.
2. Working conditions: The upholsterer must stand all day. There is quite a bit of stooping and bending involved. Must be able to handle sharp knives, shears, etc.
3. A 40 - hour week is standard. Workers are paid on a piece work basis and are often laid off during slack seasons. Wages vary --they are often paid by the hour.
4. A high school diploma is not necessary, but preferred. Courses in drafting, woodwork and operating a sewing machine are necessary. On the job training is provided in most shops.
5. Job prospects for skilled upholsterers are good.

**OCCUPATIONAL CLUSTER: COMMUNICATIONS AND MEDIA  
SPECIFIC JOB:**

**SUGGESTED SUBJECT AREA:** French, German, Latin

**SUGGESTED GRADE LEVEL :** 10, 11, 12

- GENERAL OBJECTIVES :**
- (1) To help students gain a basic vocabulary of French, Latin, and German.
  - (2) To help students gain a reading ability of simple texts in the foreign language using this basic vocabulary.

- (3) To help students gain some speaking ability by use of this basic vocabulary.
- (4) To help students gain comprehension of simple foreign language texts.
- (5) To help students understand language qualifications for various careers using foreign languages.
- (6) To give students information where language related careers can be found.

<b>SPECIFIC BEHAVIORAL OBJECTIVES</b>	<b>VOCABULARY</b>	<b>LEARNING EXPERIENCES OR ACTIVITIES</b>	<b>DESIRED OUTCOMES</b>
The students will be able to list or discuss ways in which foreign language courses are related to the world of work and name a career of their choice in which foreign language is used.	Courier  Customs Agent  Expert Manager  Foreign Correspondence  Guide  Interpreter	Pre-test  Have students list various careers where foreign language is needed.  Have students determine educational needs for success in these areas.  Show film or filmstrip showing foreign languages being used by Americans.	The students will have a more positive attitude toward self, others and the world of work.
The students will be able to list a variety of places in the Cleveland area where language related careers can be found.		Invite someone who uses foreign languages in his/her work to speak to the class.	The students will have a greater knowledge of the requirements and operations involved in a large number of jobs that would require knowledge of a foreign language.

		Write a simple column for school newspaper in French, German, and Latin	The students will show more positive attitudes toward their career goals and continuing education.
		Post-Test	

FILMS, FILMSTRIPS, AND TAPES	SOUND SLIDES DEVELOPED BY DVEP	SPEAKERS	FIELD TRIPS	CAREER LIBRARY
Films;		Contact: Foreign Language Dept. Case Western Reserve University	Contact: Case Western Reserve University	Pamphlets Brochures SRA Kits Popeye Career Comics
Why Study Foreign Languages Words and Their Meaning		Contact: Case Western Reserve University	Performances of the Metropolitan Opera Association	Occupational Exploration Kit DOT Occupational Outlook Handbook Chronicle Occupational Library

EVALUATION: Successful attainment of objectives in this unit will be based on the ability of 85-90% of the students to be able to (a) write a detailed description of at least three workers in which foreign language courses can be related to the world of work and list at least five careers that would require the knowledge of a foreign language. (b) correctly translate at least two paragraphs from a newspaper dealing with the foreign language taught in class. Teacher evaluation of pre test will be that at least 75-80% of the students correctly answer 70-75% of pre test items and 85-90% of post test items.

SUGGESTIONS FOR IMPROVEMENT OF UNIT:

## FOREIGN LANGUAGES

GRADE LEVEL: 10,11,12

### Music

Opera  
Radio  
Composing  
Singing

### Art

Artist  
Director  
Student  
Critic  
Collector  
Curator  
Designer

### Govt. Services

Foreign Service  
Detective Service  
Customs  
Army  
Navy  
Aviation  
Technical advising

### Dramatics

Opera  
Movies  
Legitimate Stager

### Interpreting

Banks  
Hotels  
Hospitals  
Immigration  
Police Court  
Tourist service  
Dept. store

### Travel

Tourist Interpreter  
Courier guide  
Explorer

### Literary Pursuits

Foreign Correspondence  
Book dealer  
Publisher  
Journalist  
Author

### Hotel Management

Writer  
Entertainer  
Information clerk

### Foreign Trade

Banks  
Export  
Import

### Communication

Cable  
Telegraph  
Telephone  
Radio

### Social Service

Settlement worker  
Missionary

### Commercial Pursuits

Advertising  
Commercial Aid  
Salesmanship  
Merchandising  
Clerking  
Shipping

### Secretarial Work

Social  
Business

### Costuming

Designer  
Dressmaker  
Milliner  
Stylist  
Buyer

### Professions

Medicine      Ministry  
Pharmacy      Mining  
Nursing      Teaching  
Geology      Research  
Engineering      Librarian  
Architect-  
ure  
Archeology

### Instructional Fixation

## **FOREIGN LANGUAGE**

**GRADE LEVEL: 10,11,12**

### **POST TEST**

1. Name five career areas where foreign language is used.
2. What are academic qualifications for these jobs?
3. What personal qualities are desirable that differ from other careers?
4. Where would one make inquiry about securing such a position?
5. If you had to choose a career using a foreign language or one in which a foreign language might be used, which would you choose?
6. Is there any special vocabulary you would want to learn that may not be included in our text?

**A P P E N D I X**

## DEVELOPMENTAL VOCATIONAL EDUCATION

Quincy-Woodhill Building  
229-5310

### Available Materials

#### Audio Visual Equipment

- 4 34 MM Cameras
- 3 Cassette Recorders
- 2 16 MM Projectors
- 3 Overhead Projectors
- 18 Sound-slide Projectors
- 1 Sound Filmstrip Projector

#### 16 MM Films

- |                                     |  |
|-------------------------------------|--|
| Careers in Transportation           | Careers in Skilled Services (Sales)      |
| Money in the Hand and Out           | Careers in Personal Services             |
| Horizons Unlimited (Health Careers) | Careers in Industry                      |
| Building a House                    | Careers in Business & Office Occupations |
| The Joys of Selling                 | The City                                 |
| Seaport                             | Our City Government                      |
| Careers in Machine Trades           | Trucks in Our Neighborhood               |
| Careers in Building Trades          | Dairy: Farm to Door                      |
| Careers in Communication            | Postman: Rain or Shine                   |

#### Filmstrips

- Who Are You?
- How Do You Get There?
- What Do You Like To Do?
- What is A Job?
- What Good Is School
- Motion Pictures
- Radio
- Television
- The Newspaper
- The Telephone
- Books
- Communicating Ideas
- Communicating Without Words

Filmstrips Cont.

Conservation For Today's America (Series With Sound)

- (a) Land Conservation Today
- (b) Water Conservation Today
- (c) Urban Conservation Today
- (d) Wildlife Conservation Today
- (e) Mineral Conservation Today
- (f) Forest Conservation Today
- (g) Soil Conservation Today

Sound-Slides

Airport	Bus
Railroad	Radio
Post Office	Television
Police Department	Ships
Fire Department	Home Economics
Newspaper	

Posters

- Business and Office
- Manufacturing
- Fine Arts & Humanities
- Marine Science
- Marketing & Distribution
- Environmental Control
- Hospitality and Recreation
- Agri-Business & Natural Resources
- Communication
- Transportation - Ships
- Manufacturing - Apparel
- Health Services

RICHARD'S ROSEN PRESS  
Careers in Depth Series Cont.

Journalism	Own Business
Landscape Architecture	Personnel Work
Law Enforcement	Physics
Librarian	Pilot
Marines	Pharmacy
Marketing	Photography
Medical Assisting	Physician
Medical Technology	Printing
Merchant Marine	Public Relations
Meteorology	Rabbi
Minister	Radiologic Technology
Model	Railroading
Museums	Real Estate
Music	Retailing
NASA	School Psychology
Naval Architecture	Secretary
Navy	Shorthand Reporter
Nuclear Energy Fields	Social Work
Nun	Television
Nursery Industry	Temporary Office Worker
Nursing	Traffic Management
Occupation Therapy	Translating and Interpreting
Oceanography	
Optician	
Optometry	

JULIAN MESSNER SERIES

Your Career in Advertising	Your Career in Medicine
Your Career in Aerospace Industry	Your Career in Nursing
Beauty As A Career	Your Career in Oceanology
Careers in Biological Science	On The Job Training
Your Career in Chemistry	Your Career in Parks & Recreation
Your Career in Civil Service	Your Career in Public Relations
Your Career in Computer Programming	Your Career in Selling
Disease Detectives	Skyblazers
Engineers Unlimited	Social Service
Guide To Professional Careers	Stagestruck (Theatre)
Fashion as a Career	Your Career in Teaching
Your Career in Film Making	The Teen-Age Diet Book
Your Career in Foreign Service	Your Career in Transportation
Careers in the Health Field	Your Career in the World of Travel
Careers for Home Economists	Your Career in TV and Radio
Careers in Horticultural Sciences	What About Teen-Age Marriage?
Careers in Hotel Management	You and Today's Troubled World
Your Career in Interior Design	Your Career-If You're Not Goint to College
Your Career in Journalism	Your College Education-How to Pay for It
Your Career in Law Enforcement	Your Handicap-Don't let it Handicap You
Careers in the Legal Profession	Your Personality and You
Careers in the Library World	

SRA Book Series

- I. Our working world- Families at work (text and records)
  - Our working world - Cities at work
  - Our working world - Neighbors at work
- II. Educational filmstrips and records
  - A. Conservation for today's america  
(4 records and 4 filmstrips)
- III. Career Opportunities
  - New York Life Insurance Company  
Box 51, Madison Square Station  
New York, N.Y. 10010 1958  
(a series of articles designed to help guide young  
people to a better future)

## Career Development Resource Materials

1. Occupational Exploration Kit  
Science Research Assoc. (Sr. High)  
259 W. Erie St.  
\$99.50 (approx price)
2. Language Development Kit
3. Work (Widening Occupational) Kit

Note: (The above are available at the Visual Aid Center and the Cleveland Public Library)

Popeye Career Comics  
King Features  
235 E. 45th St.  
N.Y. N.Y. 10017

Occupational Library, Chronicle, Moravia, N.Y.  
Based on D.O.T.  
DVEP Office

People and Choices Career Folios (Bernard C. Watson professor and Chairman Urban Educ. Temple University)  
Division of Urban Education  
a program to acquaint pre-high school students with career possibilities  
Harcourt Brace Jovanovich, Inc. N.Y.

Sound Filmstrips  
Guidance Association of Pleasantville, N.Y.

I People who help others

Filmstrips:

- A. Physical Therapist
- B. Day care worker
- C. Community Organizer
- D. People who help others

II People who work in science

Filmstrips:

- A. People who work in science
- B. Recording Engineer
- C. Laboratory Technician
- D. Ocean Life Scientist

III People who make things

Filmstrips:

- A. People who make things
- B. Aircraft assembler
- C. Chef
- D. Model builder

IV People who create art

- A. People who create art
- B. Puppeteer
- C. Musician
- D. Designer

V People who influence others

Filmstrips:

- A. People who influence others
- B. Model (homemaking)
- C. Creative director (art)
- D. County agent (horticulture)

VI People who organize facts

- A. People who organize facts
- B. Bakery fore-woman
- C. Automotive researcher
- D. TV sports editor

ADDITIONAL MATERIALS AVAILABLE IN THE  
DEVELOPMENTAL VOCATIONAL EDUCATION OFFICE

I. Posters:

1. They set their sights on careers at sea
2. Leisure and restaurants
3. Where people work
4. Trades and industrial
5. Home economics
6. Business education - General

II. Tapes (the world of work)

1. On the job (20 tapes)
2. Getting a job (20 tapes)
3. Cross - Vocational skills and information (20 tapes)

III. Games

1. Travel Connection
2. Transportation
3. Riddle your way

## DEVELOPMENTAL VOCATIONAL EDUCATION PROGRAM

### VISUAL AIDS LIST

#### Careers in the Building Trades. 26 Minutes

Easy-to-follow language and lively action demonstrate some of the tasks carried on in the various trades practiced by the largest group of skilled workers in the nation.

#### Careers in Business and Office Occupations. 25 Minutes

Helps youngsters develop an understanding of what is required in office occupations. A number of these occupations were unknown only a few years ago.

#### Careers in Communications. 30 Minutes

What do workers in this essential area do? The film gives a close-up look at various opportunities available and some of the skills and talents required.

#### Careers in Industry. 26 Minutes

Ranges over some of the many opportunities American industry provides with a closer look at some specific occupations. It also emphasizes importance and satisfactions of jobs in this area.

#### Careers in Machine Trades. 29 Minutes

Portrays some of the skilled trades involving use of powerdriven machinery. The program relates the occupation to young people's own interests and future.

Careers in Personal Services. 29 Minutes

Looks at the jobs of those, from firemen and policemen to beauticians and barbers, who want to work with people. It demonstrates their role in making life safer and pleasanter.

Careers in Sales--"The Joys of Selling". 26 Minutes

Every industry, business, and community employs sales people. So, the variety and opportunities are limitless. The film explores some of the directions young people with a bent for selling can follow.

Careers in Skilled Services. 25 Minutes

The people who install, maintain, and repair automobiles and machinery in homes, offices, and factories keep the nation running. The program shows some of the talents and skills used in a wide field with a shortage of trained personnel.

Careers in Transportation. 24 Minutes

These workers help move passengers and goods over highways, railways, airways, and seaways across continents and oceans, or inside cities and communities.

How Do You Get There. 26 Minutes

Here are the tips youngsters need on how to start looking for a job--newspaper ads, employment agencies, etc; how to apply and how to approach an interview. There is also information on technical courses at two-year colleges, apprenticeships, and on-the-job training.

Airplanes Work for Us. 11 Minutes

Depicts some of the common and uncommon uses of aircraft, pointing out that in addition to the carrying of passengers and freight, airplanes and helicopters are used for fire patrol, rescue work, weather patrol, construction of power lines and crop dusting. Describes air to ground communication and shows many auxiliary jobs other than the actual piloting of aircraft.

Building a House. 11 Minutes

Shows the main stages in building a house and pointing out the importance of each workman's special skill in following the architect's plans.

The City. 11 Minutes

Features a complex modern city with private homes, apartments, office buildings, schools, stores, and factories. Pictures the major transportation facilities, the huge suburban sprawl, the city's elected governmental body, and the city departments such as the fire and police departments.

Dairy Farm to Door. 11 Minutes

Presents the story of milk production and processing showing views of the dairy farm, the creamery, the distribution of processed milk and other dairy products to the home and market.

Exploring the Ocean. 11 Minutes

Uses drawings, diagrams, animation, and photographs of the ocean floor to reveal the wealth of the ocean in minerals as well as in plant and

animal life. Shows the work of oceanographers and describes the part played by the water cycle in depositing minerals in the ocean.

Industry. (filmstrip)

Discusses the growth and importance of industry in New England and describes various industries such as shoes, textiles, hardware, paper hats, silverware, firearms, electronics and others.

Money in The Bank and Out. 15 Minutes

Explains how a bank helps the community by keeping money in circulation and explains such procedures and terminology as deposits, checks, interest, loans, and money flow.

Our City Government. 10 Minutes

Views the urban community and its government. Considers how a city government provides services and makes and enforces laws. Discusses the functions of the city council, mayor or city manager, and courts.

Postman: Rain or Shine. 11 Minutes

Follows a letter from the time it is mailed in Kansas until it is delivered in California, describing the role of trains, trucks, planes, and the postman. Shows the use of automation in the post office.

Seaport. 16 Minutes

Gives an insight into the seaport area of a large city and such activities as loading and unloading of cargo, hiring of seamen, varied types of work and workers, and making a ship seaworthy for another trip.

Transportation. (filmstrip)

Illustrates the different types of transportation needed, including railroads, airlines, buses, automobiles, boats, and pipelines.

Trucks in our Neighborhood. 12 Minutes

Shows many kinds of trucks and how they work to help the neighborhood.

Communication: Books. (filmstrip)

Explains how a book is published and distributed and shows the role that libraries play.

Communication: Communicating Ideas. (filmstrip)

Points out that men in all societies have ways of communicating with each other and emphasizes that our modern society works because we have easy, rapid, and recognizable systems of communication.

Communication: Communicating Without Words. (filmstrip)

Illustrates some of the ways in which we communicate without words, including gestures, pictures, sounds, touch, signs and symbols, odors and appearance.

Communication: Motion Pictures. (filmstrip)

Explains how motion pictures are produced and discusses the motion picture as a particular type of communication.

Communication: Radio. (filmstrip)

Explains the importance of radio to people, businesses, and city agencies.

Communication: Television. (filmstrip)

Explains how television programs are produced and why television is important to people.

Communication: The Newspaper. (filmstrip)

Explains why newspapers are important and how they are produced.

Communication: The Telephone. (filmstrip)

Explains how the telephone establishes a network of communication that ties us in a city, across the country, and around the world.

Conservation for Today's America. (filmstrip)

Contains: soil, forest, water, wildlife, mineral, urban, and land conservation today.

## STUDENT TOURS OF OFFICES

Attached is a list of companies which will accommodate students for tours of offices. When making arrangements in writing or by phone, it would be helpful if you would include the following information:

1. Make sure the date and time of the tour is accurate.
2. Ask your contact to furnish you with orientation information on the company so you can conduct an orientation session on the company before the tour. This information could include: brief company history; product or services; production processes; annual sales; payroll, profit, dividends, and taxes; employment of men and women in the plant and offices; product use and markets etc.
3. Give the person who is arranging the tour as much advance notice as possible. Two weeks notice is not uncommon.
4. Give the number of students who will be on the tour and the name or names of the teachers or other supervisory persons who will accompany the students. Remember most companies have a limit on the number of people they can accommodate.
5. Get the consent of your principal and the parents of the students.
6. Remind your students to ask pertinent questions and have one or more students react by making favorable comments to the company representatives at the end of the tour.
7. Have students write "thank you" letters.

STUDENT TOURS OF OFFICES IN THE CLEVELAND AREA

<u>Company and Address</u>	<u>Person to Contact</u>	<u>Special Information</u>
Eaton Corp. 100 Erieview Plaza Cleveland, Ohio 44114	Mr. Leonard C. Jarvis Office Services Manager 523-5356	
The Standard Oil Co. Midland Building Cleveland, Ohio 44115	Mr. Andrew Molnor Employment Director 575-5948	
National Acme Corp. East 131 St. & Coit Rd. Cleveland, Ohio	Mr. Walter Bandlow Training Director 268-4200 Ext. 460	
The East Ohio Gas C. East Ninth & Superior Cleveland, Ohio 44113	Mrs. Marilyn Nize Public Relations Dept. 522-2949	Tour hours. 10 a.m. to 2 p.m. Tour includes three key departments: Energy Control Center, Customer Information and Data Processing
The Plain Dealer 1801 Superior Avenue Cleveland, Ohio 44114	Miss Genevieve Mohlor Promotion Dept. 523-4245	Tour includes: City Room, Company Room, Engraving Department, Stereotype Department, Press Room and wire library
The Penn. Mutual Life Ins. Co. 33 Public Square Building Cleveland, Ohio 44113	Dorothy York Office Manager 861-7780	
New York Life Ins. Co. 55 Public Square Cleveland, Ohio 44113	Miss Frances Shinn Office Manager 969-2610	
Sears Roebuck and Co. 8501 Carnegie Avenue Cleveland, Ohio 44106	Mr. Earl D. Ellis Director of Urban Affairs 795-2233 Ext. 346	
The Buckeye Union Ins. Co. Rockefeller Building 614 Superior, West Cleveland, Ohio	Miss Christina Greive 861-660	

Company and  
Address

Person To Contact

Special Information

Glidden Durkee Div.  
Union Commerce Building  
East Ninth & Euclid  
Cleveland, Ohio

Federal Reserve Bank  
P.O. Box 6387  
Cleveland, Ohio 44101

The Cleveland Press  
901 Lakeside Avenue  
Cleveland, Ohio 44114

The Warner & Swasey Co.  
5701 Carnegie Avenue  
Cleveland, Ohio 44103

Travelers Ins. Co.  
1801 East Ninth St.  
Investment Plaza  
Cleveland, Ohio 44116

Harshaw Chemical Co.  
1945 E. 97 St.  
Cleveland, Ohio 44106

Ford Motor Co.  
P.O. Box 9868  
Cleveland, Ohio 44101

The Geo. Worthington Co.  
P.O. Box 6028  
Cleveland, Ohio 44101

Miss Norma Thompson  
Employment Supervision  
771-5121

William Iddsardi  
Public Information Director

Mr. Glen Rynearson  
623-1111 Ext. 630

John Krisko  
Training Coordinator  
431-5580 Ext. 304

Marilyn Walton  
Personnel Assistant  
241-4646 Ext. 302

Miss Doris Smith  
Manager of Research  
Administration

Mr. Richard A. Weiss  
Supervisor of Personnel  
433-7000 Ext. 473

Betty Urban  
241-1600 Ext. 226

Tours scheduled at 9:30 a.m.  
and 1:30 p.m. No more than  
25 persons

Tours scheduled at 9:30 a.m.  
and 1:30 p.m. Size of group.  
minimum-10, Maximum-25.  
Length of tour - 45 minutes.

Tours scheduled at: 9:30 a.m. to  
11:00 a.m. Tour includes:  
orientation, plant offices,  
maximum - 10

Tour includes: Computer  
center, office publicity,  
Magnetic Card Typewriter

Will accommodate 10-15 students

Company and  
Address

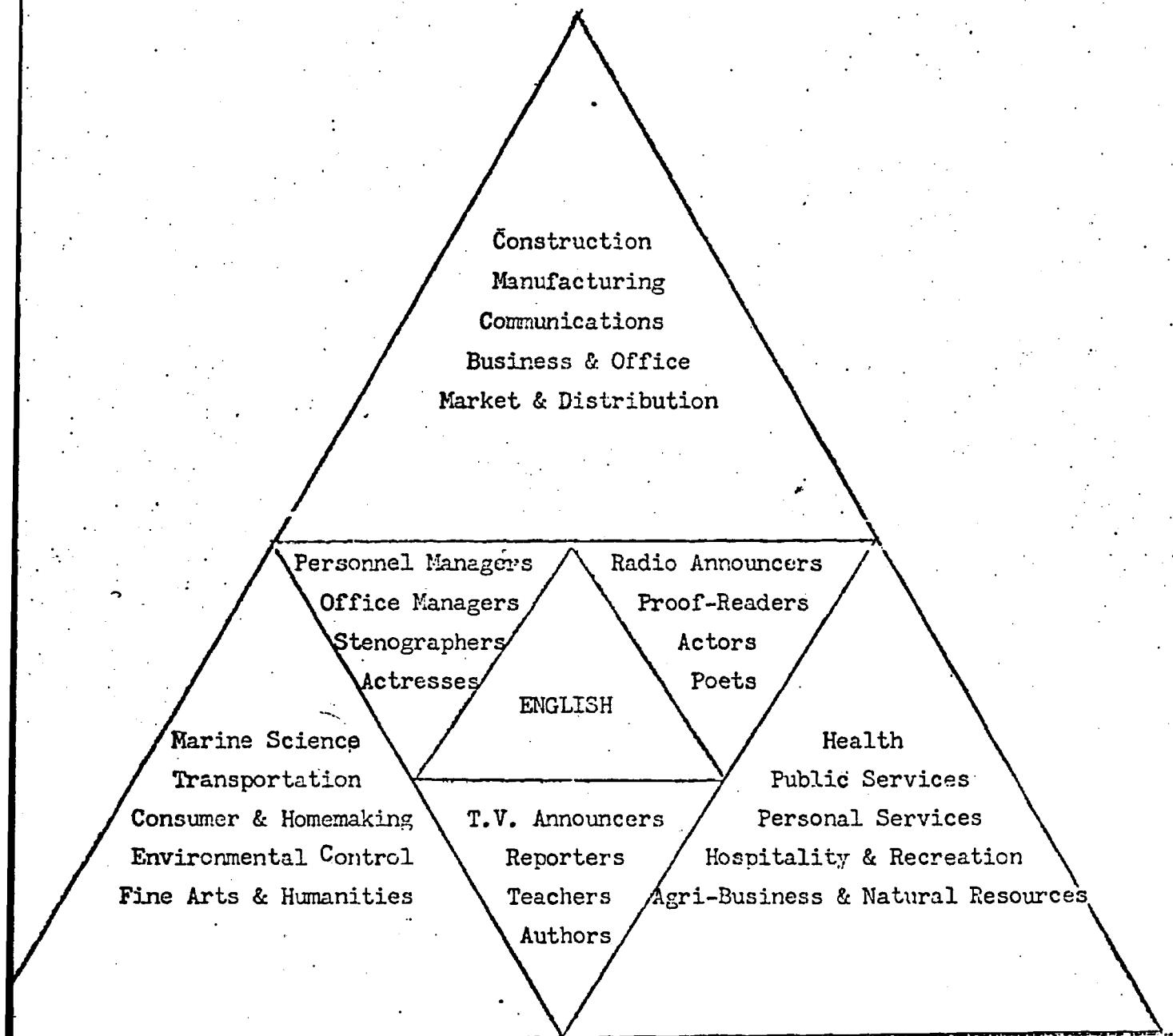
Allstate Insurance  
75 Executive Parkway  
Hudson, Ohio 44236  
  
Addressograph-Multigraph  
1200 Babbitt Road  
Euclid, Ohio 44117

Person To Contact

Jane Van Almen  
Personnel Manager  
656-6120  
  
J.W. Fulton  
731-8000 Ext. 418

Special Information

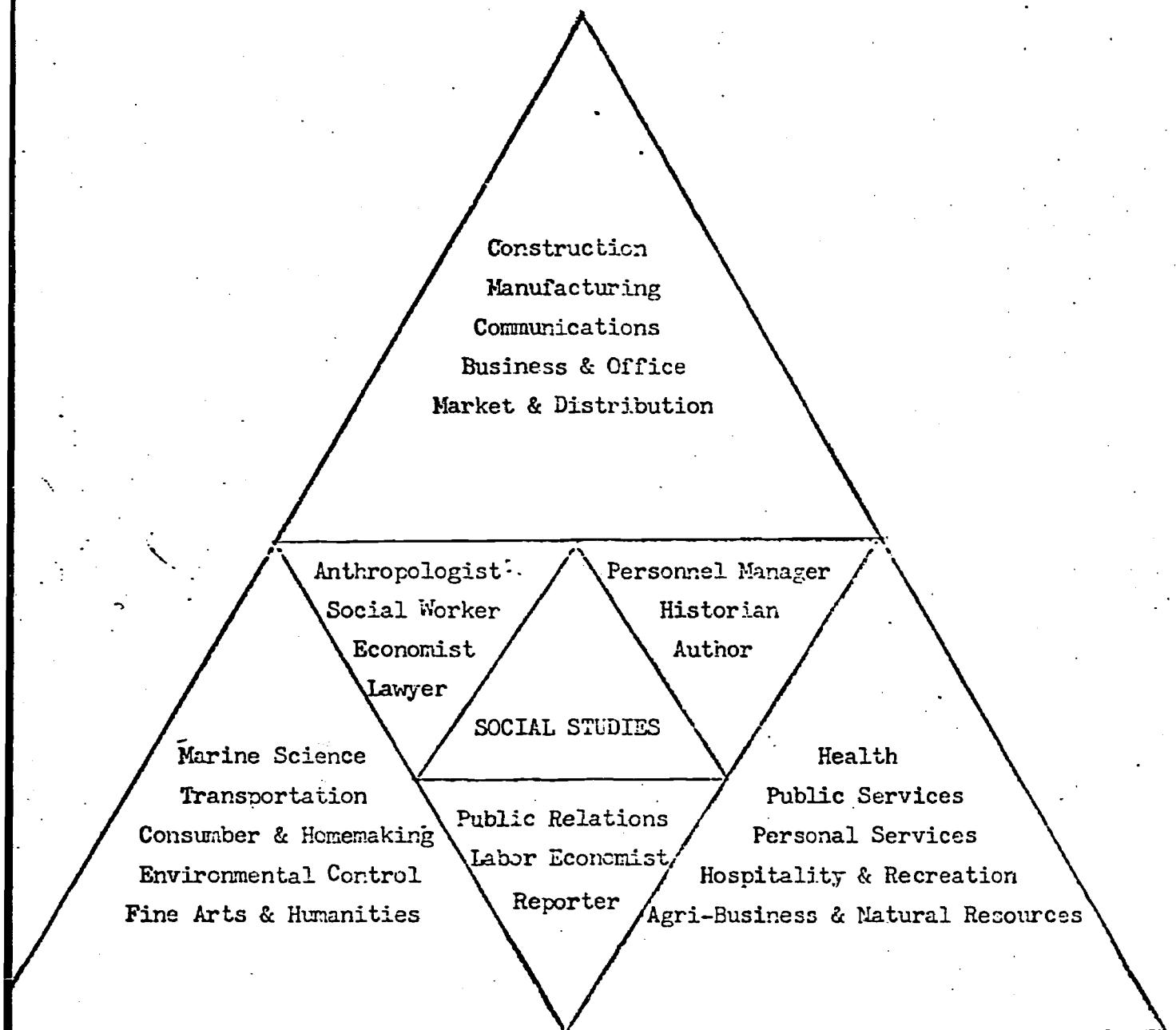
DEVELOPMENTAL VOCATIONAL EDUCATION PROGRAM  
PHASE II - III



OCCUPATIONS RELATED TO ENGLISH

DEVELOPMENTAL VOCATIONAL EDUCATION PROGRAM

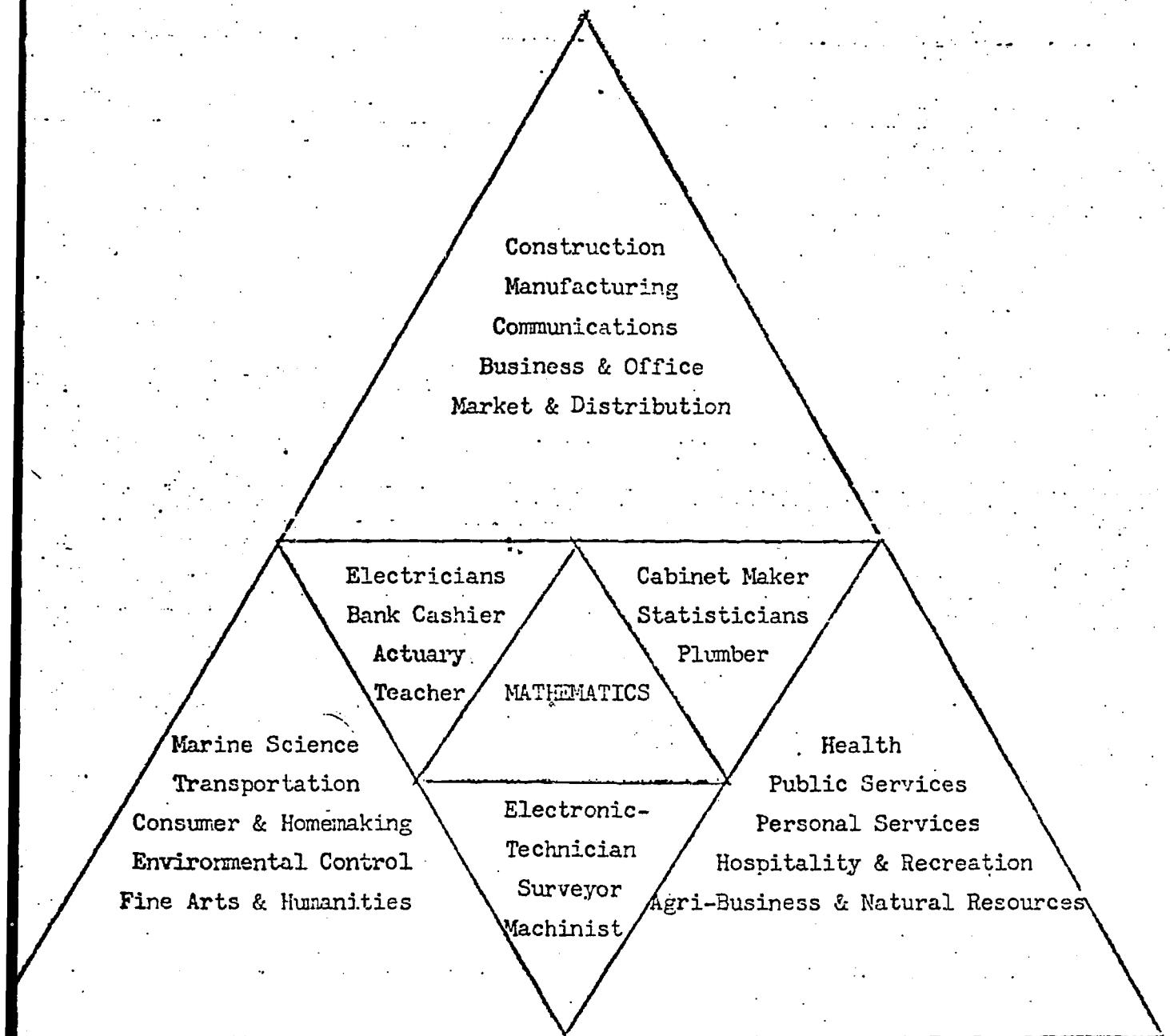
PHASE II-III



OCCUPATIONS RELATED TO SOCIAL STUDIES

DEVELOPMENTAL VOCATIONAL EDUCATION PROGRAM

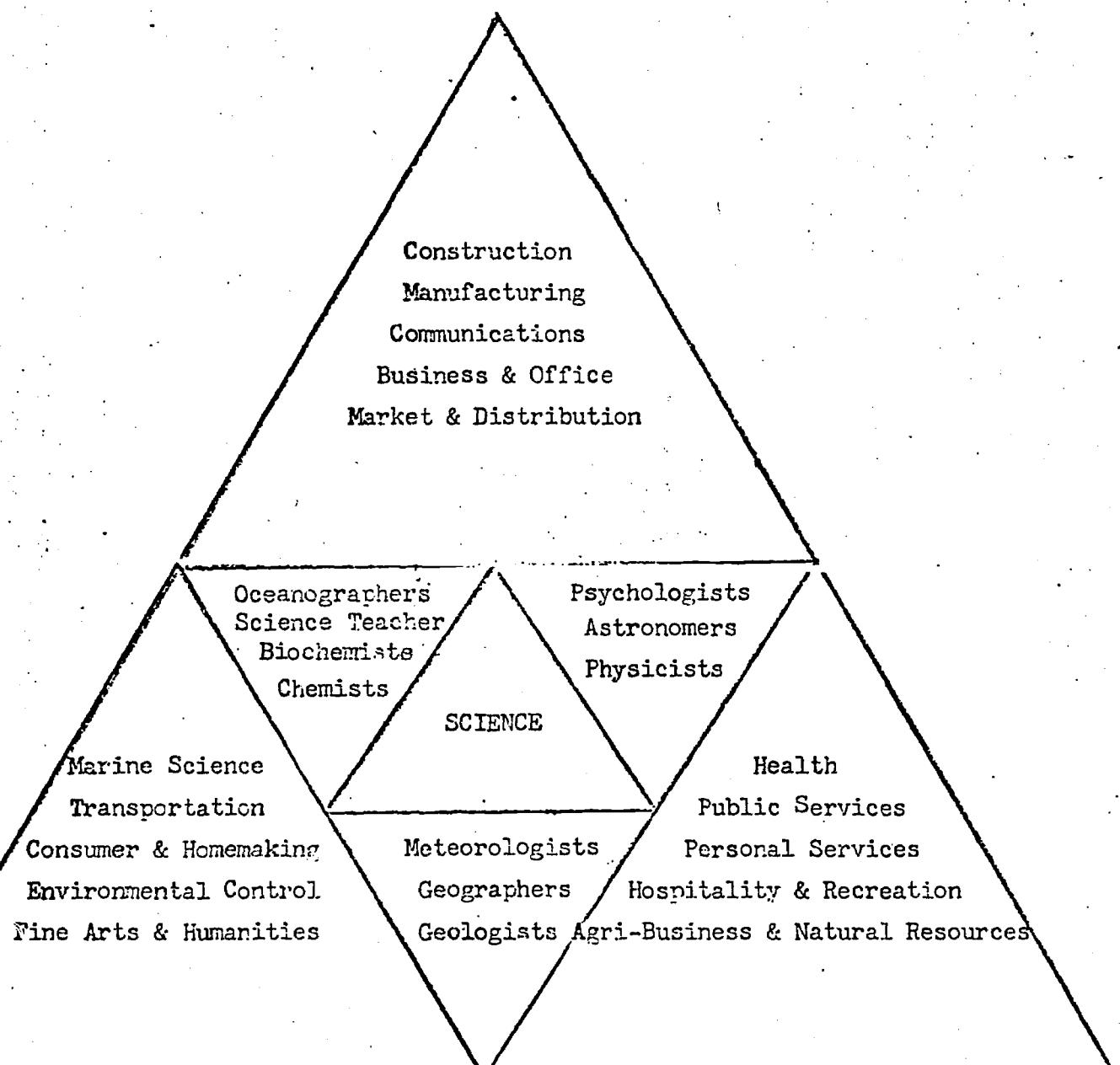
PHASE II - III



OCCUPATIONS RELATED TO MATHEMATICS

DEVELOPMENTAL VOCATIONAL EDUCATION PROGRAM

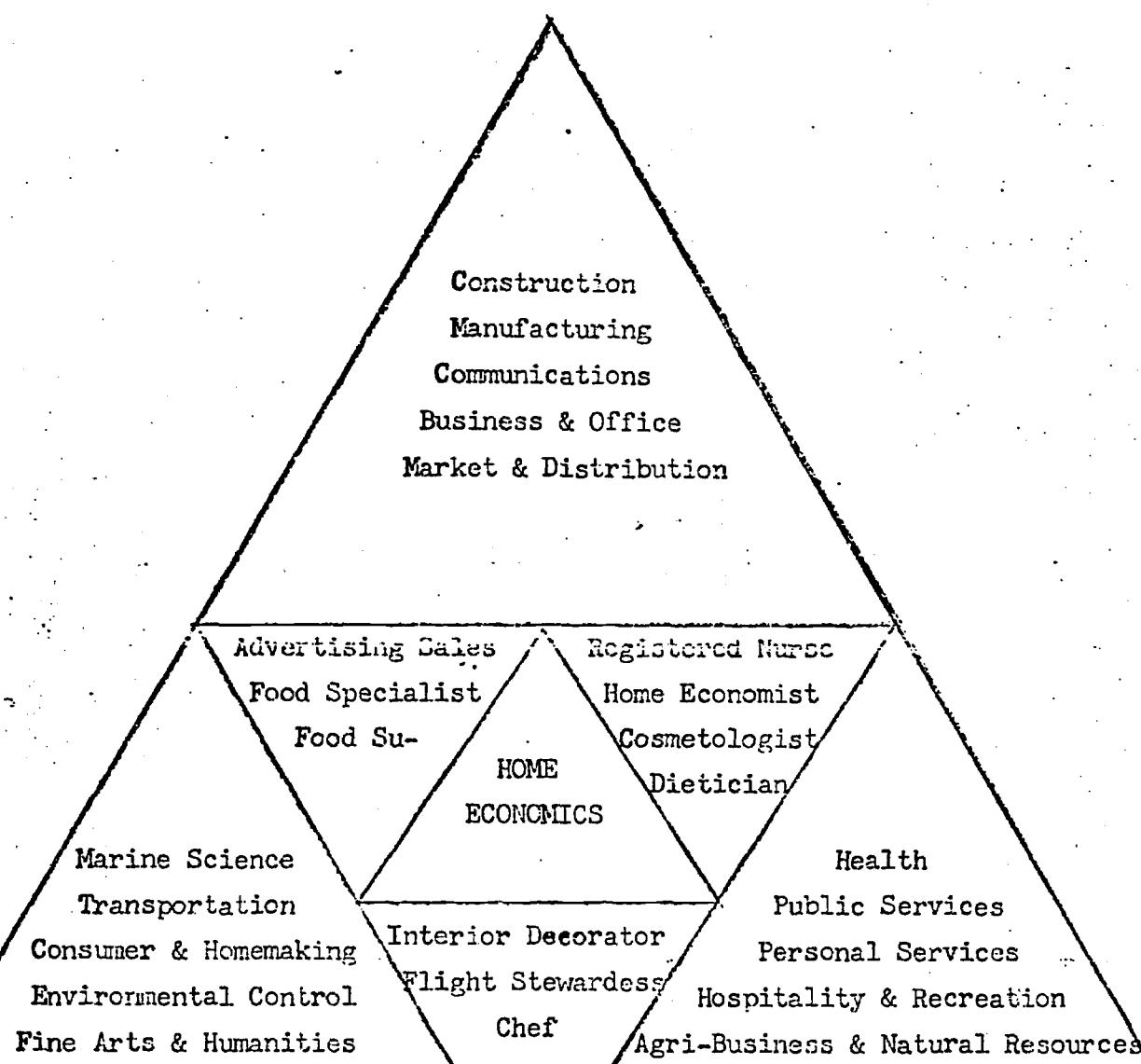
PHASE II- III



OCCUPATIONS RELATED TO SCIENCE

DEVELOPMENTAL VOCATIONAL EDUCATION PROGRAM

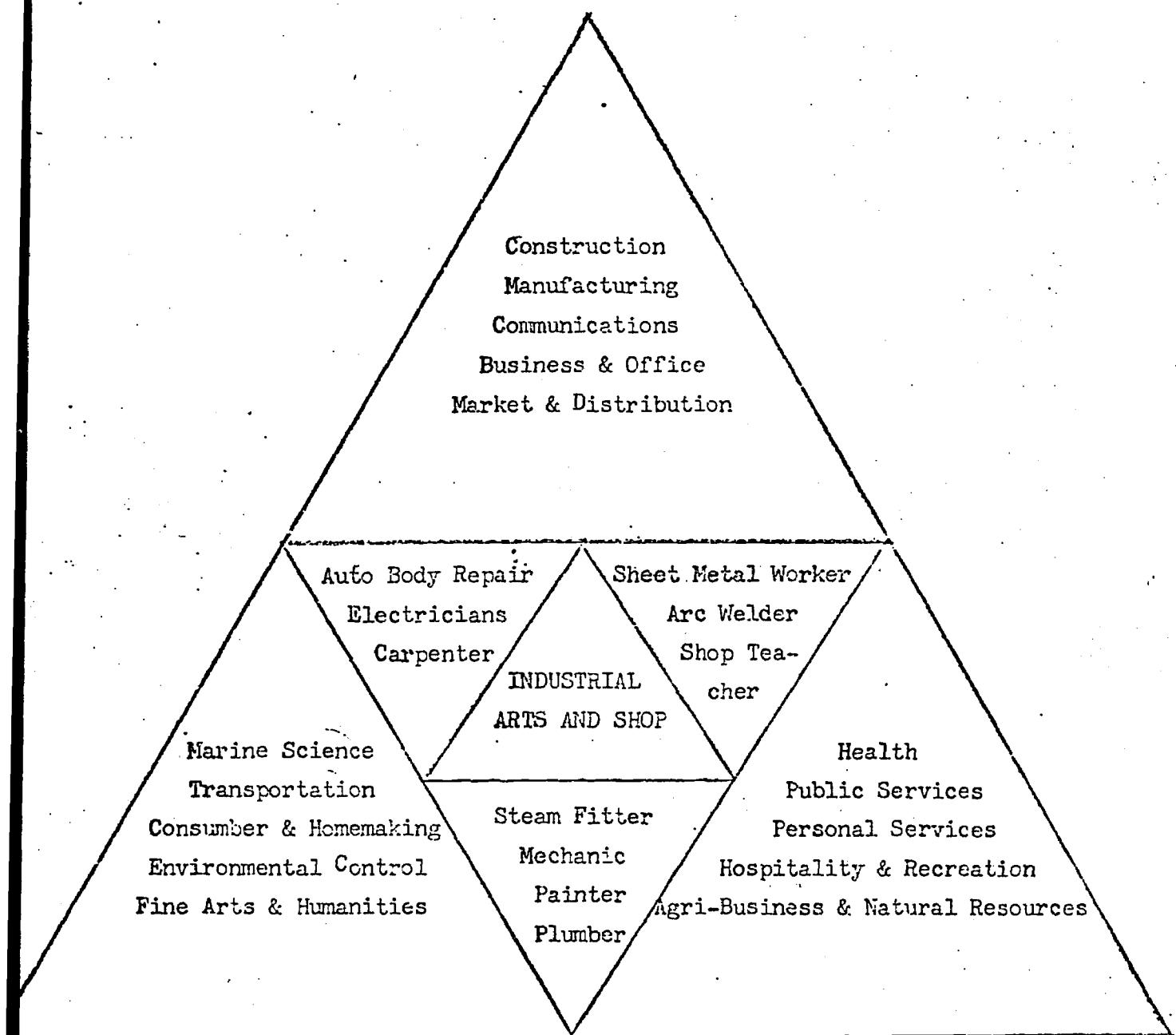
PHASE II- III



OCCUPATIONS RELATED TO HOME ECONOMICS

DEVELOPMENTAL VOCATIONAL EDUCATION PROGRAM

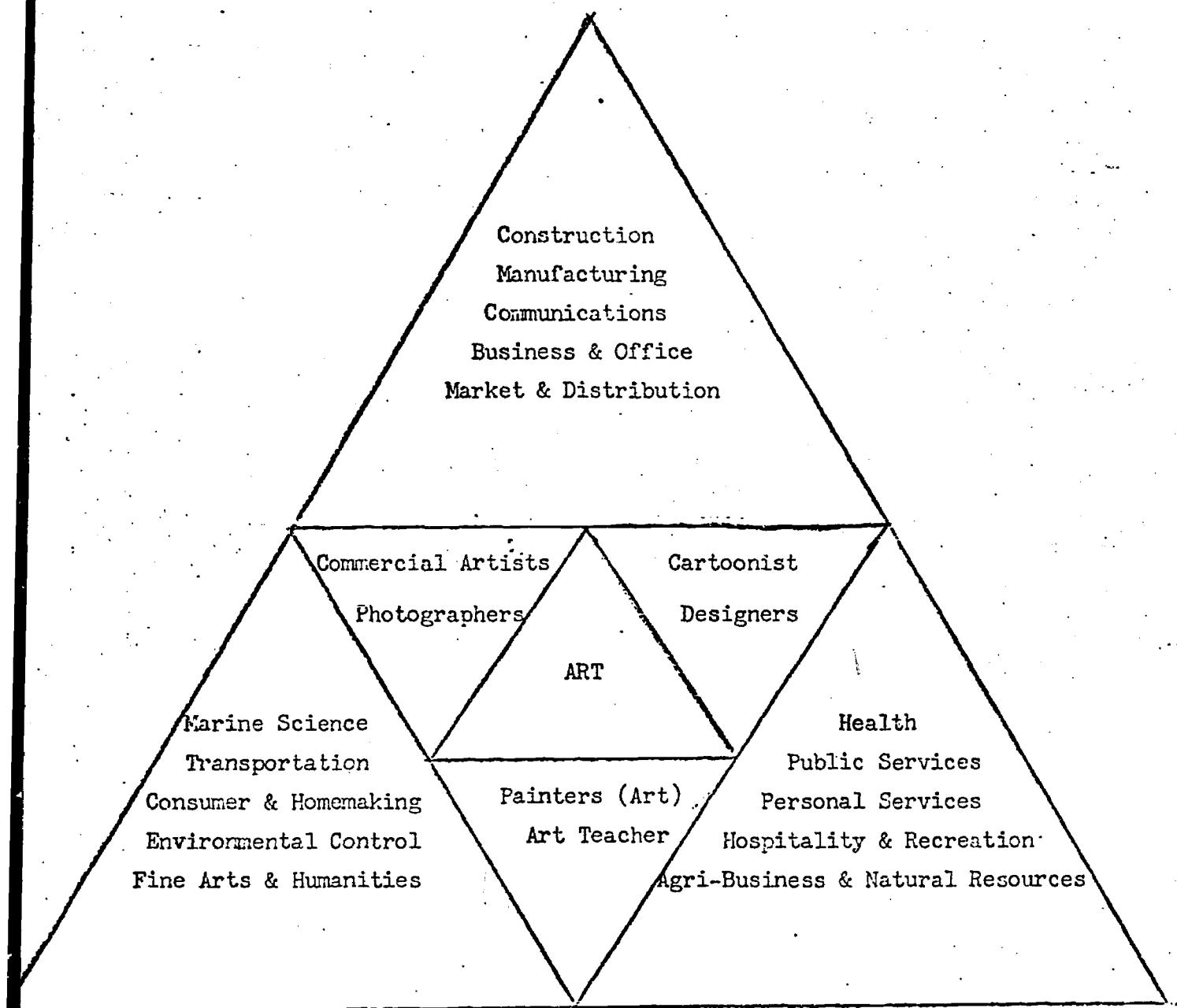
PHASE II - III



OCCUPATIONS RELATED TO INDUSTRIAL ARTS AND SHOP

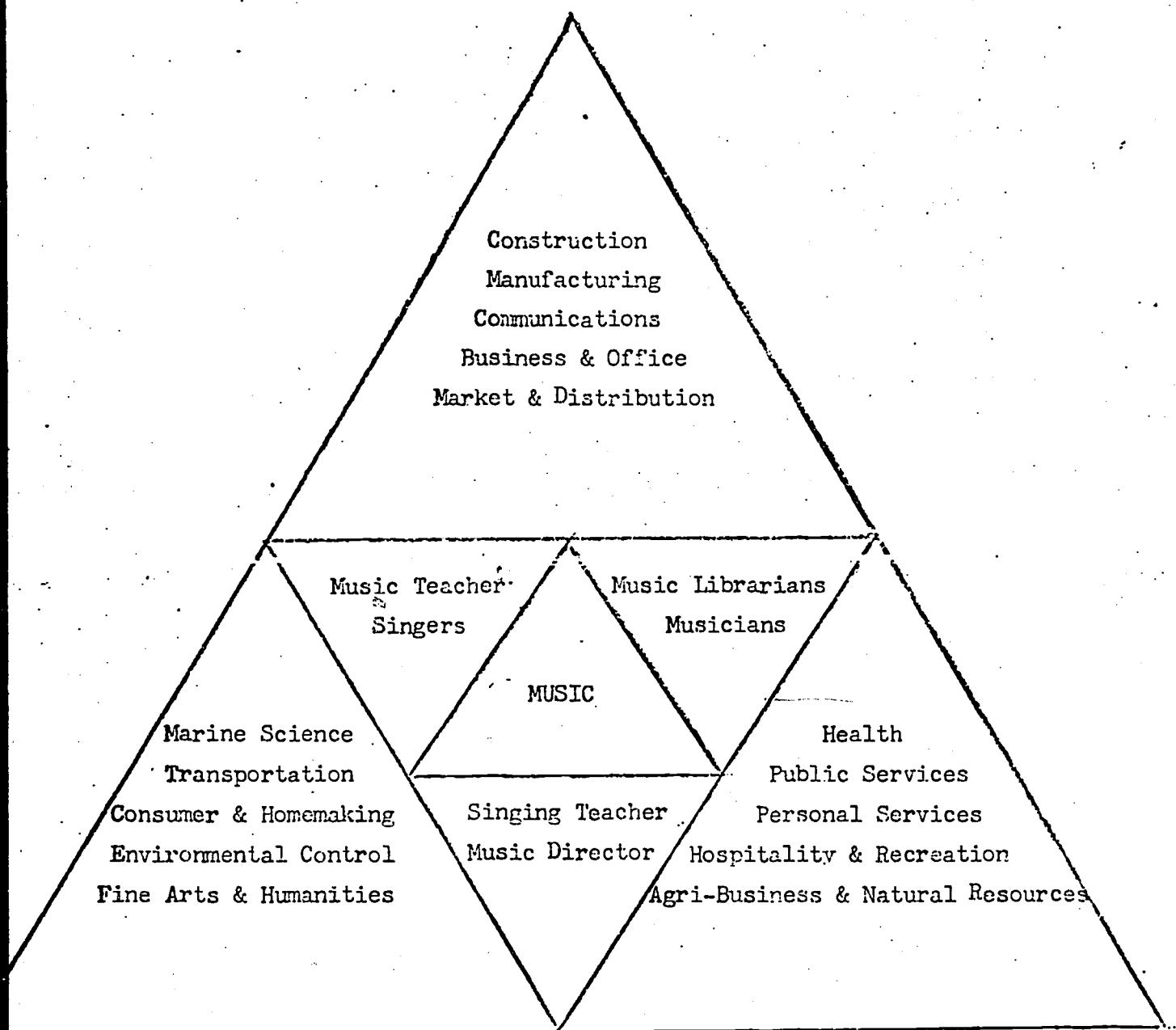
DEVELOPMENTAL VOCATIONAL EDUCATION PROGRAM

PHASE II - III



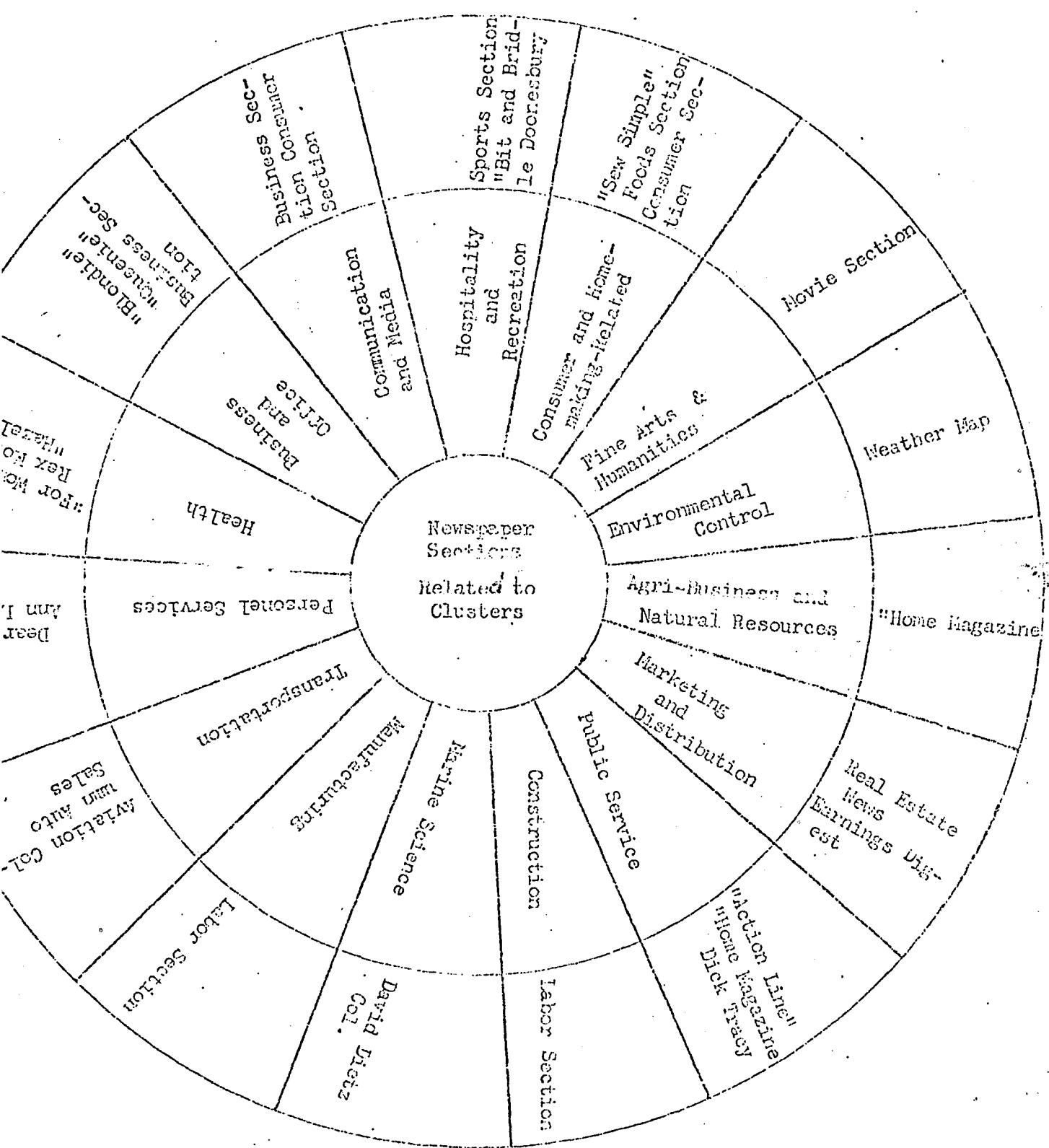
OCCUPATIONS RELATED TO ART

DEVELOPMENTAL VOCATIONAL EDUCATION PROGRAM  
PHASE II - III

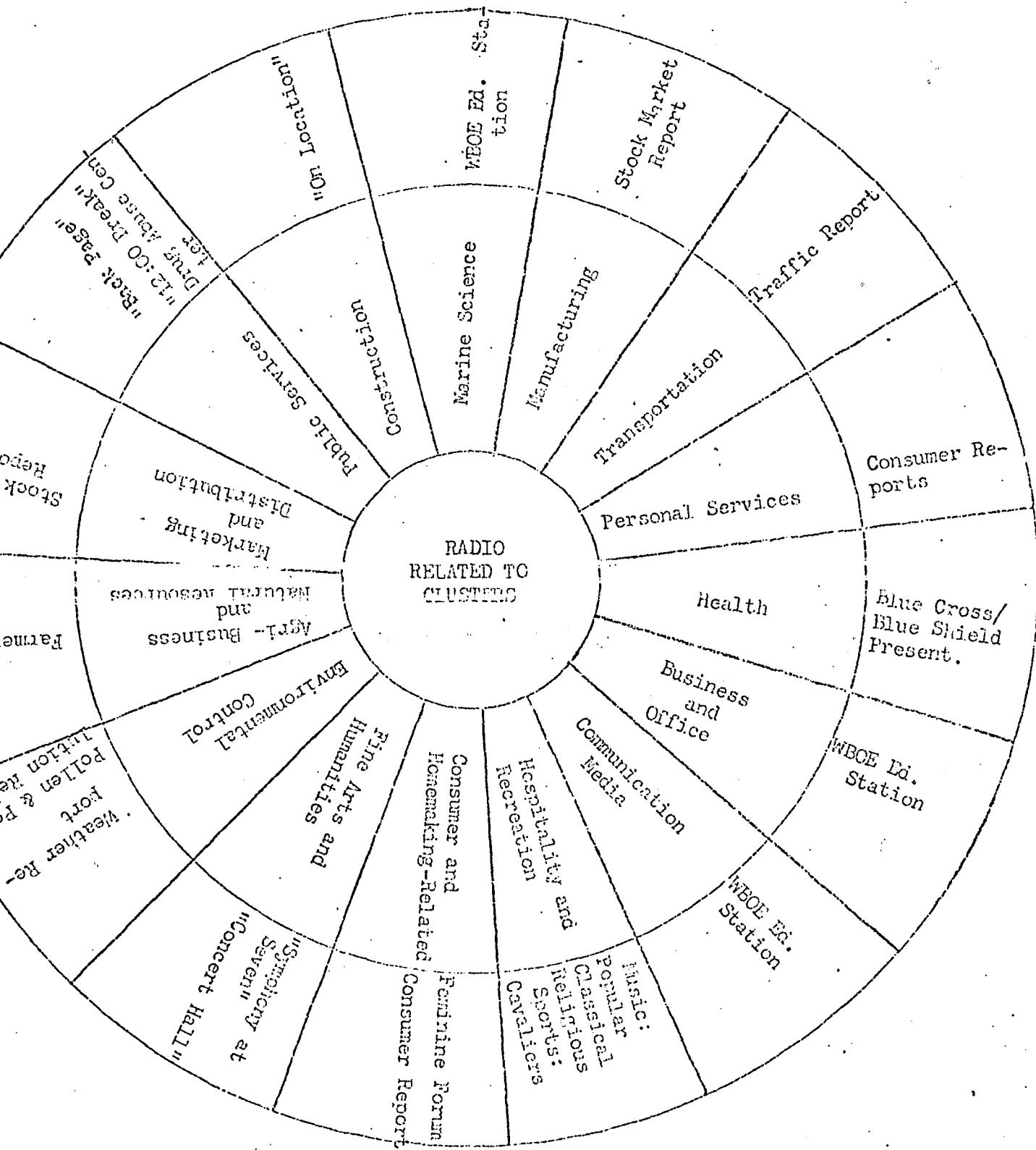


OCCUPATIONS RELATED TO MUSIC

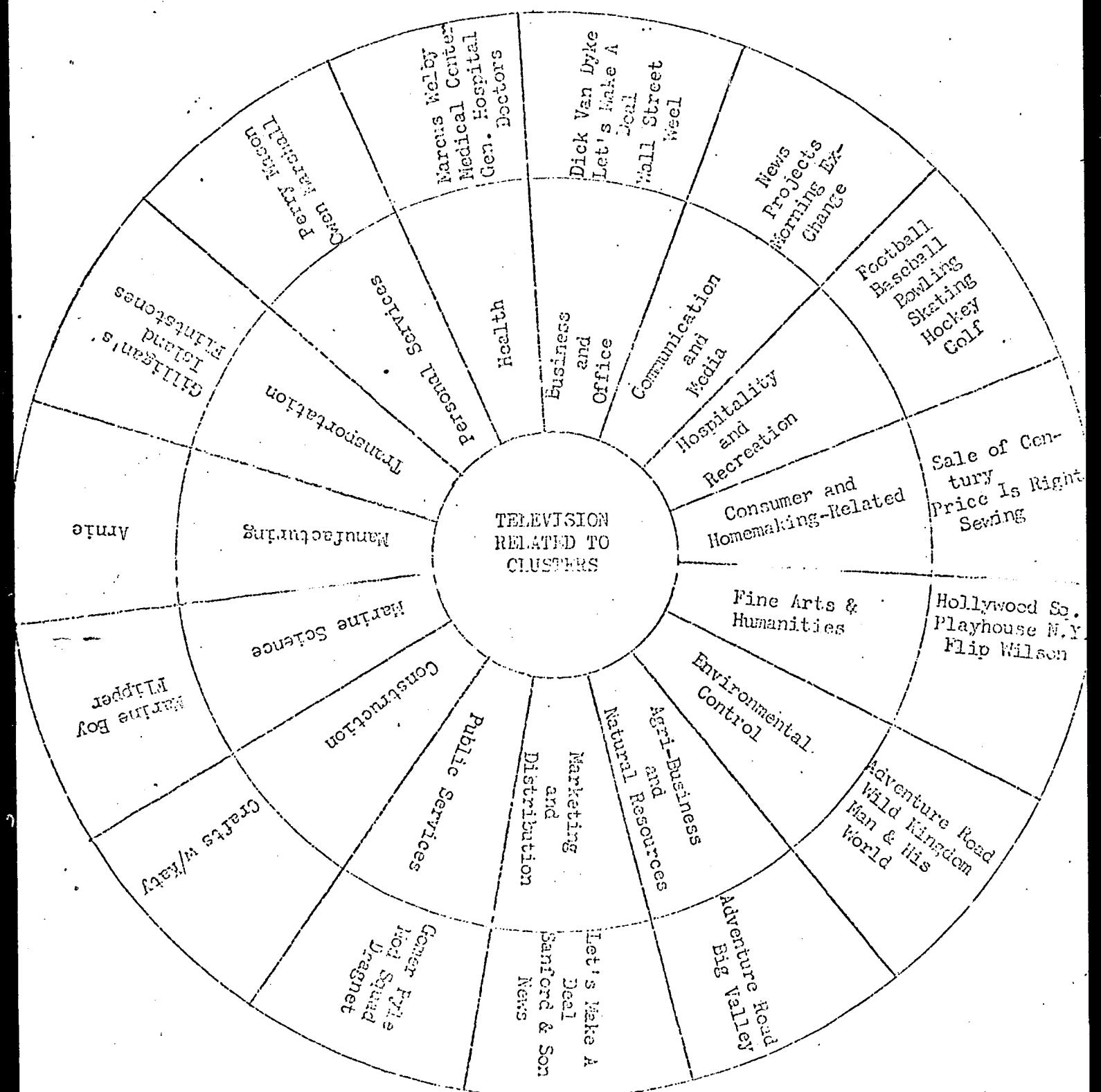
NEWSPAPER SECTIONS RELATED TO OCCUPATIONAL CLUSTERS



RADIO PROGRAMS RELATED TO OCCUPATIONAL CLUSTERS



TELEVISION PROGRAMS RELATED TO OCCUPATIONAL CLUSTERS



## BIBLIOGRAPHY

### Occupational Outlook Handbook

U.S. Department of Labor  
Bureau of Labor Statistics  
Washington, D.C.

This handbook is a guide to employment opportunities in a broad range of occupations that covers all the principal areas of work. It brings together information of significant for those who are planning a career. Service as a basic tool in the vocational guidance process. We use this guide to gather comprehensive information on career opportunities.

### Career Opportunities

New York Life Insurance Company  
Career Information Service  
Box 51, Madison Square  
Station New York, N.Y. 10010.

Soft back book composed of a series of articles designed to help guide young people to a better future. These books are easy reading material. They are used as a part of our careers library. We find it good in that our students can easily relate to it, each article is based on the experience of one who has distinguished himself in his respective field.

### English On The Job

Jerome Carlin  
Globe Book Company, Inc.  
New York 10 New York

This book capitalizes upon that interest by organizing the English activities around a core of vocational guidance. We use it because it not only improves the students' English expression, but it also helps them gain insight into some of the problems facing them. The students' learning proceeds simultaneously in two directions: A better understanding of his potentialities in the world of work, and a better command of the communication skills needed in all phases of everyday living.

### The Story Steel

United States Steel Corporation  
600 Grant Street  
Pittsburgh, Pa. 15219

A pamphlet style book which describes how steel is made. We use it to stress the importance of steel, it takes you from smelting of metals in prehistoric through the fascinating development of the iron making processes.

Careers In Depth  
Richards Rosen Press

This series covers all the careers in practical terms for the young man or woman who is interested in more than just a job. All books were written by prominent men and women who are successful in their chosen fields.

Handbooks Of Job Facts  
Scientific Research Associates

An occupational summary which helps to pinpoint the basic features and trends of a variety of significant occupations, contains concise summaries of basic data on 300 major occupations.

Industrial and Commercial Wiring  
Kennard C. Graham  
American Technical Society - Chicago, USA

This book has been rewritten to reflect the latest developments in the electrical field covering new techniques and materials, and incorporating the latest additions and changes in the National electrical code. It's especially good that it begins with basic lighting terms and principles. Study guide also accompany the book.

Electrical Construction Wiring  
Walter N. Alerick  
American Technical Society  
Chicago, Ill. 60637

This book includes the latest accepted changes in wiring, also the more traditional wiring procedures that are still recognized by the NEC. The text is very suitable for self study. Questions are found at the end of each chapter for personal check up, classroom discussion, or assignments. They are designed to reinforce the information given in the chapter and to aid in giving directions for the review of the material in the chapter.

Related Mathematics For Carpenters  
L.S. Chamberlain  
American Technical Society

This book deals with mathematics as it relates to a practical occupation. The authors teaching experience demonstrated that students found it easy to learn mathematics when the materials consisted of realistic problems such as one might encounter on a job.

Automotive Maintenance and Trouble Shooting  
Leslie F. Goings and Edward D. Spicer  
American Technical Society  
Chicago, 60637

This hard back book is based upon three main objectives (1) To show how to prevent most troubles, (2) to find out how to quickly and adequately locate the cause of any trouble, (3) once it is known what is wrong, to show how to restore the care to satisfactory operations.

The Epic of Steel  
United State Steel  
Public Relations  
100 Erieview Plaza  
Cleveland, Ohio 44114

This is a resource book used to get more detailed information about the steel industry.

Your Future In Daily Newspapers

This is easy to read material describing the jobs in the newspapers field. It is used as a part of our career library.

Hospitality Program  
(Food Service & Lodging Ed.)  
Council on Hotel, Restaurant and  
Institutional Education (1970)  
1522 K. Street, N.W.  
Washington, D.C. 20005

This book is used to gain information in the area of good service and lodging. It explains the requirements one needs if he or she is interested in managing a large hotel or motel. It also explains how one might go about getting into the areas of food catering.

Health Careers  
The Greater Cleveland Hospital Association  
1001 Huron Road  
Cleveland, Ohio 44115

This guide provides minimum basic entry information about allied health education programs in Northeast Ohio. We have used this booklet as a reference tool for seeking information about an approved health career program. It explains in detail the jobs available, the requirements, the grants available and suggested places for training.

Aim High Vocational Series  
Richards Rosen Press, Inc.,  
New York, New York

The Aim High Vocational Guidance series is for the young person who is looking for a job. All of the books are written by experts in the occupations who know what the jobs are about. The series covers occupational opportunities for young people and will help them to make decisions concerning them.

A Guide To Professional Careers

Walter Duckat

Julian Messner, a division of Simon & Schuster Inc.

New York, New York 10018

This book is as it said a guide to professional careers. Many careers are mentioned in this book for college bound students. The requirements, training, duties, salaries and future outlook for each career are clearly detailed, with helpful cross references to other closely related professional careers. The book is unique in that each career description includes questions to determine the reader's interest in and capabilities for the profession.

How To Plan A House

G. Townsend & J. Dalzell

A multi purpose book written in a practical and authoritative manner. Designed to instruct the layman on house planning intelligently. The book is also written to be of value to builders, developers, apprentices and students wishing basic information on planning. The book provides an entire course in design in the residential field presenting plans, how plans are made, and factors involved in shopping plans.

Machine Shop - Operations & Setups

Porter Lascoe, & Nelson

A text written by professionals in the field, with the purpose of providing basic training in conventional machine operations and information regarding the latest developments and machine book business. The book also provides the student with innovations which will be useful in the future using illustrations and language basic to the trainee.

Concrete Block Construction: For Home & Farm

J. Dalzell, Townsend

A guide written by professionals working in the field which carries the reader step by step through experience tested methods of erecting a structure designed to eliminate common errors in the use of concrete blocks, this book is filled with instruction valuable to the beginner as well as the mason inexperienced with the concrete block.

Steel Square

Townsend

A "How to do it" book with detailed instructions and illustrations for the carpenters or helper on the use of the steel square. The book is compiled in such a way as to explain lines and angles in a simple and practical manner. answering questions from "what is a steel square" to "how to build a roof." A valuable book in any carpenter's handbook.