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ABSTRACT

The guide is designed primarily for industrial arts teachers at the middle school level who wish to integrate career education into their curricula. The lessons and activities attempt to establish a balance among career information, technical information, and hands-on experience. The guide contains six lesson plans which cover the topics: the world of work, knowing yourself, manufacturing and you, sources of information, labor-management relations, and job traits. It also contains a sample six-week mechanical drawing/career education unit plan for seventh graders. The bulk of the guide comprises detailed descriptions of 21 implemented activities including such things as: questionnaires, interviews, slide shows, manufacturing a candle sconce, guest speakers, role playing interviews, and a career crossword puzzle. The format of each of these activities is: introduction, objectives, procedures, content, evaluation, and materials. The guide also contains: three pages of suggested activities, suggested materials for evaluating the career education project, 12 transparency masters, procedures for writing and samples of public relations news releases, sources of information for 15 career clusters, a glossary, and an eight-page bibliography of career education materials. (JR)

INDUSTRIAL ARTS CAREER EDUCATION

PILOT PROGRAM

CAREER EDUCATION

INSTRUCTIONAL PLAN

Department of Industrial Arts and Technology

State University of New York
College of Arts and Sciences
Oswego, New York 13126
Spring 1974

PREFACE

This instructional guide is the result of the implementation of career education in industrial arts classes in a total of eight selected public middle school student teaching centers during the 1973-74 school year. The field testing of pilot programs in industrial arts is an optional student teaching assignment conducted by the Department of Industrial Arts at the State University College at Oswego. This cooperative college/public school program has been in operation for several years.

The material in this guide is a composite of the successful activities implemented through either career education "mini-courses," or a series of related activities infused into an ongoing program. This compilation of information is viewed as being valuable to the teacher who wishes to include career education in his industrial arts program.

The participants and staff of the Industrial Arts Career Education Pilot Program thank the cooperating consultants, building principals, and the students in each of the pilot centers for making this field test of career education in industrial arts possible.

INDUSTRIAL ARTS CAREER EDUCATION
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CAREER EDUCATION

Career education is an essential part of a student's education that should be infused into the total educational system of curriculum, instruction, experience and counseling through the home, school, and community. Being exposed to a wide variety of careers at an early age will help prepare a student to become socially and economically independent. The ability to make intelligent decisions about his career options will also help him to achieve personal fulfillment in his life's work. The educational emphasis is on the relationship between what the student is asked to learn and what he will some day do as a living.

Career education is a developmental process, rather than an event which occurs at a certain time in an individual's life. Career development must be comprised of many varied objectives and instructional activities that occur from kindergarten through post secondary and adult education levels. At the elementary level, programs are designed to familiarize students with the many kinds of work people do and the relationship of work to the production of goods and services. In addition, students develop an awareness of themselves and the world of work. At the middle school level the program is laboratory centered, giving students experience with the kinds of activities performed by persons in a wide range of occupational pursuits. Courses at the high school level are designed to prepare individuals for enrollment in vocational courses, technical education programs or institutions of higher education.

The remaining educational level is that of adult continuing, and higher education, made up of awareness and exploration activities with laboratory experiences. The program is designed for adults and out of school youths, who may benefit from broad basic instruction related to industrial and technical occupations, or may better understand the industrial world and the profitable use of recreational and leisure time.

Career education should help prepare the student for a lifetime of work in a career he will enjoy - one that will fulfill his personal needs as well as helping him to become a productive member of society.

A RATIONALE FOR CAREER EDUCATION

in

INDUSTRIAL ARTS

The purpose of this program was to explore the implementation of career education in industrial arts classes at the middle school level. Career education has become one of the most important issues in education today. Ever since Sidney Marland coined the term "career education", in 1971, it has been the most talked about and written about issue in the field of education. Marland proposed, "that a universal goal of Americal Education, starting now, be this: that every young person completing our school program at grade twelve be ready to enter higher education or to enter useful and rewarding employment."[3]

The problem today lies in the indecision so many young people have, concerning what they should do with their lives. The magnitude and intensity of the problem currently faced by society and the educational profession in preparing individuals to become effective, contributing members of society has brought about the need for career education.

In today's world of rapid social and technological change, there is no more important way of helping students, than through the acquisition of basic skills. Therefore, career education may be easily adapted to the industrial arts classroom, where skill development is a major goal. The industrial arts classroom can provide a wide range of activities for career education programs. Through hands-on experience, manufacturing units, and clean up, student can acquire basic skills and become familiar with job responsibilities and working conditions.

The purpose of this booklet is to assist the classroom teacher in implementing career education in the curriculum he is currently teaching. This booklet is not restricted to industrial arts and teachers of other subject areas will find the activities covered easily adaptable to their own situations.

Career education should be an important part of every industrial arts class. Each industrial arts teacher should in one way or another attempt to implement some of the activities covered in this booklet, and those in the many other recent publications dealing with career education.

Literature Cited

1. Bailey, L. J., Stadt, R. Career Education new approaches to human development, Illinois, Mcknight, 1973

2. Deay, A. M., Straus, N. A., Wilcox, J., Infusion Models career education in the elementary school, N. Y., State Department of Education, 1973

3. Speech by Sidney P. Marland Jr. delivered at the conference of Pennsylvania Personnel and Guidance Association, Nov. 1971 Pittsburgh, Pennsylvania.

OBJECTIVES FOR CAREER EDUCATION
in
MIDDLE SCHOOL INDUSTRIAL ARTS

The following objectives were followed throughout the pilot program. The activities chosen for implementation were chosen on the basis of these objectives. Most of the activities were easily adaptable to industrial arts classes. However, these objectives may also be used in the implementation of career education in many other subject areas.

To help students:

1. Become aware of related careers.
2. Develop methods for intelligent career exploration.
3. Discover their interests and abilities and relate them to careers.
4. Relate their emotional and physical needs to careers.
5. Develop appropriate attitudes about the personal and social significance of work.
6. Understand the decision-making process and develop decision-making skills

APPROACHES TO CAREER EDUCATION

Career Education can be taught by using many different approaches. The degree to which career education is integrated into a program can range from a separate self-contained unit on Career Education, to a totally infused program, with career information considered as an integral part of the topic under study. Career Education can be used as an introduction to a unit, or as an introduction to a lesson. It can be included in lessons as information related to the general topic. While doing class work on an area of study, students can do homework assignments in Career Education that are related to the unit being studied.

Career Education is an attempt at bringing relevance to the abstractions that are studied in classrooms by relating them to the many occupations found outside the school setting. A balance should be established between career information, technical information, and hands-on experience, in order to give a career unit the most meaning to the students. Without support from and correlation with other subject areas, each area of study can become just so much more abstract information. Unless information can be put in a framework of reality, it will not be internalized and learned, which is the purpose and goal of all education.

World of Work

Objectives: Students will have an understanding of the work ethic
1. will be able to list reasons for work
2. will be able to define career, job, work
3. will realize need for awareness and exploration of various careers

Introduction: your future depends on your education and job skills....choosing a career is one of your most important decisions

Instructional steps:

A. Reasons for work
   1. self satisfaction
   2. sense of contribution
   3. support
   4. luxury
   5. responsibility
   6. 6. whatever jobs the students can name

B. Terms
   1. work: any kind of planned and responsible activity in which an individual engages with an expectation of getting a gainful return for his efforts
   2. job: group of similar positions in a single plant, business establishment, or educational institution (a regular remunerative position)
   3. career: the course of an individual taken in his progress through life

C. Why make a study of jobs?
   1. choice may determine if you will be employed or not
   2. choice may determine success or failure
   3. choice may influence other aspects of one's life
   4. choice may determine how much one enjoys his work
   5. choice will affect the distribution of manpower

Termination: Choosing a career is a very important decision, probably the most important of your life. By beginning a study now, your choice will be easier and more confident.

Materials: chalk board
chalk

References:

Feingold, S. Norman Occupations and Careers, McGraw-Hill Book Company, 1969, pp.2-11.

Hoppock, Robert Occupational Information, McGraw-Hill Book Company, 1967, pp.1-5

Knowing Yourself

Objectives: Students will relate self awareness to career choice
1. will relate interests and abilities to careers
2. will relate emotional and physical needs to careers
3. will determine what a value is and some of his values
4. will appraise his strengths, actions, and personality

Introduction: every individual is different....own interests, abilities, needs, values....these characteristics will play a part in your career choice.... one needs to look at one's self

Instructional steps:

A. Interests and abilities
   1. interest: a liking for something; hobbies
   2. ability: relative capability of doing certain things; academic, mechanical, physical

B. Emotional and physical needs
   1. physical: air, water, food, shelter
   2. emotional: affection, acceptance, success, adventure

C. Values: what something is worth to a person, what he is willing to do, or pay, or give up for it

D. How are these characteristics related to career choice?

Termination: Self awareness is a continuing process. People change over a period of time. Interests, needs, values will change which might call for a change in occupation. Don't fall into a rut.

Materials: Self Appraisal Chart

References:

Feingold, S. Norman Occupations and Careers, McGraw-Hill Book Company, 1969, pp.12-19

Career Development Resource Guide, Grades 6-8 It's Time to Plan, Howard County Board of Education, Clarksville, Md.

Job Traits

Objectives: Students will understand job traits
1. will list job traits to consider
2. will use these traits to analyze various jobs

Introduction: in order to analyze a job we must have a list of criteria....what are some things that make up a job?

Instructional steps:

A. Job traits
   1. nature of work
   2. mental requirements
   3. personality
   4. educational and training requirements
   5/ entrance into occupation
      a. formal examination
      b. license or certification
      c. membership or union
   6. Possible restrictions
      a. strength
      b. age
      c. personal appearance
      d. height
      e. weight
   7. working conditions
   8. supply and demand of workers
   9. income, promotion, security

Termination: By knowing yourself and identifying job traits you are on your way to exploring jobs.

Materials: chalk board
chalk

Resources:

Granger, Kolene M. Junior High Career Guidance Curriculum, Utah State Board of Education

Sources of Information

Objectives: Students will be aware of different sources of career information
1. will be able to list different sources of career information
2. will know how to use these sources

Introduction: You wish to explore or research an occupation.... where do you find the answers?

Instructional steps:

A. Original sources
   1. worker who does the job
   2. employer
B. Intermediate sources
   1. guidance counselors
   2. teachers
   3. labor unions
   4. government bureau which issues licenses and regulates employment
   5. professional, trade, and business associations
C. Publications
   1. Occupational Outlook Handbook
   2. Dictionary of Occupational Titles
   3. career fiction
   4. biography
   5. occupational monograph
   6. occupational brief
   7. business and industrial descriptive literature
   8. government publications
D. Audio-Visual Material
   1. charts and posters
   2. films
   3. film strips
   4. recordings

Termination: There are many sources of information. Be aware of them and know how to use them in helping you explore occupations.

Materials: handout of outline

References:

Hoppock, Robert Occupational Information, McGraw-Hill Book Company, 1967, pp.27-43

Norris, Willa The Information Service in Guidance, Rand McNally and Company, 1960, pp.117-159

Manufacturing and You

Objectives: Students will gain an understanding of manufacturing
1. will be able to define manufacturing
2. will understand importance of manufacturing
3, will be aware of social and economic effects

Introduction: we have a system of production and manufacturing which is basic to our way of life....you will all contribute to this system some day.... should have understanding of it

Instructional steps:

A. Manufacturing: "the making of large numbers of an article on a mass production basis using machines to produce identical parts which may be used interchangeably."

B. Importance: social and economic effects
1. need for providing products to the community: one is unable to be self sufficient in todays world
2. need for interchangeable replacement parts
3. increase quality of products
4. lower cost of items, thereby making them more available to more people
5. creation of jobs as result of people being able to buy more items due to decrease in price
6. gives leisure time to workers
7. growth of large industries helps cities grow
8. provide work for women
9. development of labor unions
10. provision of sick leaves, vacation and hospitalization

Termination: Man has come a long way from the stone age. We are living in a very sophisticated world. Where will we go next? What part will you play in our future?

Materials: chalk board
chalk

References:

Haws, Robert W. Manufacturing in the School Shop, American Technical Society, 1972, pp.1-22

Labor-Management Relations

Objectives: The student will be able to:
1. define labor in terms of skills, time, and salary
2. define management in terms of expense, sales, and profits
3. demonstrate the use of collective bargaining to solve a labor dispute
4. describe the importance of good working conditions, and the efficient use of manpower to increase profits and salaries

Introduction: There are two main forces in any business: labor and management

Instructional steps:

A. Define the terms, labor and management
   1. labor: skills x time=salary
   2. management: sales-expense=profits

B. Role playing: paid construction of a spray booth
   1. divide the class into two equal groups
      a. prepare one group to be labor: the school will pay $300.00 to construct a spray booth and the students will do the work and will be paid by the management
      b. prepare the other group to be management: the school will pay $300.00 to construct a spray booth; this group will run the job, pay labor, and keep the surplus as profits
   2. bring the class together to negotiate the terms of the job
      a. let the two groups haggle for three or four minutes
      b. inform the class that they are role playing
   3. collective bargaining
      a. labor and management state their needs in the form of contract proposals
      b. reach a compromise that fills as many of the needs of both groups as possible
      c. arbitrate the main points of difference
      d. ratify the contract
   4. improved efficiency means higher profits and salaries
      a. working conditions (temperature, light, air quality)
      b. good craftsmanship cuts waste and improves the product
      c. work at a steady rate and don't waste time
      d. breaks to rest and relieve boredom
      e. rotate jobs or work in small groups

f. think of ways to speed up production and save time
g. profit sharing with employees

Termination: Hand out a ditto of terms as a review

Materials: ditto of terms for review

Name_____

Labor-Management Review

A. Define the following terms:

1. Labor

2. Management

3. Arbitrate

4. Compromise

5. Ratify

B. List five ways to improve efficiency and increase profits and salaries.

1.

2.

3.

4.

5.

Unit Plan

Class

Seventh grade mechanical drawing and career education

Duration

Six weeks, five forty-five minute periods per week

Units to be covered in the seventh grade

A. Mechanical Drawing
B. Career Education

Objectives

The student will:

1. understand the importance of drafting as it relates to industry.
2. gain a working knowledge of the careers in drafting.
3. understand the correct use of drafting tools.
4. understand that mechanical drawings are composed of at least one basic geometric shape.
5. be aware of possible careers in the drafting industry.
6. develop an awareness of the concept of "career", its definition, importance, value, etc.
7. develop an insight into the careers available and the need for career planning at this stage in life.
8. develop:
   a) self awareness.
   b) career awareness.
   c) ability to identify realistic career choices.
9. identify information sources available for career exploration and decision-making.
10. understand some of the life adjustments required to select an occupation in the world of work (e.g. location, boss/worker, salary, etc.).
11. understand the concepts of responsibilities, working conditions, basic skills, etc. through shop experiences.
12. be aware of the changing employment patterns and opportunities in the world of work.

Note

This unit plan can be used as a means for infusing career education into any curriculum area. In this case the curriculum area of mechanical drawing has been used to infuse career education.

	Demonstrations, Related Lessons	Student Activities	Instructional Materials
WEEK # 1	Career orientation How to obtain career information Orientation to Drafting	Make a list of the occupations related to a piece of wood. Library visit. Fill out handout sheet on an occupation interest. Cut out pictures of jobs in magazines Start on sketches Homework, Unit # 1 Ques. 1-3 Unit # 2 Ques. 1-6 Work on sketches	O.O.H., D.O.T., Blackboard SRA files, library books, and pamphlets from GOOP. Handout sheet of job interests Blackboard Handout sheet on sketches. Text: Brown, W. Drafting, Goodheart-Willcox.
WEEK # 2	Career investigation Why study occupations Measuring, reading a ruler Drawing equipment	Bulletin board display of pictures of jobs in city. Bulletin board of a career tree. Finish handout sheet of job interest Finish work sheet on sketching Start on lettering plate Homework, Unit # 4 Ques. 1-7 Work on lettering plate	Handout sheet of job interest. Library resources Bulletin boards Text

	Demonstrations, Related Lessons	Student Activities	Instructional Materials
WEEK # 3	Self awareness How occupational choice affects life off the job Geometric construction Parts of a drawing	Role playing a career on video tape Finish bulletin boards Cut out newspaper want ads on jobs related to industrial arts Start drawings Homework, Unit # 9 Ques. 1-4 Work on drawing	Video tape recorder Blackboard Handouts for self awareness Old newspapers Text
WEEK # 4	What's My Career Student discussion of the occupation they drew Orthographic drawing	Students investigate and draw a picture of an occupation of their choice. Panel game Students discuss their drawings using the opaque projector Homework, Unit # 3 Ques. 1-6 Start on three view drawing	Opaque projector A.V. equipment O.O.H. and D.O.T. Text

	Demonstrations, Related Lessons	Student Activities	Instructional Materials
W E E K # 5	20 Question Career Game Pictorial drawings	Choose a career, and fill out the handout Panel game Isometric sketches Homework, Unit # 7 Ques. 1-7 Start on drawing on page 60 fig. 7-5 (half scale)	Library for research, and materials 3 x 5 cards Handout on job or career interest Text Drafting equipment Paper, pencil
W E E K # 6	Speakers on drafting and ceramics Architectural drawing	Outside speakers Homework, Unit # 11 Ques. 1-7 Work on drafting activity on page 86 Start on floor plan on page 87 drawn to 3/16" = 1' scale Work on floor plan	Outside speakers Text Drawing paper and equipment

Career Questionnaire

Introduction

Using this questionnaire developed by the class, you are to interview someone with a job that interests you. These questions are a guide. If a question does not apply or the person does not want to answer for personal reasons, you may leave it blank.

Pay

1. Do you get paid by the piece, the hour, the day, the week, the month or the year? How much does this add up to in a normal year?
2. Is there a bonus or profit-sharing program?
3. What do you get for working over-time?
4. Do you get any paid vacations or holidays?

Benefits

1. Is there an insurance program within the firm?
2. Do you receive traveling expenses?
3. What kind of pension plan is offered?
4. How often do you get days off?
5. Do you get sick pay or compensation benefits?
6. Is your job seasonal?

Working Conditions

1. Do you work for someone else or are you self-employed?
2. Are you a boss or are you under a boss?
3. Do you meet many new people on the job?
4. Do you work part time or full time?
5. Are there any hazards connected with your work?
6. What are the safety provisions where you work?
7. Do you sit or stand?

8. Do you work indoors or outdoors?

9. How much time do you get for lunch and coffee breaks?

Job Requirements

1. What type of preparation did you go through and how much did it cost?

2. Where do you have to work and how much traveling is involved?

3. How difficult is the work?

4. What hours do you have to work?

5. Did you have to join a union? If yes, how much does it cost and what do you get in return?

6. What exactly are you required to do? (example- a deliveryman for a large bakery must be at work at 5:30 or 6:00 in the morning to load his truck with fresh bread, he must stop at several stores along his route, at each store he must fill the shelves with fresh bread, remove stale bread and make out a bill, at the end of the day he must make a list of what he will need the next day, he may be done at 1:00 or 2:00 in the afternoon)

Student Developed Career Questionnaire

Introduction

By using questions designed by students they are more apt to take an interest in the implementation of the questionnaire.

Objectives

The students will be able to:

1. identify aspects of a career that would affect his choice of a career.
2. identify the particular aspects of a career that may interest him.

Procedure

1. The development of the questionnaire may follow a class discussion of aspects of a career you should be aware of.
2. As an in class or homework assignment have the students list five questions that they would like answered before they accept a job.
3. Compile questions to eliminate duplicates and poorer questions.
4. Reword questions so that they require more than a one or two word answer.
5. Categorize questions and prepare as a ditto.
6. Hand out questionnaire and explain that all questions were prepared by students and that their assignment is to ask the questions of anyone with a job that interests them. A parent, relative, neighbor or friend may make a good subject.
7. When questionnaire have been completed they may simply be evaluated by the teacher. If time permits and you are working with the right group you may want students to share information they have found with either a short presentation or a question and answer period.

Contents

A sample questionnaire may be helpful to get the class started.

Evaluation

The questions on the sample questionnaire did allow a lot of possible yes or no answers. The original intent of the assignment was for students to research a career that interested them, however, a majority interviewed their parents. Even though the students thought this the easiest way to complete the assignment they did gain a greater insight into the responsibilities of work.

Student Interest Inventory

Introduction

Career education, it has been found, should include many aspects of personality and character awareness for individual growth. One way to promote this growth is with the aid of an interest inventory.

Objectives

The student will be able to:

1. Identify subject, hobby and extra-curricular areas of personal interest.
2. Identify important personal character traits.
3. Recognize the relationship between personality traits and careers.

Content

A very important segment of career education is the awareness of "self". An individual, unless lucky, could not possibly find an occupation to suit his, or her, needs without some knowledge of strengths, weaknesses, preferences, and the like. Devices used to measure these interests, and hopefully stimulate self-awareness have been in use for some time. Some are more scientific and reliable than others.

Procedure

A discussion related to self-awareness acted as an introduction or preparation to the interest inventory. A discussion following might also have been of some value.

Evaluation

The interest inventories used were quite subjective and open to interpretation. There was no way of qualitatively evaluating student responses, and no assurance of honest answers. In view of that, it may have been more useful to use one of the many scientifically designed tests. As it was, the interest inventory served primarily to stimulate self-awareness.

An interesting contrast might be seen by testing a student group before and after a career education unit. The results could serve as a measure of the studentslearning.

Supportive Material

The following are examples of interest inventories that can.be used with this activity.

Interest Inventory

1. What courses of study have you enjoyed most in school, and why?

2. What courses of study have you disliked most in school, and why?

3. What jobs have you held (either part-time or during vacation) and what were your duties?

4. Which jobs interested you most, and why?

5. Which jobs did you dislike most, and why?

6. If you have only held one job so far, write down what you liked about it and what you disliked about it.

7. Suppose you were financially independent and perfectly free to do anything you wanted, what life work would you select, if any?

8. Is there anything that you do which interests you so much that you lose all sense of time and forget all about watching the clock?

9. Do you have any special preferences as to where you would work: indoors, outdoors, in larger cities, smaller towns, rural areas, or in any special part of the country or world?

10. What hobbies have sustained your interest over any length of time, and why?

11. What do you read about, outside your regular school assignments, and why?

12. What extracurricular activities have you engaged in at school? Which ones did you like best, and why?

13. What community activities outside of high school have you particularly enjoyed, and why?

14. Have you ever built or invented or written or created anything original that particularly pleased you and that you considered to be your very own?

15. What type of work do you feel you would best be able to perform - creative work, administrative work, executive work, line work? What makes you think so?

16. What are your strong points and your outstanding abilities? At what age and in what connection did these abilities begin to show themselves?

17. What are your weaknesses?

18. What kinds or types of people do you enjoy associating with the most? Describe their characteristics.

19. Do you like to work with other peopl· or would you rather work alone?

20. Explain any other personal likes or dislikes that you may have in relation to other people.

21. In your spare time, do you try to get off by yourself and spend time alone, or do you consciously seek the company of others?

22. Do you want to take the initiative in meeting people, do you want other people to come halfway, or do you prefer that others take the initiative incoming to you?

23. Do you enjoy trying to persuade others to your point of view?

Student Interest Inventory
Career Education

Name _____ Age _____

What was your last year's scholastic average?

high_____ average_____ below average_____ low_____

List the subjects that:

you like best_____
you like least_____
are easiest_____
are hardiest_____

Do you plan to graduate from high school? _____

If you do not plan to graduate from high school, circle the last grade you plan to complete.

Grade 9 10 11 12

If you plan to leave high school, state briefly why.

What do you plan to do when you leave high school?

_____ go to college _____ go to work _____ enter military
_____ go to trade school _____ go to business

What are your hobbies?

What kind of job world you like? 1st choice _____

2nd choice _____ 3rd choice _____

Reasons for 1st choice? _____

Ever had a job? _____ What? _____

What kind of job would you like to know more about?

Parent Interview

Introduction

This assignment is in place of an assignment which has the student spending the day with his mother/father at work. Through the use of specific questions a little more insight is given to each student about different careers. Through group discussion of each others parent's occupations this insight is developed.

Objectives

The student will be able to:

1. identify many different jobs.
2. restate some specifics about a given occupation.

Procedure

Hand out questionnaire. The student will fill them out with parents and return to class the next day ready to discuss them.

Note: a circle is effective for this discussion.

Content

See attached questionnaire.

Evaluation & Recommendation

This assignment worked fine. All students cooperated and the discussions were really good. There was some surprising occupations and a lot of good questions and discussion. A recommendation would be to watch the questions closely, so that they require more than just a yes and no answer.

Parent Interview

Directions

Interview an adult, perhaps one of your parents or a neighbor, concerning his or her job. The questions on this sheet should be used as an outline for the interview.

Name and address of company _____

_____

Worker's job or position _____

Worker's responsibilities _____

Product being manufactured, if any _____

Description of job:

travel involved _____
equipment involved _____
hours worked _____
union membership _____

Mental abilities required _____

_____

Physical abilities needed _____

Preparation needed for the job (apprenticeship, on the job training, high school, college, etc.) _____

Things you like about your job? _____

_____

Things you dislike about your job? _____

_____

Other information _____

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

Parent Interview
(alternate form)

Name of company and address.

Name or title of position.

Job responsibilities (list several)

Product being manufactured, if any.

Job description

travel
operate equipment
hours worked
safety program
working conditions

Does this person belong to a union? If so, which one?

Is this person satisfied with his/her occupation?

Why or why not?

Would this occupation interest you? Why, or why not?

A Day with a Parent

Introduction

This activity is designed to familiarize the student with their parent's occupation. Each student is excused from school for one day and spends that day with his parent on the job.

Objectives

The student will be able to:

1. Complete the questionnaire about his/her parent's occupation.
2. Present an oral report to the class describing their parent's occupation.
3. Answer questions raised by the class regarding their parent's occupation.

Procedure

1. Review the personal data cards of your classes to decide which class would be best suited for this activity. Things to consider are, does the student have parents? etc.
2. Discuss the activity with the class to see the student reaction to the idea.
3. Pass out the permission slips and information sheets and explain what their responsibilities are so that you can arrange their day off from school in advance.
4. The day following their excused day, the students will present an oral report on what they learned about their parent's occupation.
5. Encourage the students to bring in product samples, forms used, pictures, equipment, clothing worn, etc. which will help them present their report.
6. Encourage the class to ask questions during these reports; you might find that you must lead the questioning.
7. Be prepared to supplement points of interest that come out of these reports; relate to your own work experiences.

Content

See work sheet and permission slip

Evaluation

This activity proved to be very successful. The students broadened their knowledge about careers not only thru the day with their parent but by listening to the oral reports in class as well. Each student is exposed to as many careers as there are students in the class. Many relating points for discussion are brought about thru these reports. The students receive a good exposure to career education thru this activity.

Parent's Occupation-Work Sheet

1. Name and address of company.

_____

_____

2. Parent's position (name) _____

3. Parent's responsibilities (list some).

_____

_____

_____

_____

_____

4. Product being manufactured if any. _____

5. Description of your parent's job.

   a. Does he/she travel? _____
   b. Operate equipment (type). _____
   c. Hours worked (time, when to when). _____
   d. Describe the safety program. _____

6. Does your parent belong to a union? _____

_____

7. List some of the interesting things about this occupation.

_____

_____

_____

_____

_____

_____

_____

Permission Slip

We would like each of the students to spend a day with their parent to learn about their occupation. We realize that in some cases this might not be possible. Please indicate your interest to take part in this career education program by listing a date convenient for you and your son/daughter to spend together.

I will allow my son/daughter _____ to spend a day with me and learn about my occupation.

_____ (Signature)

_____ (Date most convenient)

On the Job Interview

Introduction

Most students at the middle school level have little idea of what actually goes on in a working environment. Through the use of the video tape recorder the teacher and the students are able to interview various people at their places of employment to discover the different aspects of a particular career.

Objectives

The student will be able to:

1. describe the environment of a particular job.
2. list the responsibilities and qualifications of a particular job.

Procedure

Teacher interviews

1. Select occupations that students might be unaware of (e.g. pharmacist, glazier, sheet metal worker).
2. Prepare questions that would require answers with some depth of explanation.
3. Find willing people in the occupation and explain the activity and your questions.
4. Begin interviewing and video tape the person working three to five minutes. Another person, as a helper, will probably be most effective.
5. Record three or four interviews to provide a good length tape (If you have the facilities you may want to do some editing).
6. Introduce the tape to the class.
7. Present the tape to the class.
8. Discuss the presentation.

Student interviews

1. After viewing the teacher-prepared tapes ask for names of students who are interested in using a video tape recorder and interviewing people on their jobs.
2. Select a small group (4-6) to work on the activity.
3. Find one company that has people in various occupations working for them. (e.g. auto-dealership, factory, department store).

4. Obtain permission to conduct activity and find out who can be interviewed.
5. Instruct the students in the use of the video tape recorder and help them formulate some questions.

    a. One hour or more will probably be needed. This may be during or after school, whichever is convenient.
    b. It may be necessary for the teacher to help the interview get started with his own questions.
    c. It is more than likely that some editing may be necessary. If editing facilities are not available some may be done by writing down the intervals of time and take-up reel revolutions to be eliminated.

6. Introduce the tape to the class.
7. Present the tape to the class.
8. Discuss the presentation.

Evaluation

The video tape recorder was found to generate a great deal of interest. A short teacher-prepared tape was used to show the students what they could possibly do. It is most important to be selective in your choice of interviewers, they should be prepared with appropriate questions. Although all of the students were not involved in the interviewing, most were interested in the tapes and did get exposure to some careers that they were unaware of.

Job Application

Introduction

This activity is used to acquaint the student with the type of questions that are on a job application.

Objectives

The student will be able to:

1. identify the kinds of questions asked on a job application form.
2. identify five important factors needed to get a job selected from a newspaper classified ad.
3. fill out job application for a position in the shop personnel system.

Procedure

1. Present industrial job applications and discuss the types of questions on it.
2. Permit students to select a help wanted ad from the newspaper.
3. Have students identify five factors needed to get the job they selected from the newspaper.
4. Have students fill out job applications for positions in the shop personnel system.

Evaluation

This activity went well. The students identified the factors and discussed what job they had found and what factors where needed. Many discovered that the jobs they wanted required a high school education.

APPLICATION FOR EMPLOYMENT
AN EQUAL OPPORTUNITY EMPLOYER

PLEASE FILL IN ALL BLANKS

Name _____
Last First MI

Address _____
No. & Street City State Zip Telephone

Notify in emergency _____ Soc. Sec. No. _____
Name Address

Check all that apply
Citizen of US____ yes____ no
Male_____ Female_____
Height_____ Weight_____
Birth Date_____
Mo. Day Year

(The New York State Law Prohibits Discrimination Because of Age)

Present Conditions of Health _____
Are there any Physical Limitations we should consider? ____ yes____no
If yes, What are they? (glasses, hearing-aid, etc.)_____

Have you ever been convicted of a misdemeanor or a felony?___ yes___ no
If yes, Explain fully _____

Position for which you are applying? _____ Wages or salary expenses $_____

Other positions for which you are qualified? _____
Date available for employment? _____

What interested you in our company? _____
_____
_____
_____

Have you any side line business interests? _____yes _____no
If yes, please explain _____

Have you ever been employed by Oswego Middle School Const., Co,. ____yes ____no
If yes, when _____

Have you ever applied for work here ___yes ___no
If yes, when? _____

Circle highest grade completed in each school category

Grade School 1 2 3 4 5 6 7 8 | High School 9 10 11 12 | College 1 2 3 4 5 6

	Name	Location	Yr. of Grad.	Degree
Grade School				
High School				
College				

Standing in High School Top Qtr. 2nd Qtr. 3rd Qtr. Bottom Qtr.

Other Training or skills (special courses, machines operated, typing, etc.) _____

Employment History

Please list all previous employment starting with present or most recent employer.

Dates	Name & Address of Employer	Job title	Describe Major duties	Wages
from Mo. ___ Yr. ___				
to Mo. ___ Yr. ___				
from Mo. ___ Yr. ___				
to Mo. ___ Yr. ___				
from Mo. ___ Yr. ___				
to Mo. ___ Yr. ___				
From Mo. ___ Yr. ___				
to Mo. ___ Yr. ___				

What was the reason for leaving your last job? _____

_____

_____

I certify that all of the above information is true and complete to the best of my knowledge.

Applicant's Signature .....Date .....

Interviewer's comments:

_____

_____

_____

_____

_____

_____

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_____

_____

For Personnel Dept. Use Only:

Dept. _____ Permanent _____

Supervisor _____ Seasonal _____

Position _____ Temporary _____

Rate _____ Part Time _____

Starting Date _____ Male _____

Review Date _____ Female _____

Shift __ 1 __ 2 __ 3 __ 4

Working Papers

Objectives

1. The student will be able to list three ways that working papers will prevent him from being exploited by an employer.
2. Given a working paper application the student will be able to fill in the necessary information to complete the form.

Materials

1. Guidance counselor
2. Working paper application ditto
3. Work permit ditto
4. Pamphlet of "Laws Governing Employment of Minors"

Introduction

Working papers are a protection for you against overwork, under pay and dangerous jobs. They register you with the State Education Department and entitle you to all the rights and privileges of the State Labor Laws.
What are these privileges?

Prohibited Occupations- Boys under sixteen years old can not work in:

1. factory workrooms
2. with dangerous machinery or chemicals
3. cleaning, oiling or wiping machinery
4. packing paints, dry colors, red or white lead
5. erection of buildings or structures
6. demolition of buildings or structures
7. operating steam boilers
8. industrially related homework
9. places of entertainment dangerous to life, limb, health or morals

Hours of Work- Boys under sixteen can not work more than:

1. three hours on a school day
2. eight hours on Saturday or non-school days
3. more than twenty-three hours per week
4. more than six days per week
5. between 6 pm and 8 am on most jobs

Minimum Wage- In New York State the law guarantees every employed person must be paid at least $2.00 per hour.

All through your life you will be expected to fill out applications of all types. Whether it is a job application or income tax forms or any one of the millions of applications it is important that they be done correctly.

An application is a legal document. If you knowingly put down a false answer to a question you have broken a law.

Read last paragraph on the application.

An application is not a permit to work. Be sure to obtain working papers and carry your permit card at all times while at work.

Conclusion

Why do you need working papers?
What do they quarantee?

Reference

"Laws Governing Employment of Minors", N.Y.S. Labor Department, 1965

Social Security

Introduction

This activity is designed to familiarize seventh and eighth grade students with the Social Security Act and the protection it can offer them.

Objectives

1. The student will be able to successfully apply for a Social Security number.
2. The student will be able to describe the benefits of social security.
3. The student will be able to describe how an employee will contribute to social security.

Procedure

This activity can be conducted by either the classroom teacher or a guidance counselor or an officer from the local social security board. The class will meet as one group in any manner that formal lectures are normally conducted.

Content

Social Security application forms will be passed out to students and they are shown how to fill them out as a group with the guidance of the instructor. The instructor will now present a short history of Social Security, and explain its general purpose. With the aid of the instructor the students will now make a list of the benefits of social security. At the end of the activity any unanswered questions should be written down and submitted to a local Social Security Office.

Evaluation

The students were able to fill out their Social Security applications and seemed interested in doing so. They made a fairly accurate list of Social Security benefits which was rounded out by the instructor. Students could also explain how they would contribute to Social Security from their future salaries.

Occupational Information

Suggestions for students seeking jobs.

1. Tell relatives, friends, neighbors that you're looking.
2. Tell your minister, rabbi or priest, your doctor and dentist.
3. See your school counselor or placement offices.
4. Tell teachers, advisors, or other school personnel.
5. Alert school or college alumni associations.
6. Alert your librarian and local businessmen you deal with.
7. Get in touch with any employers you have worked for.
8. Examine the classified telephone directory for employer names.
9. Telephone prospective employers for interview appointments.
10. Pay personal visits to places of employment.
11. Send letters of application to likely employers.
12. Read classified ads ("Help Wanted") in newspapers.
13. Read classified ads in trade and professional magazines.
14. Read bulletin boards at supermarkets and other places.
15. Visit unions and trade and professional associations.
16. Visit fraternal organizations, service clubs, other social groups.
17. Visit chambers of commerce and manufacturers' associations.
18. Visit churches and synagogues and religious organizations.
19. Register at private employment agencies for temporary jobs.
20. Register at the State Employment Service office.
21. Register at Volunteer Bureau for non-pay jobs.
22. Apply at local, state, and federal civil service offices.
23. Put "Situation Wanted" ads in daily and weekly newspaper.

Career Slide Show

Introduction

The purpose of this slide show is to expose the students to the many different jobs available in their community.

Objectives

The student will be able to:

1. build an awareness of the occupations available within most communities.
2. identify the responsibilities related to a number of these jobs.

Procedure

1. Arrange students for discussion, identifying points of importance.
2. Introduce slide presentation using cassette and slide projector.
3. After presentation, have question and answer period.

Content

1. Slides (e.g. sheet metal worker, policeman, construction worker, etc.)
2. Tape recorded description of each slide.

Evaluation & Recommendation

The presentation went well, the students listened to the recorded descriptions and had questions to ask when the presentation was over.

One point should be made, you can stop the recorder anytime you want if you have an important point to make. Always try to put some enthusiasm in your audio track and have some flow from slide to slide.

Supportive Materials

1. Discussion on slide presentation
2. Assignment to research a career.

Women at Work: A Slide Show

Introduction

This activity was designed to expose a class of eighth grade girls to a variety of jobs which they might not have considered because of their sex. The slides used in this activity depicted women in a wide range of occupational roles.

Objectives

The students will become aware of different jobs which they might not consider because of their sex by:

1. identifying the characteristics of a job in general.
2. researching a selected career from a list of job slides available.

Procedure

1. Students list and discuss job characteristics.
2. Students decide on which characteristics to use in the script for the slide series.
3. Students research the job that they have selected using the criteria decided on.
4. Students write their information into a script.
5. Students select someone to record the script on tapes.
6. Slide series is presented to class with discussion taking place during and after the presentation.

Content

1. Set of slides produced by teacher.
2. Job characteristics used in script research.
    a. name of job
    b. nature of work
    c. educational and training requirements
    d. benefits, promotions, etc.
3. Prepared script by students.
4. Recorded script of job descriptions.

Evaluation

This activity was interesting to the students and it accomplished its objectives. They were motivated through their active participation in preparing the slide show. The tape should be stopped whenever a question is posed or a point is to be made rather than waiting until the end of the presentation.

Identifying Career Clusters

Introduction

This activity is designed to expose the student to the cluster concept.

Objectives

The students will be aware of the career cluster concept by:

1. identifying the different clusters.
2. listing different jobs related to a particular cluster.

Procedure

1. Develop bulletin board displaying the different clusters.
2. Have students bring in classified ads or pictures.
3. As students bring in ads or pictures, discuss the nature of the work and necessary requirements.
4. After the discussion, the students place their ad or picture on the bulletin board in its appropriate cluster.

Content

1. Bulletin board displaying the different career clusters.
2. Classified ads or pictures of workers.

Evaluation

This activity went well but must be developed over a period of time. At the beginning of each class, discuss no more than two of the ads or pictures. Students lost interest when the whole period was devoted to this activity. Students should be assigned a day when they are expected to bring in an ad or picture. As the different clusters become represented, the students should be encouraged to find ads or pictures of jobs that will be a part of a cluster not already represented.

Occupation of Interest
An Investigation of a Career

Introduction

This activity was designed so that the student will become familiar with library materials that are available to him.

The student will also become familiar with occupations of interest to his classmates.

Objectives

The student will be able to:

1. Describe the importance of work and list the educational and occupational requirements of different jobs.
2. Gain a working knowledge of career opportunity publications.
3. Use the Dictionary of Occupational Titles, Occupational Outlook Handbook, and SRA File Kits, to obtain career information from the library.
4. Present an oral report describing the occupation of interest.

Procedure

A lesson is given on how to obtain career information from the library. The students will fill out a questionaire and then make a free-hand sketch of the occupational choice. An opaque projector is used to project the sketch on a screen and the student gives an oral report on the career chosen.

Content

See work sheet, free-hand sketch, lesson plan, "How to obtain Career Information".

Evaluation

This activity worked out well. The students broadened their knowledge of careers by listening to the oral reports given by their classmates. Students' interests varied providing a large selection of career choices.

How to Obtain Career Information

Objectives

The student will be able to use the D.O.T., O.O.H. and SRA files to obtain career information in the library.

Materials

1. Occupational Outlook Handbook
2. Dictionary of Occupational Titles
3. SRA files

Introduction

Where do you look for job information?

Presentation

1. D.O.T.- Alphabetical order to find title and job number.
2. O.O.H.- Use of index
3. Career files- SRA file kits
4. Library books
5. Pamphlets

Summary

1. We will use all of the above when they are needed to choose a career.
2. Discuss the importance of gaining knowledge in all of the above areas.

Assignment

Look up an occupation you would be interested in.

Occupation of Interest

Nature of work

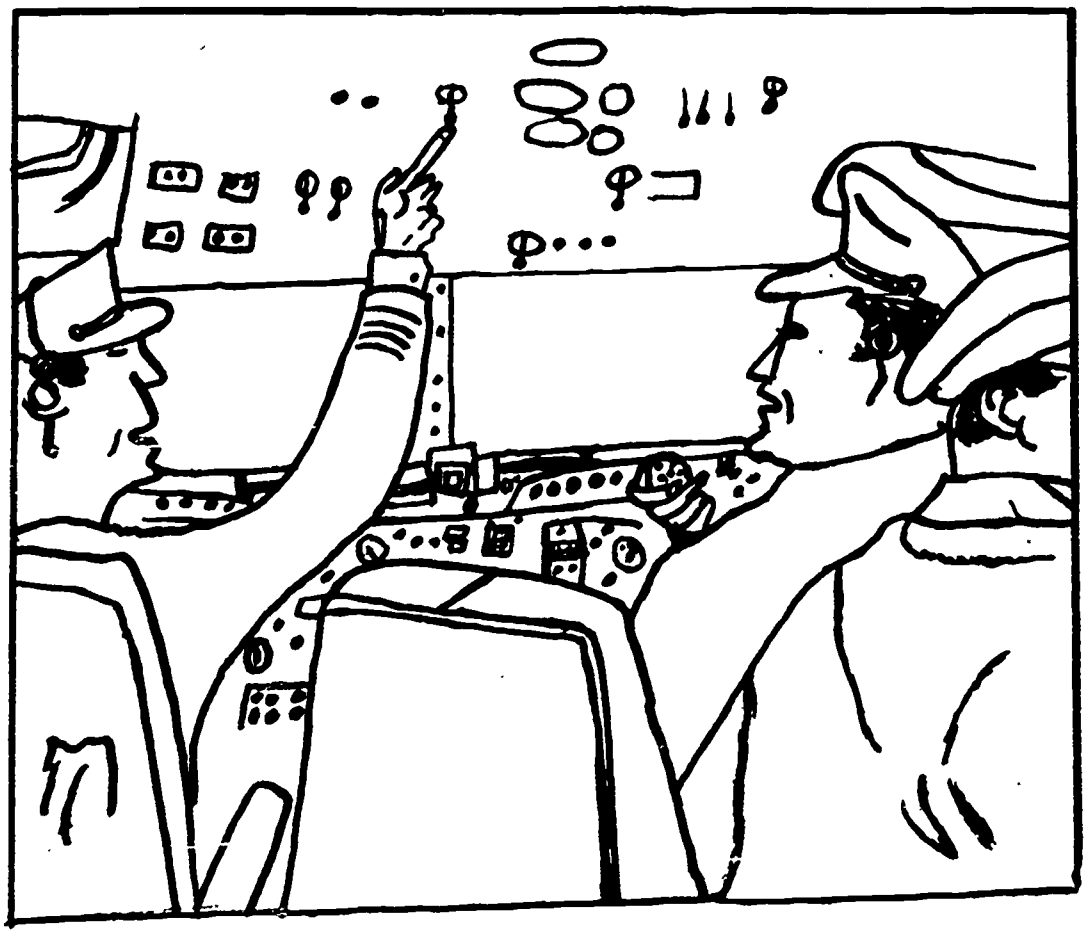
Places of employment

Educational training, other qualifications, and advancement

Employment outlook

Earnings and working conditions

José Goncalves, a seventh grader at Grant Junior High School, chose an airline pilot as his occupation of interest. This drawing is José's free-hand sketch of his occupational choice and the accompanying questionnaire was also done by José as a part of this activity.



Mr. Bartlett
4/1/74
Student Name *José Goncalves*

Mr. Zampariello
Grant Jr. High School

Occupation of Interest

Directions: Pick an occupation you might be interested in.

Nature of work *Airline pilot*

Places of employment *In all parts of the country, but mainly in transportation centers.*

Educational training, other qualifications, and advancement

Mathematics, Physics, Chemistry, English and Mechanical Drawing

Employment outlook *The number of airline pilots needed is expected to increase substantially as airline operations increase.*

Earnings and working conditions *$17,500 a year in domestic air transportation and $21,500 in international operations.*

Careers in Construction

Introduction

One goal of the Career Education Pilot Program was to expose the students to as many different types of jobs as possible. However, to do the concept of career education justice, it became necessary to narrow the field of career choices down to a workable size.

The construction industry was chosen as one area to be studied because of the wide variety of jobs it entails. Several activities could also be related to the Industrial Arts classroom.

This "mini unit" of construction was designed to introduce the on the job duties of the architect, surveyor, and excavator, carpenter, and electrician. The unit involved one class of fifteen students and covered nine school days.

Objectives

By the completion of this unit the students will:

1. be able to write six job titles related to the construction industry and write a brief description of each job.
2. research a construction job in the Occupational Outlook Handbook and complete the questionnaire "Career Information".
3. when given a map locating two walls of a house, locate the corner on the shop floor then position and outline, as indicated by the map.
4. mix a mortar of lime and sand and lay a two-course cement block foundation for a house corner with two 5' walls.
5. measure, cut, square and set a 2x6 sill on the foundation wall.
6. measure, cut, frame and secure a 5'x5' floor using 2x6 joists and headers and cover with a plywood subfloor.
7. measure, cut, frame and secure two 5'x8' wall sections as shown in drawings 1 and 2.
8. wire one light fixture, light switch and outlet, according to local codes.

Procedure

One of the ways the student can learn what it is really

like to be a mason or a carpenter would be to work with the tools and materials related to these jobs. Building scale models may provide some experience, but using full size materials would create a more vivid picture and a more realistic situation.

With this theory in mind, materials were gathered from local businessmen to construct a full size house section in the shop.

The students were introduced to the construction industry and the concept of career clusters. This was followed by a short research assignment ("Career Information") involving the Occupational Outlook Handbook, and other career information guides.

A very detailed model of a two-story frame residence was quite helpful in pointing out the various parts of a house, techniques of construction, and how the work of many people come together as one finished product. With this brief introduction, the students began the preparation work for building a house section.

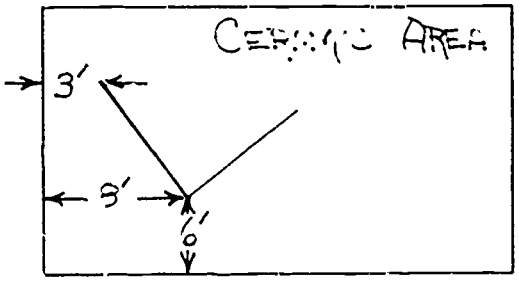
Several activities were involved to emphasis the careers in construction. Some of the more interesting and successful activities are briefly described.

Activities

An activity in Surveying

The students were provided with a map outlining the ceramic's area floor in the shop. In this area they were to locate a right angle with 5' legs which would position the foundation wall.

No equipment was provided, except for chalk. The students were at first confused, but soon found some tools they could use and within twenty minutes had the house outlined on the floor.



This activity sparked enthusiasm into all of the class members. This was the first working experience of the three day old program, and the unit was off to a good start.

An activity in Masonry

The class was shown how to measure ingredients and mix a wheelbarrow of mortar (sand and lime). They made the mix, carried concrete blocks from a storage pile to the "job site" and began to lay a foundation wall. Blocks were cut to

length and anchor bolts set in the two course wall.

This was the first time some of these seventh graders had lifted a full size block and used mortar. The wall provided a good exposure to the physical work and craftmanship of a mason.

Guest Speaker- The job of an Excavator

To vary the teaching method, and to introduce another construction job, the owner of a local excavation firm spoke to the class about his career.

Included in this talk was a description of the job of the excavator, and some of the tools he uses. A transit was set up and shots were taken on the foundation wall that the students had laid.

They were pleased to discover only 1/4" of variation in the three corners.

An activity in Framing Wall Sections

The students were given drawings of a floor frame and two wall sections, one including a door opening, the other a window opening. In groups of five they worked on measuring, cutting, framing and sheathing the sections of a house. Upon completion, the house was erected and although a bit shaky these two full size walls and foundation had provided fifteen students with an experience in construction.

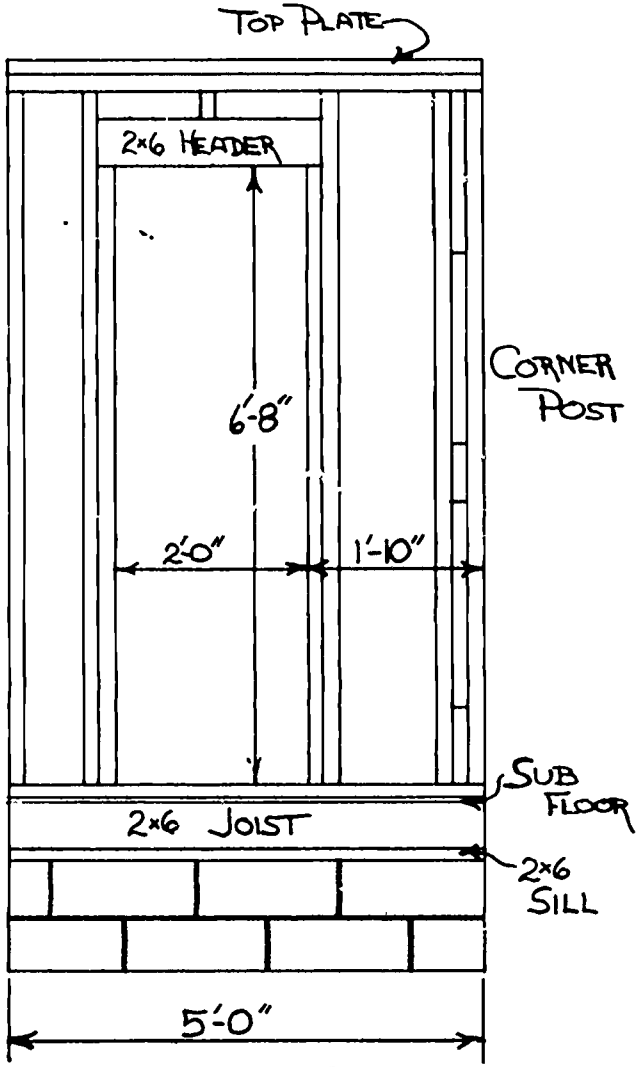
Career Information

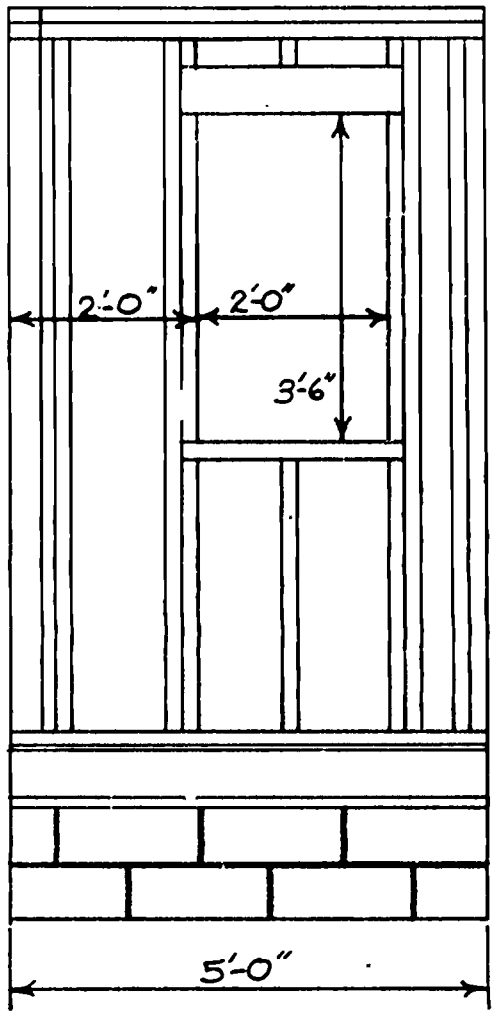
Directions

Look up an occupation of you. choosing and answer the following questions about it.

1. What duties are performed in this occupation?
2. What are the working conditions in this job? (noise, dangers, etc.)
3. List any special training needed to perform this job. (school, apprenticeship, etc.)
4. What is the average salary in this trade?
5. How many people are employed in this line of work?
6. What are the future prospects for employment in this career?
7. Where are most of these jobs located? (cities, country, offices, factories, etc.)
8. Where did you find your information?
9. List any additional information you can find about the occupation.

WALL DETAILS





1/2" = 1'-0"

Careers in Manufacturing

Introduction

By the use of a mini unit of manufacturing in industrial arts, career education was related to mass production. The importance of individuals performing industrially oriented jobs was stressed rather than the operations they performed.

The class was involved in the production of twenty "Do Nothing Machines", a small item that includes many of the basic operations a seventh grader should learn. The unit involved one class of fifteen students and was completed in five class periods.

Objectives

By the end of this unit the students will:

1. be able to demonstrate the use of a drilling fixture and a cut off jig. Write the distinction between a jig and a fixture.
2. be able to choose the five departments of industry from a list of eight titles.
3. write a description, one sentence in length, of the duties of each department.
4. use the jigs and fixtures provided to complete a mass production run of twenty "Do Nothing Machines" in five class periods.

Procedure

A list of jobs related to the production of the "Do Nothing Machine" was made by the instructor. The students were assigned a job and provided with the jigs, fixtures and materials necessary to complete the operation.

Job for mass production run of the "Do Nothing Machine"

Operation	Machine	Tool
Cut bases	Radial arm saw	Stop
Route edge	Router	Shaper table
Drill dowel holes	Drill press	Fixture
Drill shaft hole	Drill press	Fixture
Cut top	Radial arm saw	Stop
Drill dowel holes	Drill press	Fixture
Drill shaft holes	Drill press	Fixture

Operation	Machine	Tool
Cut dowels	Jig saw	Jig
Cut spacers	Band saw	Jig
Drill spacers	Drill press	Fixture
Cut wire		Fixture
Bend shaft		Jig
Cut fish line		Fixture
Tie snap swivel		
Tie sinker		
Sand		
Stain		
Finish		
Assemble		

Evaluation and Recommendations

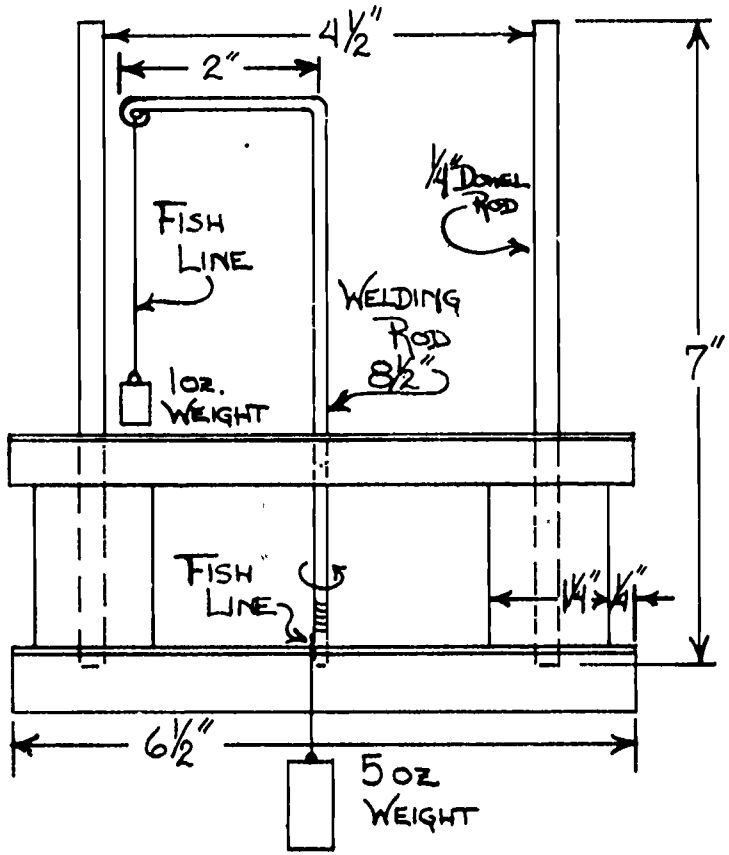
This mini unit was a quick exposure to mass production but provided enough experience for some students to make career related decisions. A small number expressed dissatisfaction with the repetitiveness of their jobs.

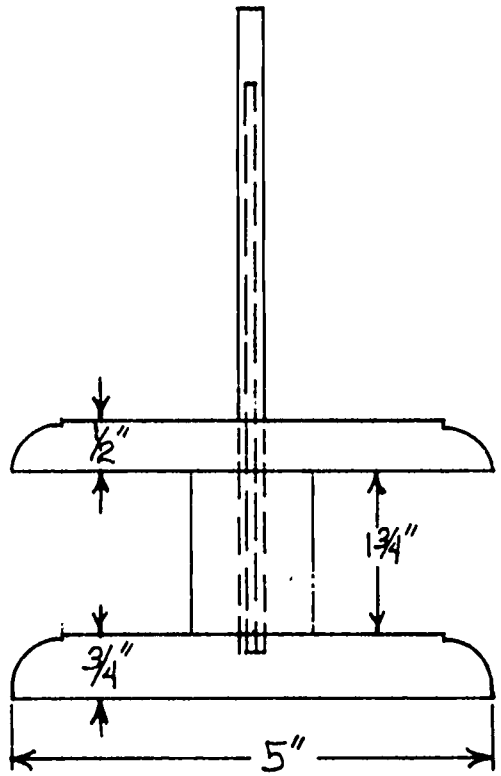
A longer production run, involving the design and construction of jigs and fixtures, student advertising, stock sales and marketing was the program of another group of fifteen students.

Because of the lack of experience in mass production methods these students faced many problems, particularily in the research and development stage.

Based on the results of both groups, a guide to consider when planning a mass production unit for career education would be, not to exceed a two week time limit. A program involving more time may begin to deviate from a career education unit to a unit in mass production.

BILL OF MATERIALS		
1	6½×5×¾	PINE
1	6½×5×½	PINE
2	1¼×1¼×1¾	PINE
2	7×¼DIA.	DOWEL ROD
1	8½×⅛DIA.	WELDING ROD
1	1 OZ.	SINKER
1	5 OZ.	SINKER





"DO NOTHING MACHINE"

½"=1"

Manufacturing - Candle Sconce

Introduction

Through the use of a manufacturing unit, career education was related to many mass production occupations.

The students in two seventh grade woodworking classes were involved in the production of one hundred wall candle sconces.

Objectives

As a result of this activity the student will be able to:

1. describe different types of businesses and the differences between a jig and fixture.
2. gain an awareness of occupations through simulated job situations.
3. gain a sense of responsibility and group spirit.

Procedure and Content

1. Wood blanks were cut and jigs and fixtures were made by the instructor.
2. Lessons were given on the history of manufacturing and the free enterprise system.
3. Students were then assigned jobs to perform.
4. Each student was given a demonstration covering his job.
5. Production
   a) layout
   b) part production
   c) sanding
   d) assembly
   e) finishing

Evaluation and Recommendations

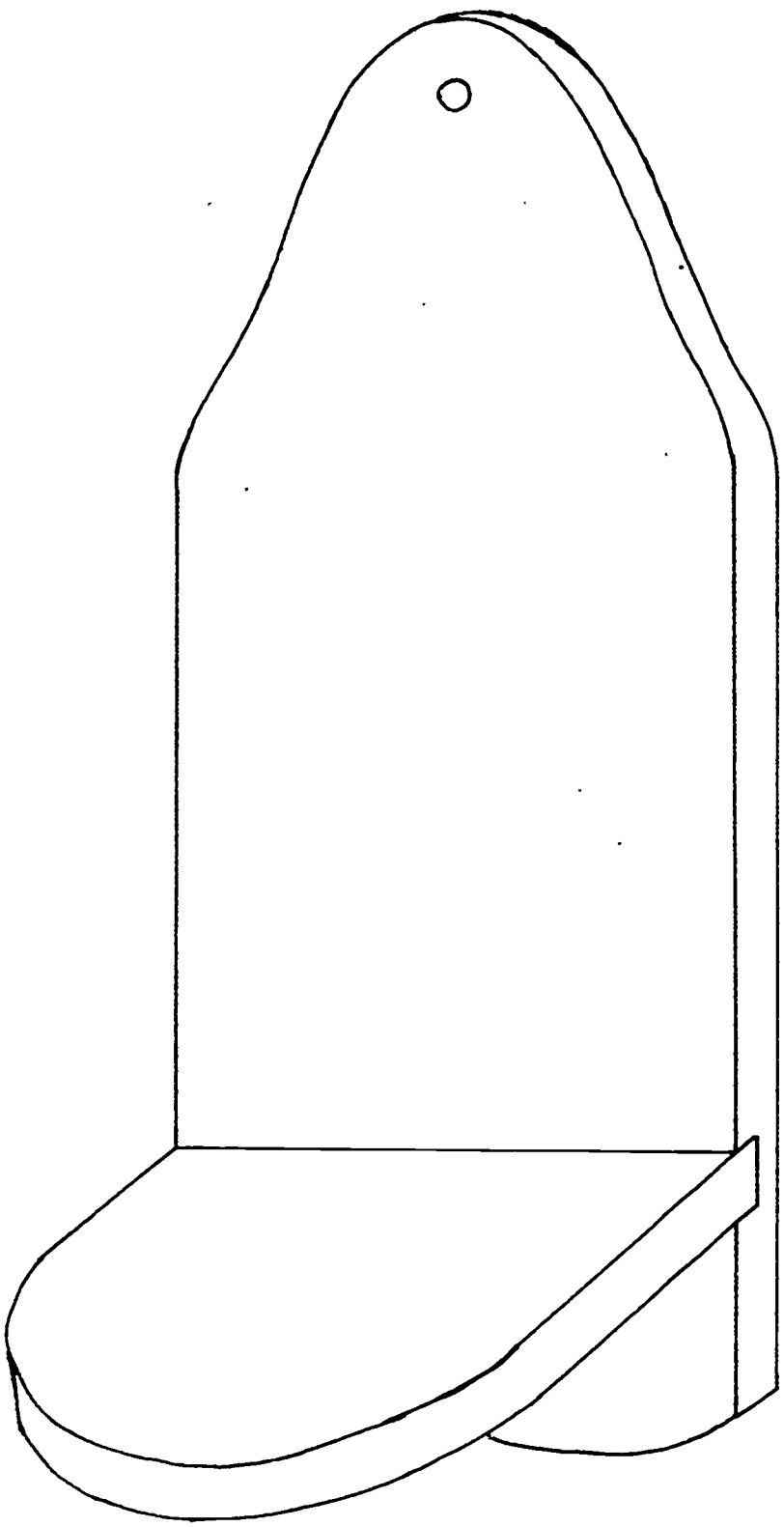
This unit was generally well accepted by the students. They were excited by the activities and enjoyed it.

Originally planned to be completed in one week, various production problems caused a several day delay. To help guard against similar delays be sure to thoroughly test each jig and fixture.

Supportive Material

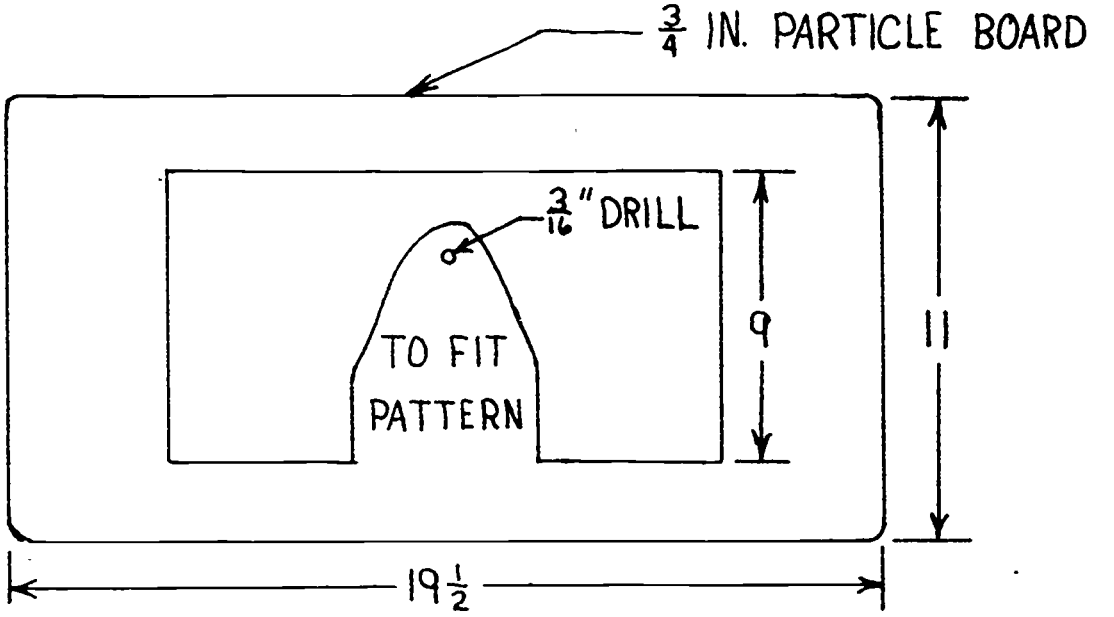
1. Job assignment chart and production chart

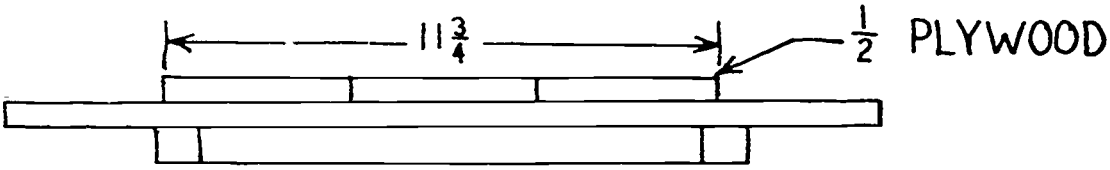
WALL SCONCE

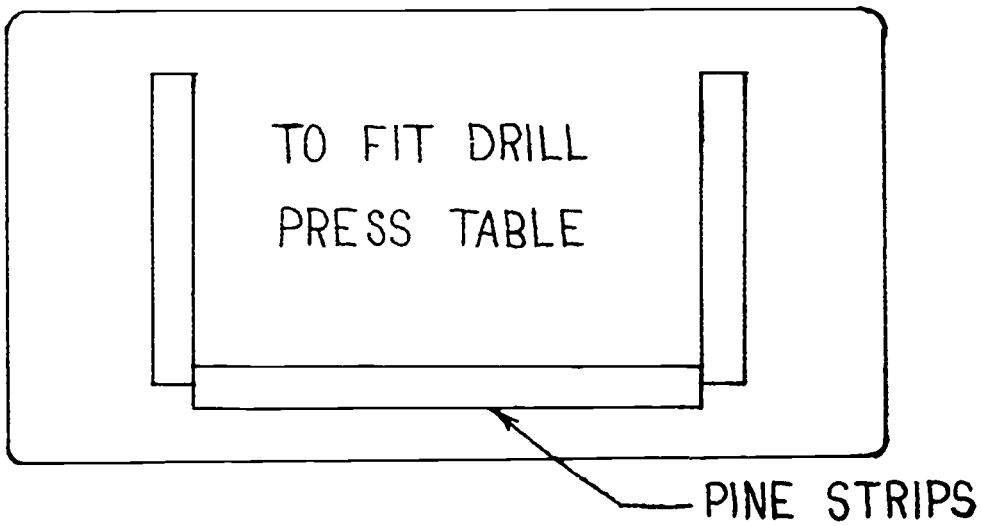


A. CIELINSKI

DRILLING JIG ~ DRILL PRESS



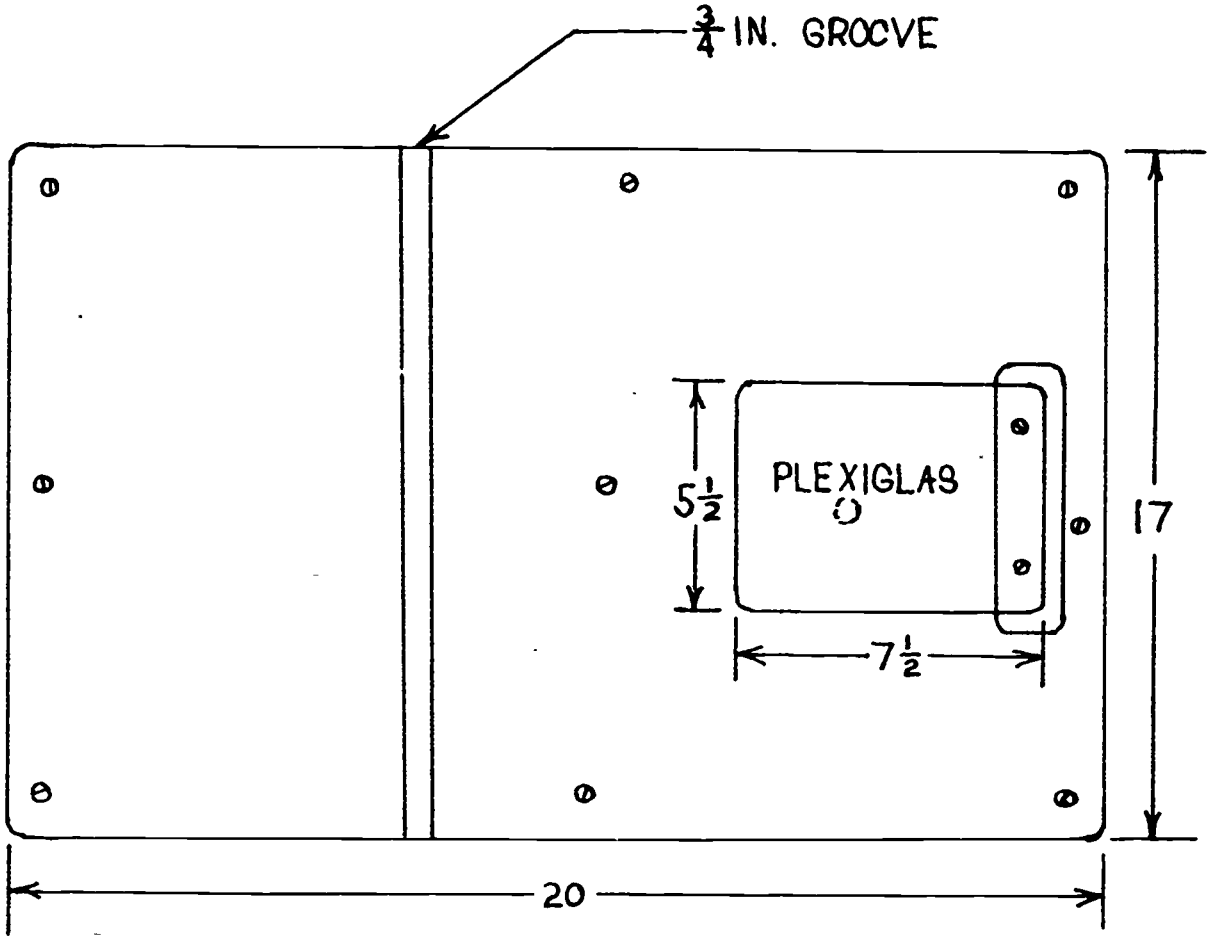




A. CIELINSKI

ROUTER JIG

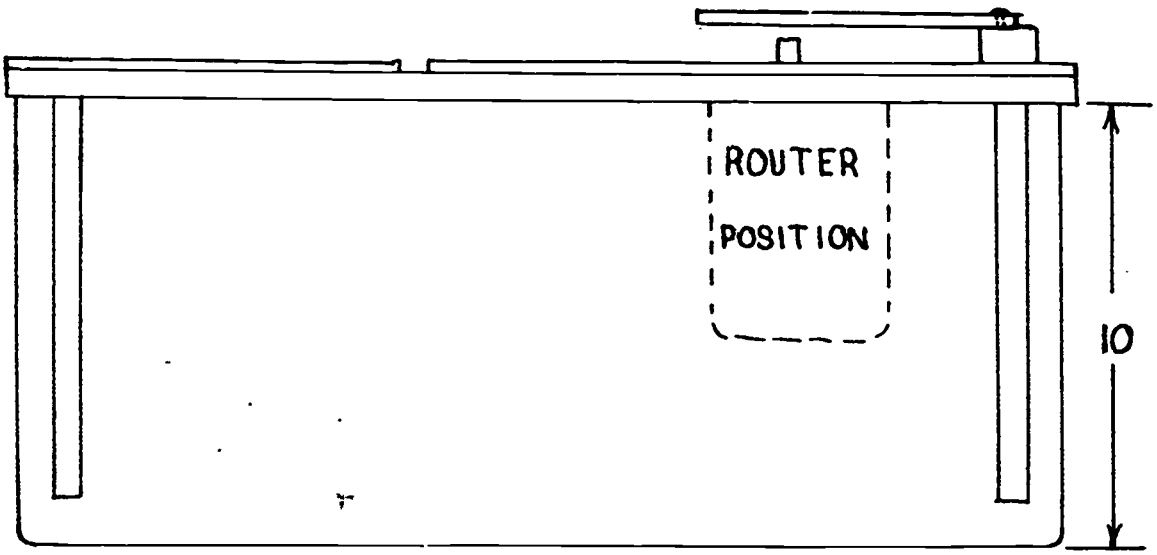
TOP



A. CIELINSKI

ROUTER JIG ~ (CON'T)

FRONT



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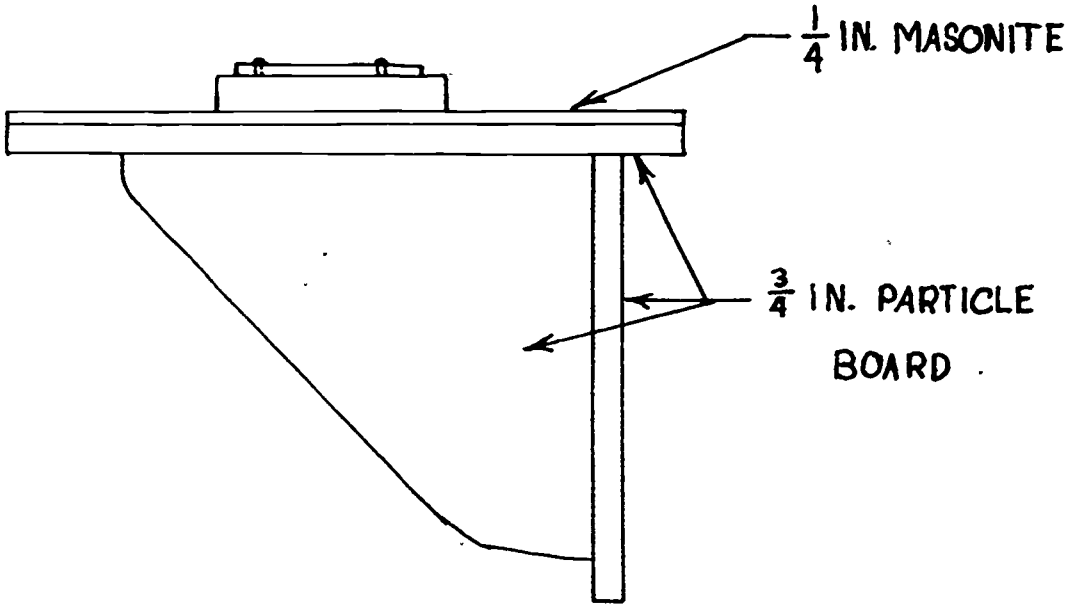
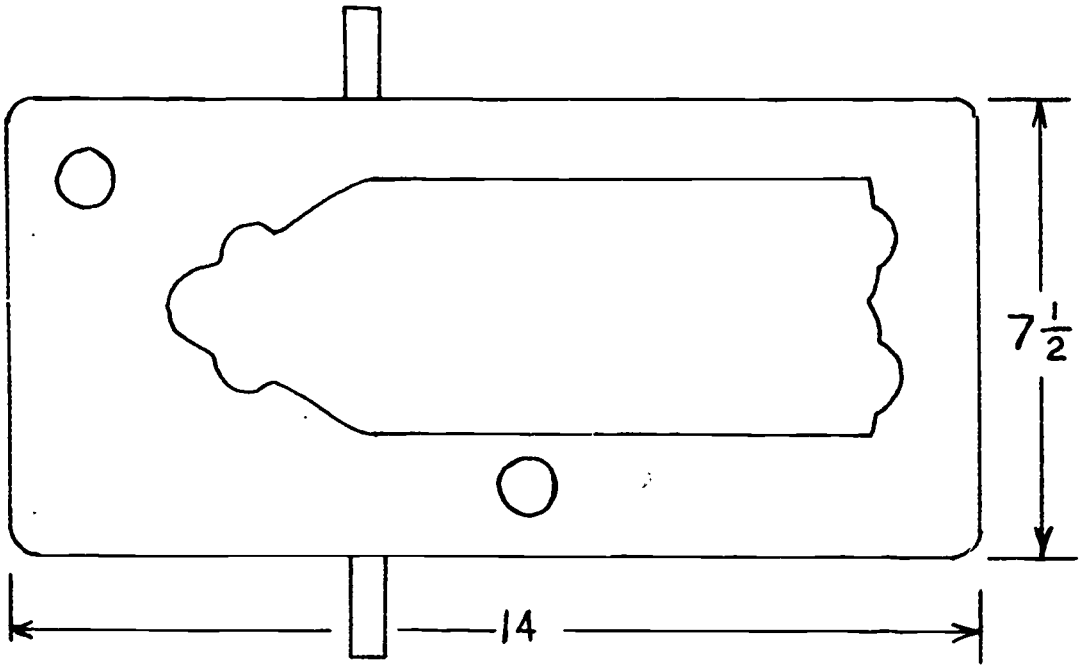
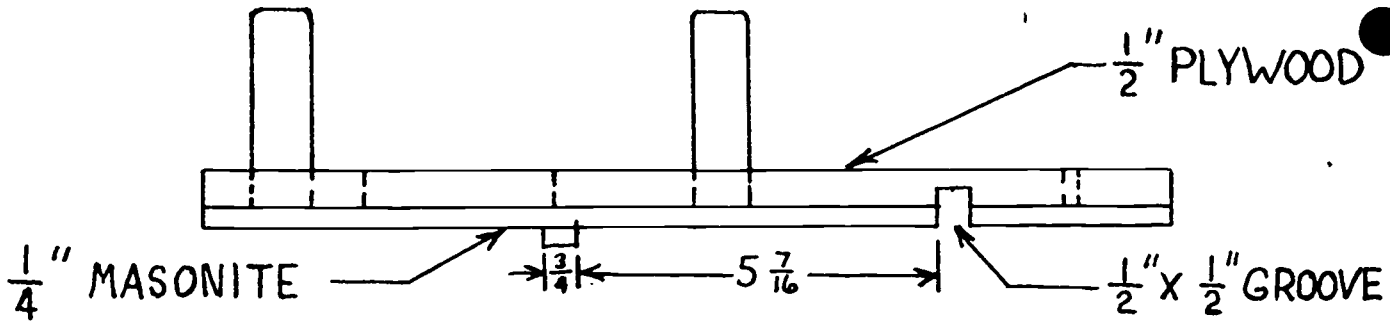
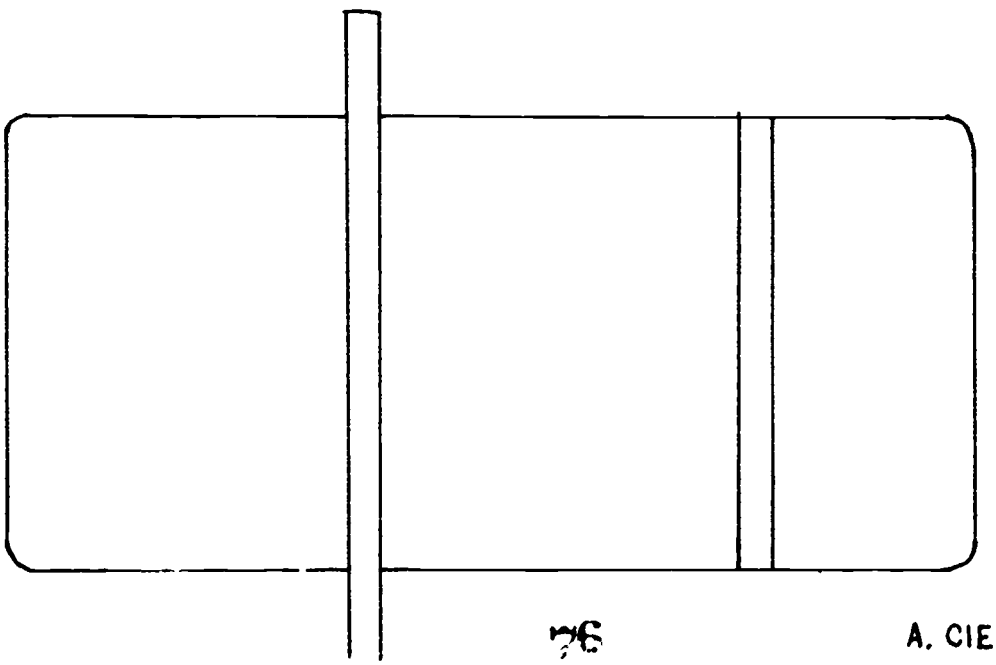


A. CIELINSKI

ROUTER JIG



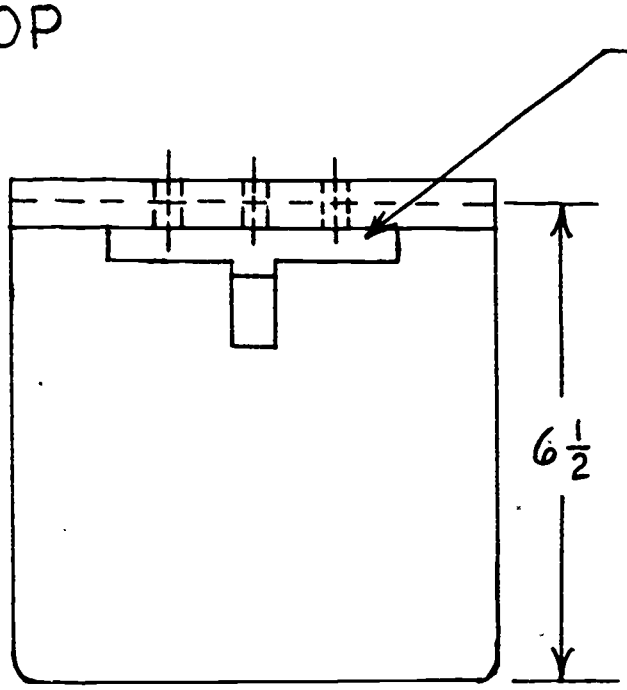




A. CIELINSKI

ASSEMBLY JIG

TOP

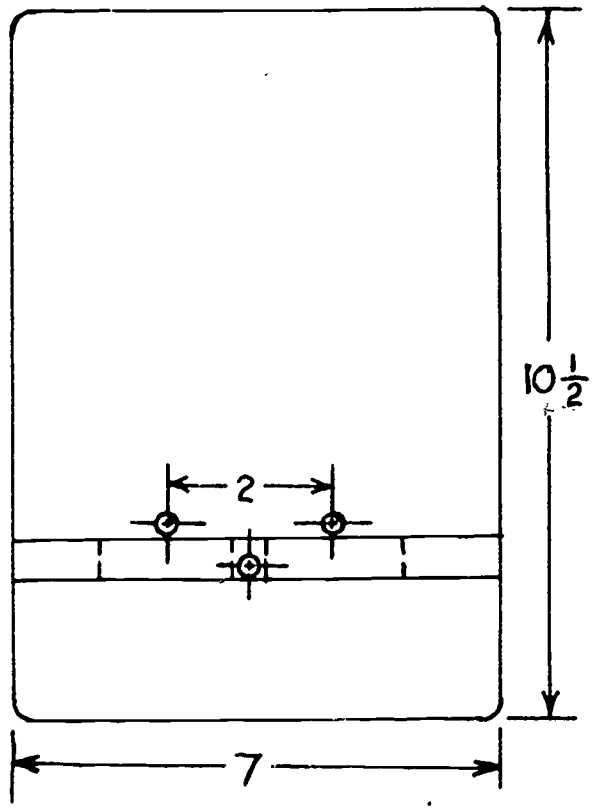


NOTE - ALL PARTS

$\frac{3}{4}$ INCH HARD MAPLE

$\frac{3}{8}$ SCALE

FRONT



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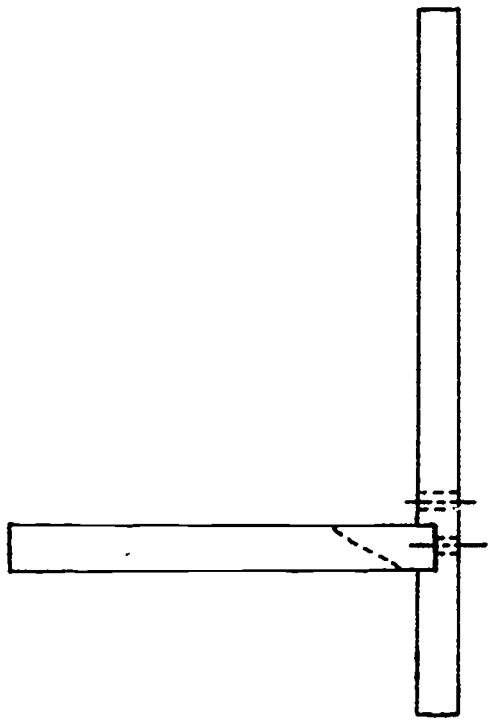
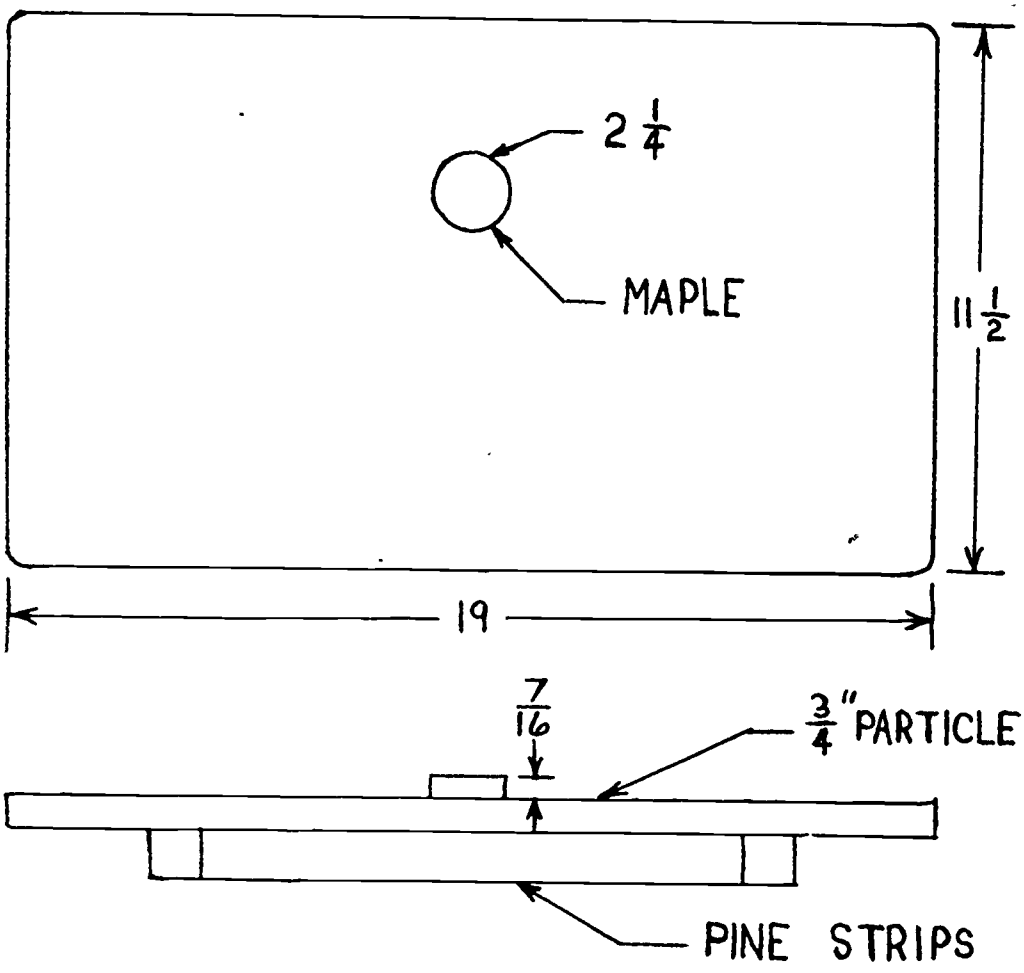
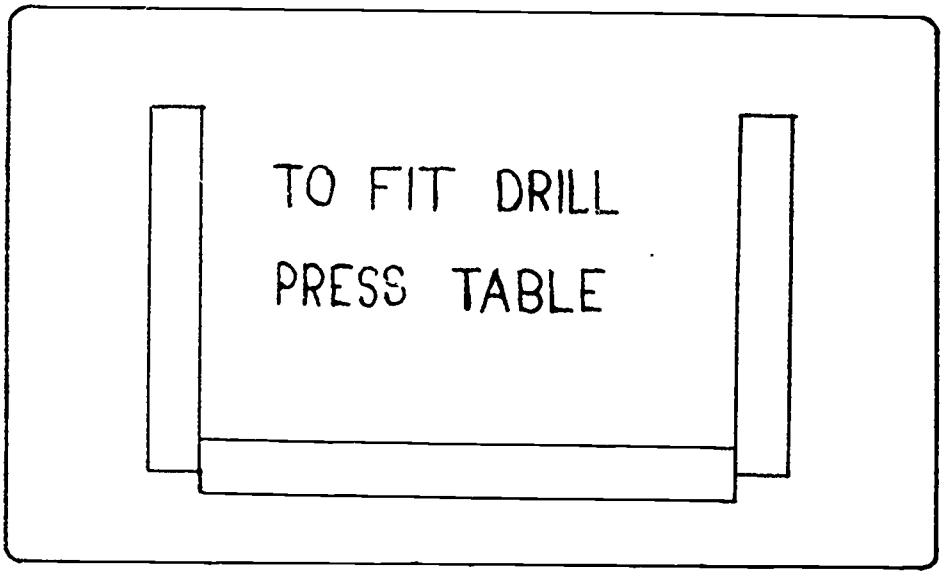


A. CIELINSKI

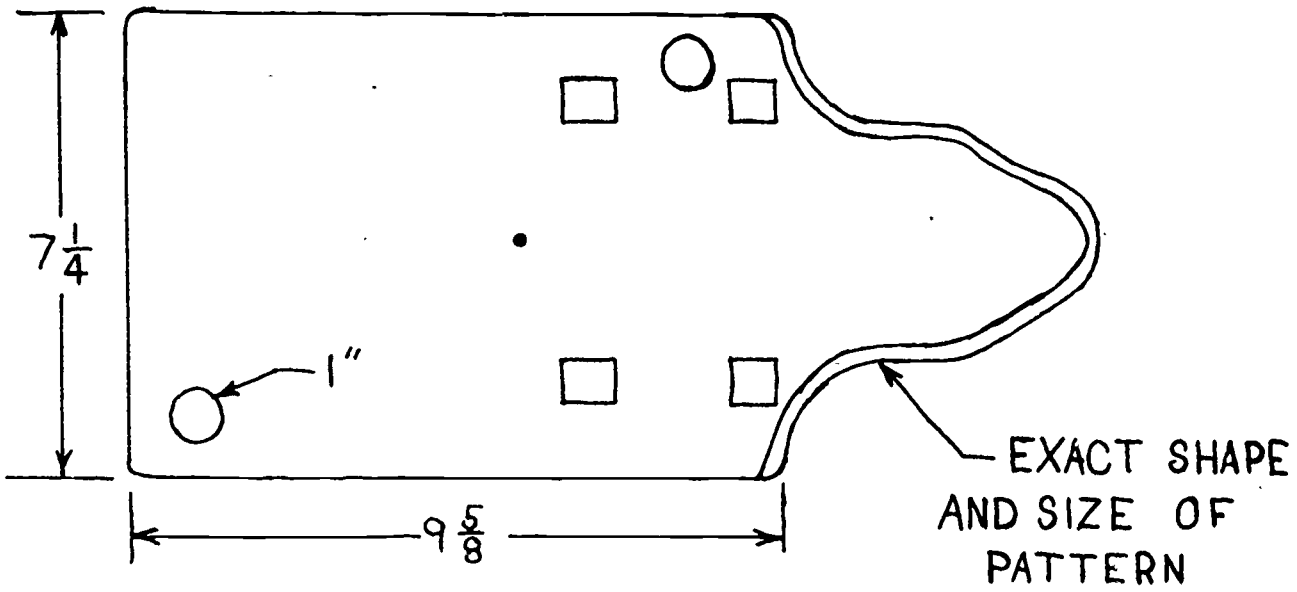
SANDING JIG ~ DRILL PRESS

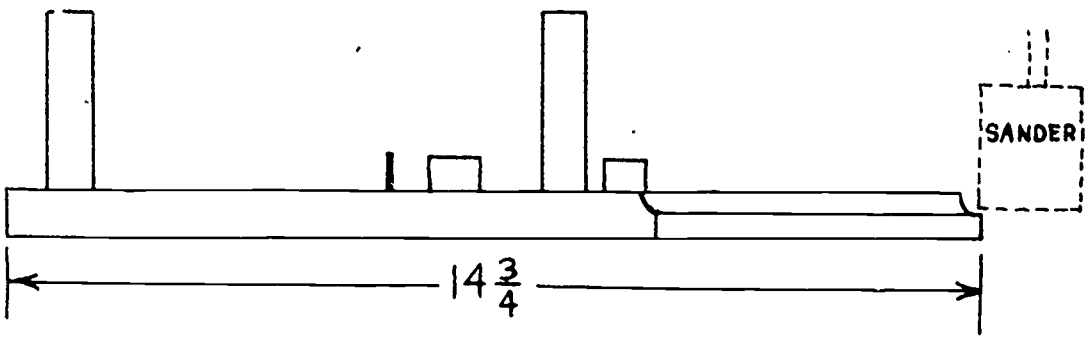




A. CIELINSKI

SANDING JIG ~ DRILL PRESS





A. CIELINSKI

Guest Speaker

Introduction

To introduce the students to related occupations in the service industry, specifically those of Niagara Mohawk.

Objectives

The student will be able to:

1. Identify specific qualifications needed to work in the public service occupations.
2. Restate the duties to a job of this type

Procedure

The speaker made aware to the students the many different occupations, by the use of a slide show and an explanation and completed with a question and answer period.

Content

1. speaker
2. slide show
3. question and answer period

Evaluation and Recommendation

The speaker had much influence over the students. By the use of a guest speaker, it was felt that it was an effective way to motivate students.

Supportive Materials

1. Pamphlets, or other handout materials brought by speaker
2. D.O.T. occupational pamphlets
3. Video tape speaker for those absent from class or for use in other classes

Role Playing Interviews Using the Video Tape Recorder

Introduction

This activity was designed to give the students an awareness of different types of jobs.

Objectives

The students will become aware of different types of jobs by:

1. indentifying the characteristics of a job in general.
2. researching a selected job.

Procedure

1. Students list and discuss job characteristics
2. Students decide on which characteristics to use as a basis for interview questions
3. Students research their selected job using the criteria decided on
4. Students prepare questions for interviewer to use
5. Video tape recorder is set up and students interview each other
6. After recording, the tape is replayed for observation and discussion

Content

Questions prepared for interviewer

1. What is your name?
2. What is your occupation?
3. What is the nature of your work?
4. What qualifications and training do you possess for this job?
5. Are there any benefits to this job?
6. Why do you like your work?

Evaluation

This activity was interesting to the students and it accomplished its objectives. They were motivated through their active participation in the interviews. The interview provided information about different types of jobs and reinforced the characteristics that make up a job. After the interviews were recorded on video tape, they played back the tape with interruptions for questions and discussion. The students did not lose their interest because they wanted to see each other on television.

Career Crossword Puzzle

Introduction

This activity was designed to expose the students to different job titles.

Objectives

The students will be aware of different job titles

1. learn titles unfamiliar to them.
2. know the nature of the work involved.

Procedure

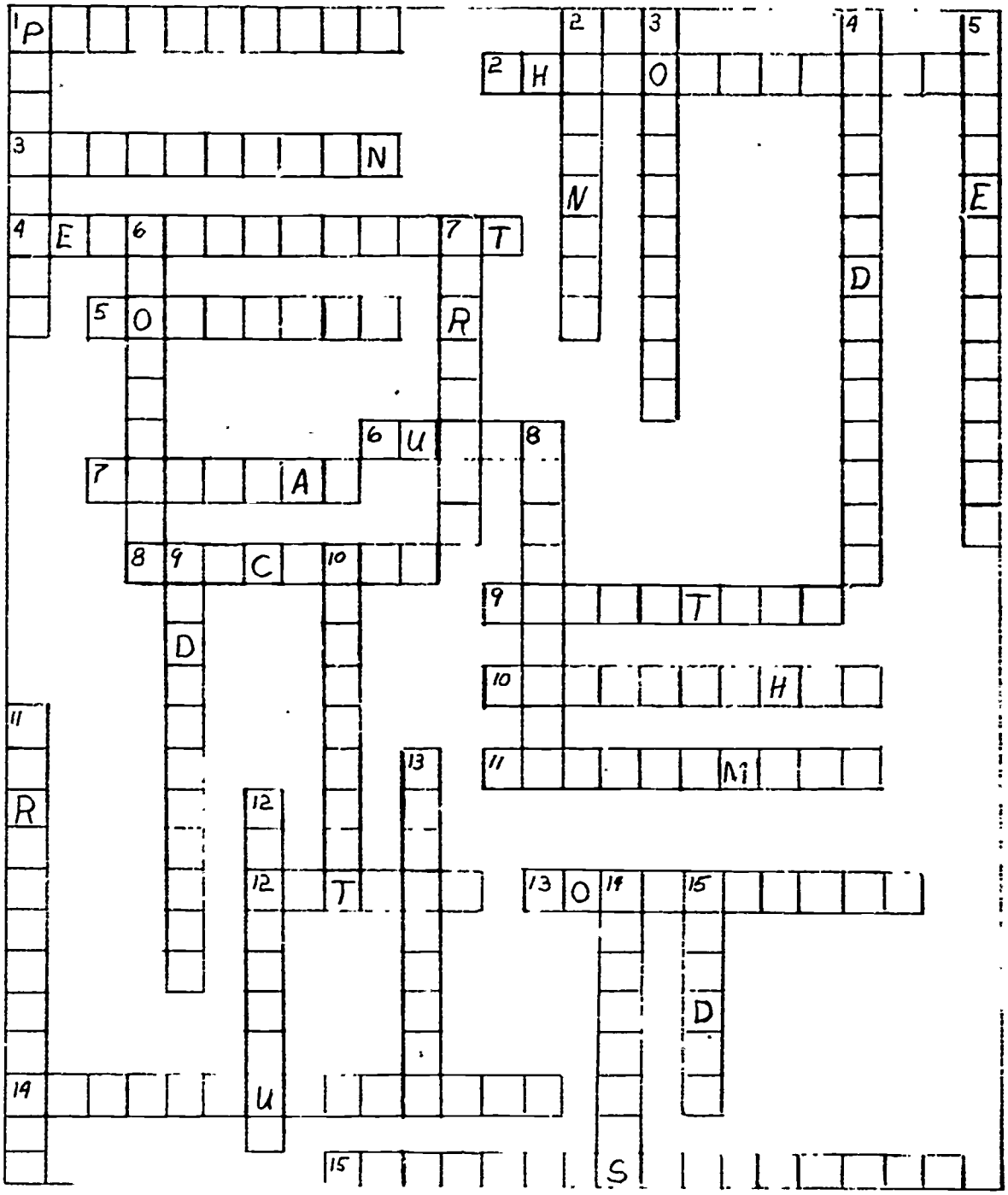
1. Students complete crossword puzzle at home.
2. Discuss puzzle in class.

Content

1. Crossword puzzle
2. Possible answer list

Evaluation

Students enjoyed doing crossword puzzles. This type of activity is generally accepted by the students and it exposes them to information at the same time. It may be just as effective if done as a class activity. This would prevent problems caused by students leaving puzzles at home.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ACROSS

1. devises programs for computers
2. produces halftone plates for printing
3. inspects and services equipment
4. forecasts weather
5. manages and develops and protects forest land
6. selects merchandise to be sold in a store
7. installs telephone lines
8. constructs, repairs and maintains railroad tracks
9. plans meals and prepares food
10. handles the communications and routes trains
11. grows, breeds, and improves field crops
12. involved in any of the arts
13. creates slogans and text for selling a product
14. develops new kinds of flowers
15. gives anesthetics during surgery

DOWN

1. operates printing press
2. studies plant life
3. transmits messages to aircraft
4. designs art for cloth
5. operates movie projector
6. is concerned with relationship between organisms and their environment
7. provides measurements of construction sites
8. checks items received against the shipping invoice
9. x-rays patients
10. makes or works on machines
11. makes maps
12. drives a car for someone else
13. applies plaster to walls
14. installs pipe systems
15. fuses metal together

possible answers

meteorologist	photoengraver	dietician
forester	pressman	fabric designer
botanist	lineman	machinist
ecologist	plumber	millwrights
pharmacist	iron worker	welder
radiologist	plasterer	trackman
dental hygienist	surveyor	flight engineer
anesthesiologist	horticulturist	receiving clerk
cartographer	agronomist	buyer
cosmetologist	programmer	serviceman
chauffeur	projectionist	copywriter
artist	controller	

What's My Career

Introduction

The ideal class activity would necessarily be an enjoyable one for students. The following activity has had such an impact, and has served as a good initial, or beginning, activity in career education. The student competition and video tape recording added to the enjoyment and learning of both student and teacher.

Objectives

After completing this activity the students will have an insight into the many different types of careers. Through the questions asked, the students will realize some of the important factors to consider in choosing a career for themselves.

The student will be able to:

1. identify several occupations.
2. recognize significant aspects of employment (pay, working conditions, fringe benefits, etc.).
3. recognize aspects of careers that should be considered before seeking employment (interests, ambitions, education, etc.).

Content

Student motivation is of paramount importance when effective learning is to take place. It is this precept that laid the foundation for the classroom activity "What's My Career". For example, the winning team might be excluded from clean-up in a shop class for a week. Another type of motivation was to video tape portions of the activity. Clearly, both positive and negative forms of reinforcement were in evidence.

Students were given an occupational survey sheet (included). Each student completed the form accouding to his own interests, or he may have interviewed someone and had them complete the form. Students in panels of four competed against each other to guess the occupation of one student "guest" who was chosen at random. The "guest" selected one of the survey sheets for his occupation. Only questions with a yes or no response were asked. Every time a question was answered yes, the panel asking that question was allowed to ask again, until a no answer was elicited. Then, the other panel was allowed to question in the same

manner. Each panel member was given a sheet of general questions to act as a guide while examining the "guest". The time period consumed was twenty minutes to forty minutes each day for three days. A round of semi-finalists and finalists were used to stumulate student competition.

Evaluation

Upon termination of the activity, each student was asked to complete an evaluation of the "What's My Career" activity (sample evaluation included). 89% of the students responded favorably to the game as a class activity. When asked if they felt they learned something from the game, 89% responded positively. The answers to the above two questions would seem to indicate some value in the inclusion of such an activity in a career education program.

The game was not faultless, however. 33% of the student group felt that the activity consumed too much project time. Such a negative reaction might be overcome by timing the activity between student projects or areas of study.

Supportive Material

The following examples of materials can be used in conjunction with the "What's My Career" activity.

Period _____ Name _____

Date _____

Occupation Information

1. What is the name or title of the job?
2. List at least four job responsibilities.
3. Is the job paid by a salary or by wages?
4. What is the product being manufactured, if any?
5. How much schooling or education is necessary?
6. Are there opportunities for travel?
7. What kinds of equipment must be operated?
8. Does this job have daylight or night hours?
9. How many hours each week are worked?
10. Is this job part-time or full-time work?
11. Are holidays and/or vacation days paid?
12. What are three personality characteristics that are important for this job?
13. Would a person with this job belong to a union?

Occupational Survey

1. Job title:
2. What does this person do?

3. What type of educational background must he have?

4. What type of skills are necessary?

5. What is the approximate salary bracket?
6. What type of hours does he work?

7. What benefits or extras are there?

8. Where does this person work?

9. What are some related jobs?

10. What should a beginner in this field do?

11. Comments or related information:

What's My Career Questionnaire

Directions

All questions must be answered with a yes or no answer.

1. Do you work with people? things?
2. Do you have your own business?
3. Do you work outside? in a factory? in an office?
4. Do you belong to a union?
5. Are you an executive?
6. Were you an apprentice?
7. Did you have to go to college? trade school?
8. Does your job involve any danger?
9. Is there a lot of physical activity?
10. Is your job in the field of Agriculture
    Transportation
    Construction
    Communication
    Science
    Health
    Personal Service
    Business & Office
11. Do you feel this is a high paying job?
12. Do you work the same hours all the time?

Evaluation of "What's My Career"

1. Did you enjoy the "What's My Career" game?

2. Why, or why not?

3. Did you learn anything about careers from the game?

4. What did you learn?

5. What are some things about the game that you didn't like?

6. Was it a good idea to use the video tape equipment?

7. Why, or why not?

8. Would you like to play a game like this again?

Follow-up of Alumni

Introduction

Many students have only vague and limited knowledge of the employment opportunities which they may expect to find when they are ready to look for a job. This activity is one way of broadening student knowledge of employment while giving some interesting specifics about different career employment. In addition it was a different approach to learning.

Objectives

The student will be able to:

1. Through the use of the follow-up study, give students a more realistic picture of their future by helping them to find out what has happened to those who have preceded them.
2. Reconstruct vague and limited knowledge of the employment opportunities, as a result their plans are vague, unrealistic and restricted to a few familar occupations.

Procedure & Content

A. Preparing the Questions

1. students suggest questions, write them on board (students own words)
2. have students think about what they know and formulate a question.
3. number each question, stop when enough, and have students pick five important ones.
4. announce teacher's right to edit question selections
5. ask how many pick number 1, as a student raises his hand have a student count and another write total on the board. (repeat for each question, each student can raise his hand five times)
6. tabulate, announce five most popular, teacher add questions
7. announce that questions will be incorporated into a letter and sent to last year's graduates and dropouts.
8. place names and addresses on separate cards.

B. Preparing the letter

1. draft letter including students' questions
2. introduction, body, closing

C. Mailing the letter

1. duplicate letters
2. type cards containing former students' names and addresses
3. inspect material to be mailed
4. mail from school

D. Discussing the replies

1. distribute replies to class, letting them open letters
2. have students read letters out loud
3. discuss the letters
4. draw comments from class
5. contribute additional comments

Recommendations

This alumni plan incorporated two medias, parcel and telephone. We planned on equal feed back which was going to be used during the discussion period. The results using the telephone were poor. Two interviews cut of eighteen were handed in for discussion. It was felt that the telephone method would not be used again unless a larger number of phone callers were used.

SUGGESTED ACTIVITIES FOR CAREER EDUCATION

1. Utilize all forms of audio-visual aids and communications media:
   a. Charts depicting occupational information in different fields
   b. News stories for school and local papers
   c. Library displays
   d. Bulletin boards
   e. Posters (possible poster contest)
   f. Film strips
   g. Motion picture films
   h. Overheads and transparencies
   i. Slide-tape shows
2. Stimulate student research by:
   a. Corresponding with people successful in a chosen field
   b. Researching great men in a vocational field
   c. Interviewing parents for an occupational report
   d. Studying an occupation
   e. Compiling a notebook
   f. Researching various types of training and educational opportunities
   g. Reading trade and professional journals
   h. Studying community job opportunities
3. Stimulate teacher cooperation in other subject areas

4. Use guest speakers:

   a. Community organizations, companies, etc.

   b. School personnel

   c. Past graduates and upperclassmen

5. Role play various occupations with the tools of the trade

6. Run a mass production simulation relating the jobs to industry

7. Supervise student visitations to:

   a. Industry

   b. Trade schools

   c. Colleges and universities

   d. Science and hobby fairs

8. Analyze newspaper ads for discussion

9. Conduct open classroom discussions concerning careers

10. Use games to stimulate interest in career education

11. Prepare assembly programs

12. Organize a club to:

   a. Discuss vocations

   b. Encourage hobbies and skills

   c. Prepare class news releases

13. Arrange for student interest surveys

14. Periodic newsletters for students and parents

15. Sponsor radio and television programs with student and teacher participation

16. Arrange for extra-curricular activities to simulate actual job conditions

17. Have students inventory their own skills and interests

18. Arrange for attendence at:

    a. Conferences concerned with occupational information

    b. Vocational clinics

    c. Technical demonstrations

    d. Business meetings

    e. Community meetings (town council, etc.)

20. Assist students in becoming familiar with various professional services for career information and placement

21. Keep current with occupational trends and vocational information:

    a. Filmstrips

    b. Periodicals

    c. Trade journals

    d. "Occupational Outlook Handbook"

Career Education Pre-Test

Introduction

This activity was designed to test the students knowledge of related career information. The activity also enabled the instructor to modify his program to match the students' levels of competancy.

Objectives

The student will become aware of related career information.

The student will be able to assess their level of achievement in career education.

Procedure

The test should be administered in class.

Students can be told that the test will not be counted as a part of their grade.

After the test is corrected it should be returned and discussed with the class.

Content

Career Education Pre-Test

Evaluation

This activity was helpful in establishing a basis for the lessons needed to initiate a program in career education. Students also became aware of related career information.

Career Education Pre-Test

1. I plan to choose my career _____.

   1. before I enter high school
   2. now
   3. after high school
   4. during military service
   5. during high school

2. I will probably change my occupation ____ times.

   1. 0
   2. 1
   3. 3
   4. 6

3. The average income for a family of four in the U.S. today is approximately _____.

   1. $3,000
   2. $6,000
   3. $10,000
   4. $36,000

4. When we consider our yearly earnings, the amount stated is _____ taxes.

   1. before
   2. after

5. Taxes usually take about _____ of our stated salary.

   1. none
   2. 10%
   3. 40%
   4. 80%

6. It is important for everyone to go to college to become a success.

   1. true
   2. false

7. Circle each occupation that is related to the medical profession.

1. x-ray technician
2. ambulance attendant
3. physical therapist
4. safety engineer

8. List three careers found in industry other than production worker.

1.
2.
3.

9. List five careers related to the food industry other than cook.

1.
2.
3.
4.
5.

10. If your career choice was related to nutrition, planning meals for a large group of people daily, you might be considered a _____ _____.

11. The hobbies I am most interested in are

1.
2.
3.
4.

12. If I could spend half of each school day working in any occupation I would choose _____.

13. I chose this occupation because (refer to question 12) _____.

14. The person I would like to follow as an example is _____. His or her occupation is _____.

15. List in order of importance the following areas when choosing a career (number 1 being the most important).

a. enjoyable family life
b. enjoyable job
c. large salary

1.
2.
3.

16. When selecting a career, it is very important to organize your thoughts and goals. Please list five goals that would be important to you in making your career choice.

1.
2.
3.
4.
5.

17. The occupation a person selects will relate to his desired life style.

1. true
2. false

18. If you do not like to do research work and read, you probably would not select a career as a lawyer.

1. true
2. false

19. As you may know, a draftsman works with drawings and plans. List at least three occupations which would be related to his type of work.

1.
2.
3.

Woodshop Name _____

Period 1 May 9, 1974

Directions: Read each question carefully and make the response in the space provided.

1. A "Career Cluster" is many _____ jobs.

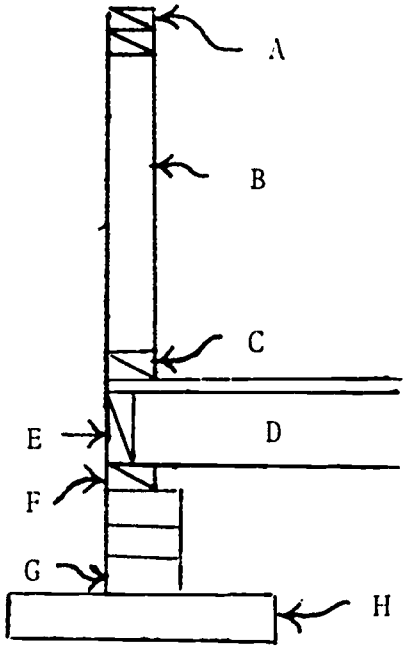
2. List 4 jobs which could be a career cluster dealing with the construction industry.

3. a. _____
   b. _____
   c. _____
   d. _____

3. Pick one of the jobs you listed in question 2. What would that person do? _____
_____

4. What kind of training or education would be needed for this job? _____

5. Listed below are some parts of a house. Next to each letter write the name of the part shown in the drawing.



top plate	sole plate		
stud	header		
footing	foundation		
joist	rafter		
sill	bridging		

A. _____	E. _____		
B. _____	F. _____		
C. _____	G. _____		
D. _____	H. _____		

6. What is the job of an excavator? _____
_____

7. Here is a list of some tools used by an excavator. Pick 2 and tell what they are used for.

transit	level	plumb bob
foundation plan	back hoe	100' tape

_____

_____

8. The people who are bosses of a company are called _____ _____ (labor or management)

9. Labor and management sometimes have trouble settling a contract. What is one area that they often disagree about?

_____

10. The state laws require any person under 16 years old to have working papers before he can hold a job. What is the purpose of this law? _____

_____

11. Working papers are a legal document, so everything written on them must be _____.

12. Many special tools are used by industry. Jigs and fixtures are the most common. A device that guides a cutter through the stock is a _____(jig or fixture)?

13. People in industry who design the jigs and fixtures would be in the department of A) production B) marketing C) research & development D) personnel

14. When an industry wants to make thousands of identical products they do not rely on a craftman's skill. They can control the work so that each product will be exactly the same. This method is called ,_____ (mass prodcution, hand crafting, importing, carpentry).

15. The people employed in Personnel Administration are responsible for A) hiring workers for the company B)selling finished products C) buying raw materials

16. As far as job opportunities for the future are concerned, the ceramic industry is _____ (growing, dying).

17. A very improtant, highly skilled worker in the ceramic industry is the A) excavator B) patternmaker C) slip caster.

18. Molds for use in slip casting are made of _____ _____(plaster of paris, deflocculant, clay, wood, metal).

EVALUATION OF STUDENT ACHIEVEMENT AND PROGRESS
IN INDUSTRIAL ARTS CAREER EDUCATION

Student name _____ Grade/Section _____

Evaluations are made in terms of what might be expected normally of a student of similar age and grade placement. O- Outstanding, S- Satisfactory, N- Needs to make improvement, PN- Has made progress but needs to make further improvements, U- Unsatisfactory.

Evaluation by Student	Evaluation by Teacher	Objectives
		1. He directs his individual activities effectively, makes good use of time, and requires a minimum amount of supervision.
		2. He intelligently follows plans and directions, listens and reads directions carefully, and follows and completes plans and directions which have been set up.
		3. He gets along well with other students, is considerate of rights of others and is courteous and tolerant.
		4. He takes an active part in class, participates in group planning, volunteers his services, and does his share in group activities.
		5. He takes good care of personal and school materials and equipment, shows respect for property and doesn't waste materials or subject equipment to unnecessary wear, and takes an active and willing part in shop clean-up.
		6. He develops an understanding of those careers in the construction industry discussed and experienced in class through his cooperation and participation in class room activities.

7. He develops desirable social relationships, takes part in and cooperates with other students on group construction projects and gives help willingly to others.

8. He develops safe working habits, uses tools and machines safely, gives attention to the safety of others and reports unsafe equipment and practices to the instructor.

9. He develops a certain amount of skill, performs tool processes accurately and develops pride in his work and craftsmanship.

10. He explores the careers around him by using the media discussed in class effectively (listening, speaking, writing, and reading).

Name _____
Period _____

1. Explain what a career means to you?

2. List five pieces of information asked of you on a job application?

   a. _____
   b. _____
   c. _____
   d. _____
   e. _____

3. What kinds of questions might be asked of you at a job interview? (list five)

   a.
   b.
   c.
   d.
   e.

4. Waht are some of the most important facts to know about a job before you apply?

   a.
   b.
   c.
   d.
   e.

5. Describe your job and explain why you would or would not like it for a career?

6. Did you enjoy making the product?

   Why?

_____ Name _____
CAREER NAME Due _____

CAREER REPORT

Sources:

Career books	Occupational Outlook Handbook
Library books	Film strips
Interviews	Newspapers

Choose a career of your choice and answer the following questions about the career. The above sources will be of great help. The Occupational Outlook Handbook is a very good source.

1. Describe what kind of work you would like to do?

2. Where would you be employed and by whom?

3. How much would salary or wages be?

4. What kind of working conditions would you be working under?

5. What kind of training or apprenticeship program would you have to go through?

WHAT ROAD WILL YOU TURN ON TO?

ABILITIES

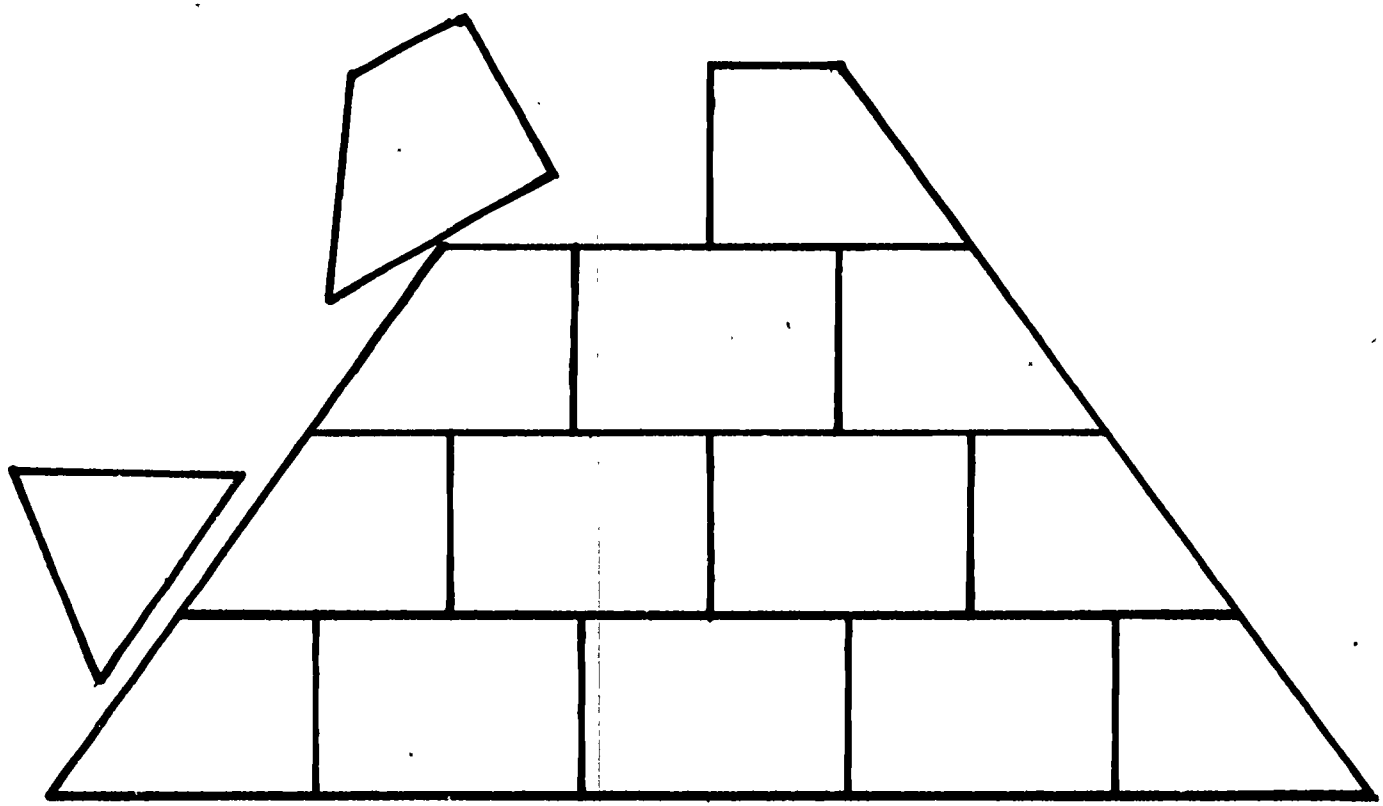
INTERESTS

CAREER
INFORMATION

SCHOOL
PREPARATION

Note: We suggest using the transparency with four overlays, one for each of the above terms. The production of these overlays can be accomplished by covering all unwanted material on this page, and producing an intermediate copy (e.g Xerox), then producing transparencies from this copy.

CAREER PYRAMID



PROJECT MANAGER

ARCHITECT

SUPERVISE CONSTRUCTION

COLLEGE EXPERIENCE

FIRM OWNER

SENIOR HIGH SCHOOL DRAWING

MECHANICAL & LOGICALLY

WORK RAPIDLY

PLEASANT PERSONALITY

ELEMENTARY SCHOOL

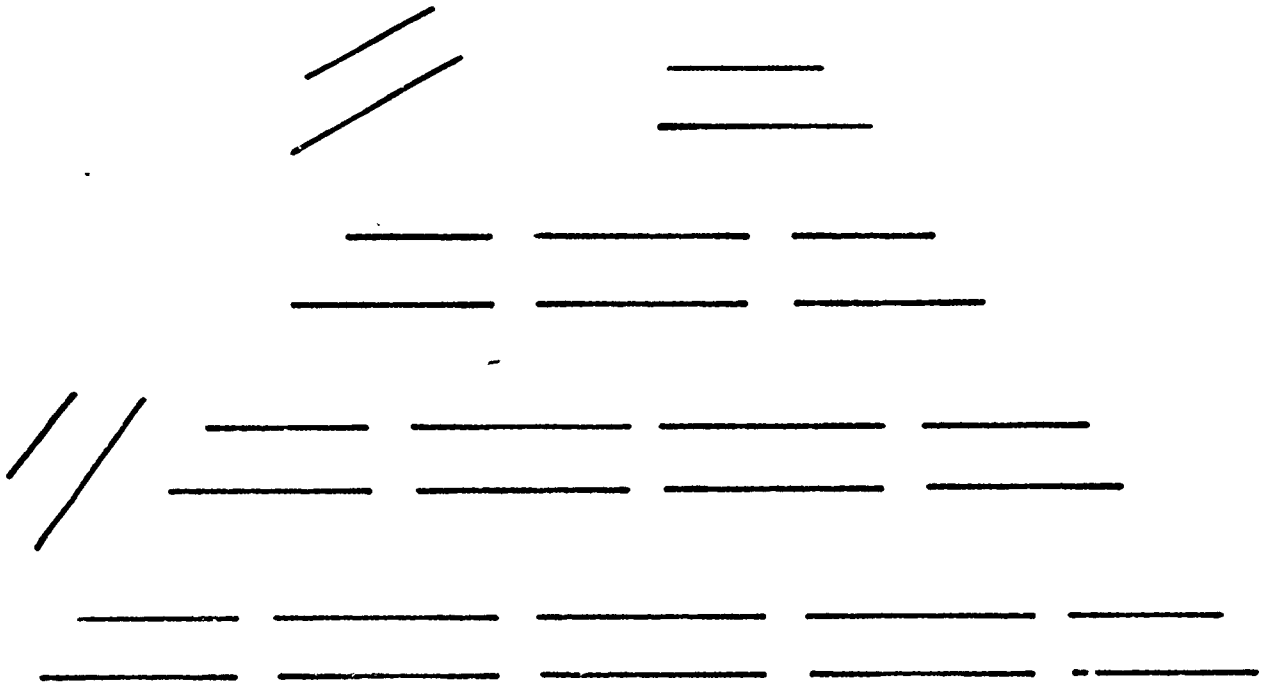
JUNIOR HIGH SCHOOL

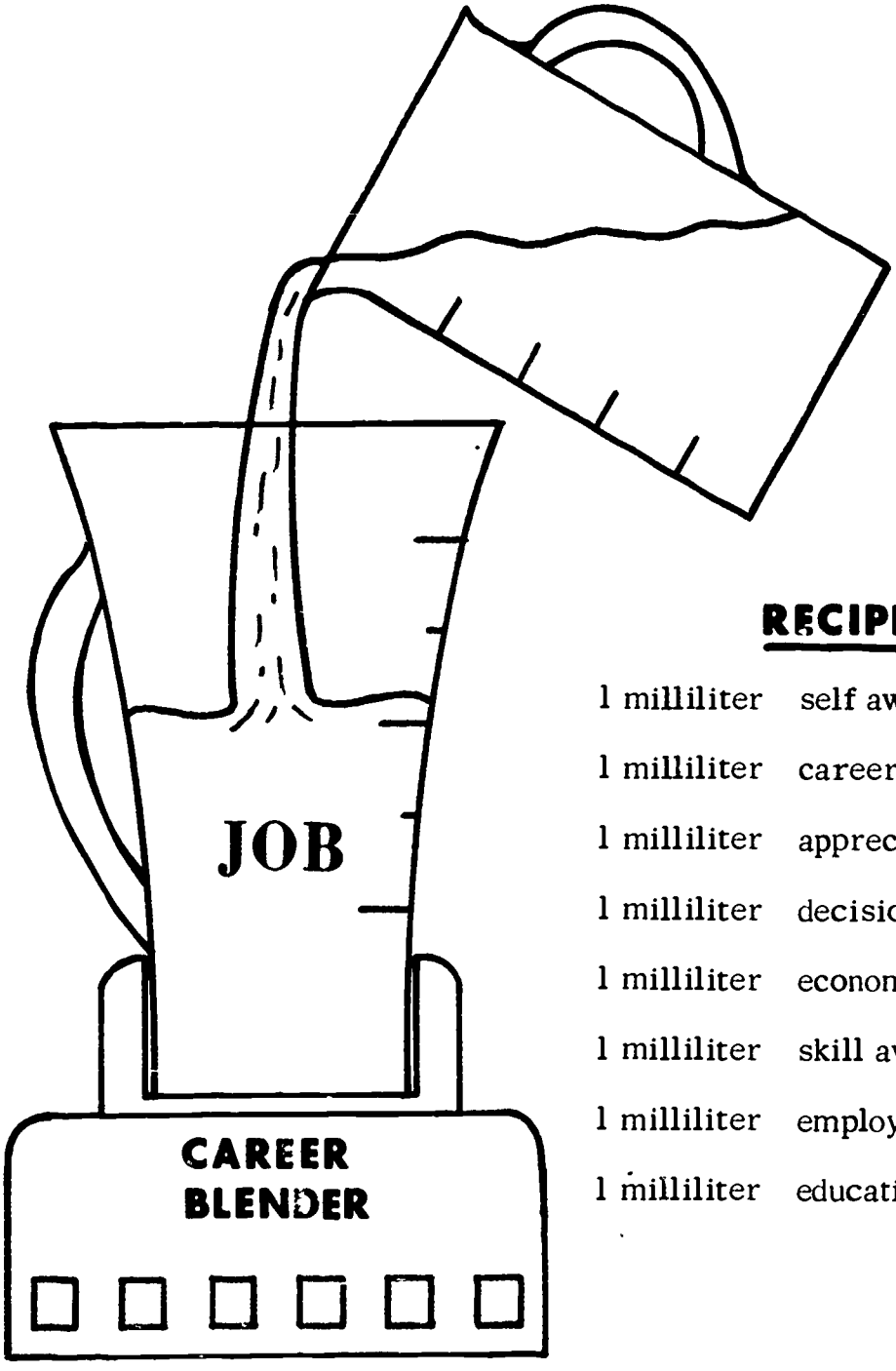
GOOD COMMUNICATION

CREATIVE DESIGN

GOOD IN MATH & Sci.

Note: This is a position guide for making additional overlays so that the pyramid can be used with other occupations.





RECIPE

1 milliliter self awareness

1 milliliter career awareness

1 milliliter appreciations & attitudes

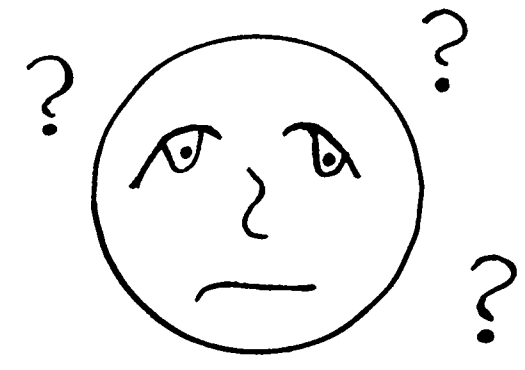
1 milliliter decision-making skills

1 milliliter economic awareness

1 milliliter skill awareness

1 milliliter employability skills

1 milliliter educational skills



Hm... WHAT SHOULD I KNOW

BEFORE LOOKING FOR A JOB??

SELF AWARENESS

MY - INTERESTS
- SKILLS
- ABILITIES
- SELF IMAGE
- VALUES
- ATTITUDES

GREAT ! NOW THAT I KNOW

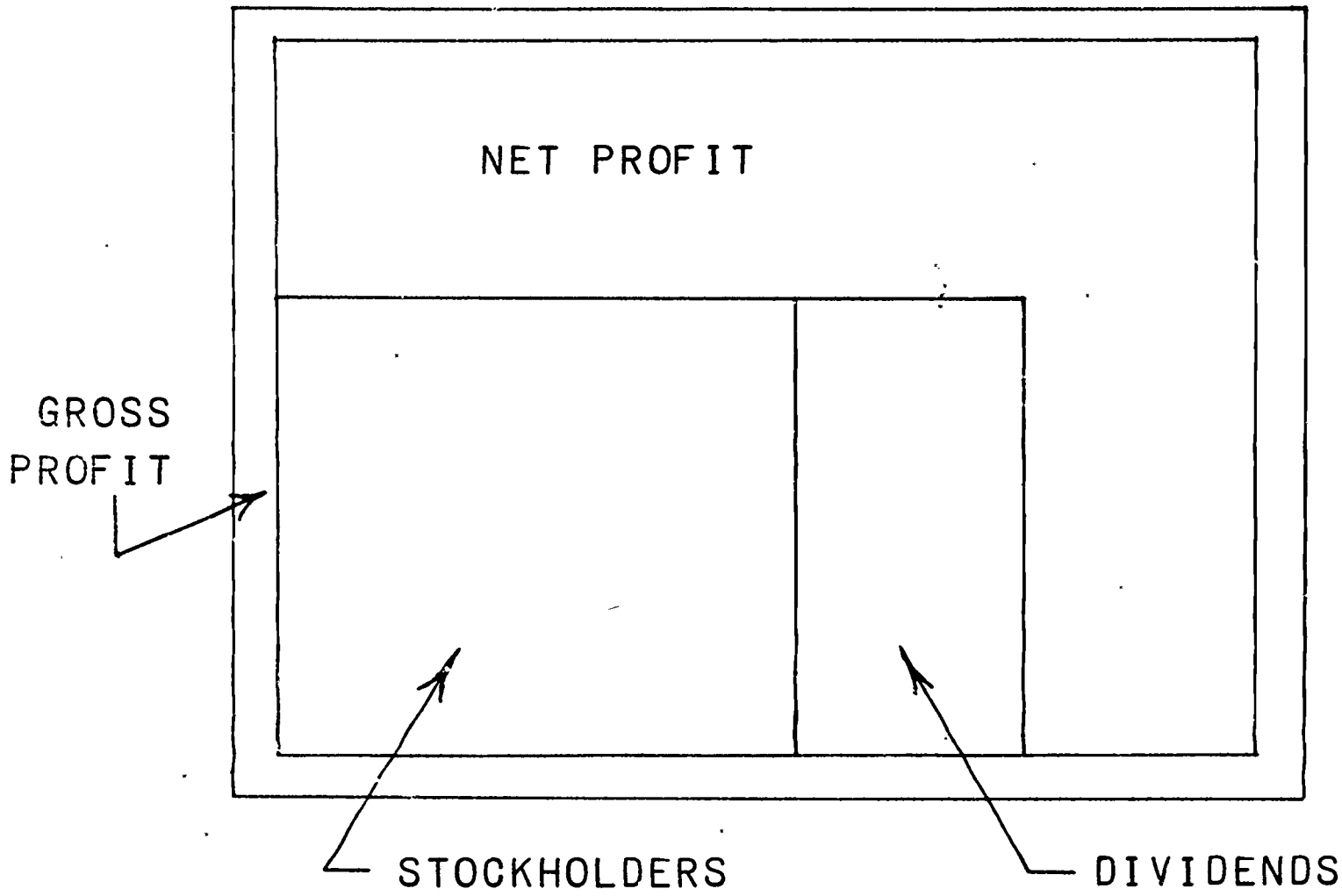
WHAT I'M LIKE, WHAT JOB

SHOULD I CHOOSE ??

JOB AWARENESS

- PAY
- HOURS
- FRINGE BENEFITS
- TRAVEL
- BOSS
- WORKER SKILLS

HOW PROFITS ARE DIVIDED



Public Relations

Since the schools are supported by public funds, the community has an interest in the educational programs being developed at their schools. It is imperative to the success of a program that the community be aware of and support it. Therefore, a public relations program should be established which would provide an exchange of information between the school and community.

The intent of career education is to help the student develop a basis from which he can make an intelligent career choice. An important source of information to the student is the community itself, of which the student will some day become a working member. A good public relations program may encourage both individuals and local businesses to provide first hand knowledge of their work. This kind of activity not only informs the public but gives them the chance to become a part of the educational process.

A good public relations program consists of a variety of different activities. Ten common methods used include:

1. exhibits and project fairs
2. open houses
3. talks to service organizations
4. newspapers
5. school assemblies
6. school publications
7. display cases
8. radio and television programs
9. adult classes
10. community service

A teacher should consider those activities that he feels will give his program the most significant exposure.

The participants of the career education pilot program contacted local newspapers as a means of informing the public. Most newspapers are willing to print articles about school activities especially if photographs are used.

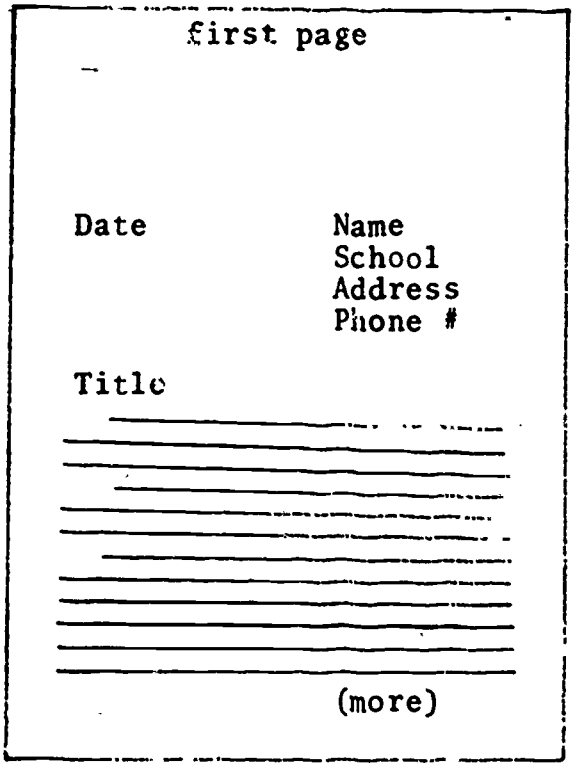
Below is an outline of the procedure used to prepare a news release. Additional references, such as journalism texts and professional magazine articles, can be consulted if additional information is desired.

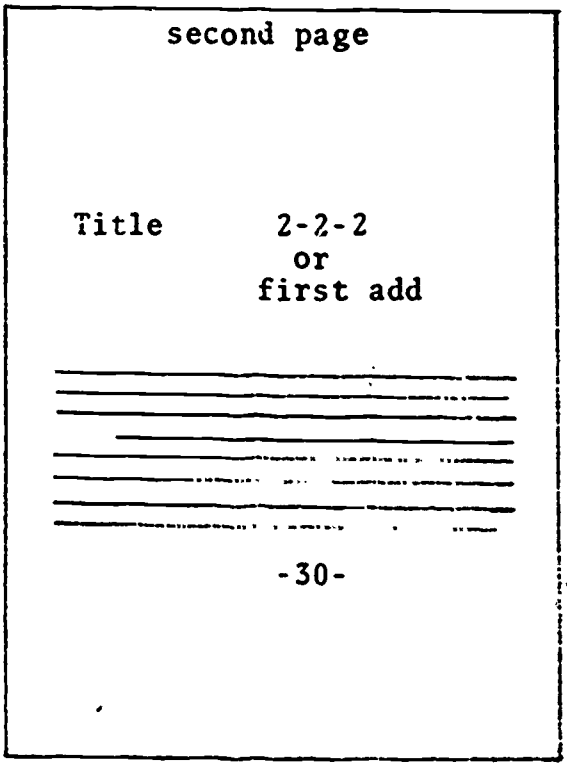
News Release

A. Content
   1. first paragraph: answer the five w's (who, what, where, when, and why). It should be only be a sentence or two in length.
   2. second paragraph: rationale
   3. third and successive paragraphs: expand on information
   4. program benefits to students

5. no longer than two typewritten pages, double-spaced

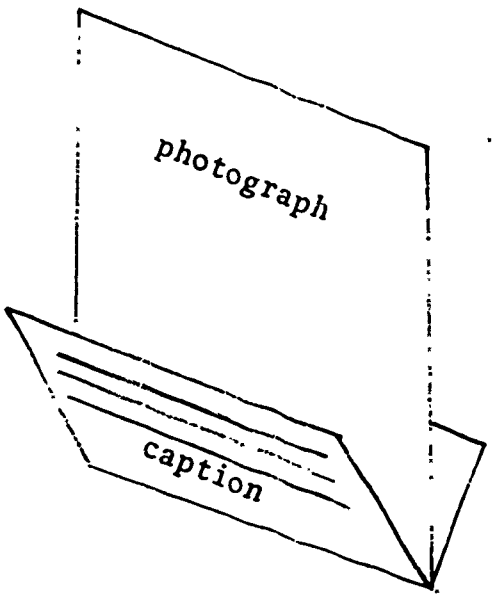
B. Format





C. Photo

1. 5x7 or 8x10 black and white - glossy polaroid has been used successfully
2. prepare caption
3. fold caption over picture and tape to back



April 22, 1974

Robert Glasser
Driver Middle School
Marcellus, New York
phone: 468-2825

Industrial Arts Career Education Pilot Program

An educational program, centered around career awareness, is being conducted at the Driver Middle School, Marcellus.

The Driver Middle School is one of six area schools that is cooperating with the State University College at Oswego in the Industrial Arts Career Education Pilot Program.

The program is being implemented in two eighth grade classes by Robert Glasser, a student teacher at the State University College at Oswego, who is working under the supervision of Richard Perry, industrial arts teacher at Driver Middle School.

The program is designed to give the pupils a chance to explore the world of work. Pupils will explore and clarify their needs, values, attitudes, and aspirations. They have formed a company for the manufacture of ecology

(more)

boxes. The work roles that the pupils assume in the company will increase their understanding of work.

It is often the case that a pupil graduates from high school unaware of possible educational and occupational alternatives open to him. The career education program will provide a base from which the pupil can begin to explore his potentials.

-30-

May 2, 1974

Gregory Black
Bruce Howe
West Genesee Junior High
Camillus, New York
phone: 487-0047

Industrial Arts Career Education Pilot Program

Pupils in five industrial arts classes at West Genesee Junior High are presently participating in a career education pilot program. This new program is being developed by student teachers from the Department of Industrial Arts and Technology at the State University College at Oswego in cooperation with local school districts. Teachers participating from West Genesee Junior High are Mr. Eugene Field and Mr. William Stessen.

This program seeks to make students aware of many different career clusters. There is no training for a particular occupation, rather the students are encouraged to relate their needs and abilities to the various aspects of a career that may interest them.

Career education is not replacing the industrial arts program, but is being infused through the use of many new activities.

(more)

Industrial Arts Career Education Pilot Program 2-2-2

Pupils have been involved in interviewing various people in their occupations. Video tape is also being used to record field trips and various occupational skills. These are just a few of the activities through which pupils become more aware of the world of work.

-30-

May 1, 1974

Gerald L. Burkard
Frank Zampariello
Grant Junior High School
Syracuse, New York

Industrial Arts Career Education Pilot Program

A new Career Education Program has been developed through cooperative efforts by the State University College at Oswego and six area schools.

Known as the Career Education Pilot Program, the experimental program is being field tested by eleven Industrial Arts student teachers to explore the implementation of Career Education in the Industrial Arts Curriculum.

Working with guidance from cooperating teachers at each school, the Oswego student teachers initiated the program at Grant Jr. High School, Roxboro Road Middle School, Marcellus Central School, Pine Grove Middle School, Jamesville-Dewitt Middle School, and West Genesee Junior High School. Supervisor for the program is Dr. Kolan Bisbee, Associate Professor of Industrial Arts and Technology at Oswego.

The student teachers work as independent two-man teams on the project using the Career Education format Dr. Sidney

(more)

Marland, former United States Comissioner of Education, championed. This format suggests the introduction of junior high students to career clusters, which are groups of related careers.

The individual student is made aware of how his abilities and interests apply in choosing a career. He is then encouraged to investigate a career and the educational requirements necessary to prepare for that career. In addition to investigating a specific career, the pupil is introduced to related careers which give him an insight into careers he might not have realized existed and could be of interest to him.

The pupils have been involved in library research, investigating careers, developing career displays for bulletin boards, role playing their chosen career in front of their classmates to expose them to other careers, and manufacturing products for sale and investigating career opportunities in the manufacturing world.

(more)

While the pupils are working on their projects, the student teachers point out careers available related to the area they are studying.

An instructional guide will be compiled at the end of the program and made available to the cooperating schools.

-30-

May 2, 1974

Adam Cielinski
Joseph Novak
Pine Grove Middle School
Fremont Road
East Syracuse, New York

What's New in Industrial Arts

The pupils in the industrial arts classes at Pine Grove Middle School are participating in a Career Education Pilot Program. Mr. Pittner and Mr. McDougal, the cooperating industrial arts teachers, and Mr. Cielinski and Mr. Novak, student teachers from the State University College at Oswego, are implementing this program.

The students are being exposed to a wide range of occupations through the use of films, slides, displays and lessons. The seventh grade pupils in woodworking classes are involved in manufacturing. They are mass producing candle holders.

-30-

April 1, 1974

Tom Dorgan
John Altman
Jamesville-Dewitt Middle School
Randall Road
Syracuse, New York
phone: 471-1556

Industrial Arts Career Education Pilot Program

The pupils currently enrolled in the industrial arts program at Jamesville-Dewitt Middle School are involved in a career education pilot program. Philip Horan and David Wells are presently working with Tom Dorgan and John Altman, student teachers from the State University of New York College at Oswego, to create and present career activities to the sixth and seventh grade industrial arts students.

The program emphasizes broad career awareness and orientation. In a career education program all young people, both boys and girls, have the opportunity to systematically explore occupational options. They proceed from broad exploratory efforts to in depth experiences with hands-on real life activities in major occupational clusters. The sixth grade pupils are currently involved in a mass production unit which will expose them to various occupations related to industry.

December 5, 1973

William Keller
Michael Carlito
Chestnut Hill Middle School
Liverpool, New York

Follow-up Alumni

If you are an alumnus of Liverpool High School, there is a good chance that you will be contacted to answer a questionnaire developed by the eighth grade industrial arts pupils of Chestnut Hill Middle School. This is part of an experimental program focusing on career awareness. Through the questionnaire, the pupils hope to develop an awareness of the many different career opportunities available.

This program is being implemented under the guidance of William Keller and Michael Carlito of State University College at Oswego. They are working with George Boni and John Pauldine of Chestnut Hill Middle School.

If you are contacted by telephone or by mail, your cooperation will be appreciated. Pictured are some of the students that are participating in this experimental program.

December 3, 1973

Richard Barczak
Fred Fosler
Roxboro Road Middle School
North Syracuse, New York

Roxboro Road Middle School Pilots Career Education

Roxboro Road Middle School was one out of five schools chosen by the State University College at Oswego to participate in a pilot program on career education. Richard Barczak and Fred Fowler, student teachers from the State University College at Oswego, worked under the supervision of John Kulesa and Gus Bollenbacher, industrial arts teachers, to develop new curriculum of career education relating to industrial arts education.

Career education has received a high priority among educators, administrators and legislators. In essence, it is a program designed to make education more relevant in preparing and assisting students to become aware of, explore, choose and prepare for a career. Career education is a continuous program integrated into current curriculums, beginning at pre-school and continuing on to all levels of education, even graduate levels.

Among the activities the students participated in were

(more)

listening to guest speakers, simulated manufacturing by mass producing a product with emphasis on career role playing, watching career education films, interviewing various people to learn about their occupations and giving oral reports on careers.

One very successful project included a day off from school for the student to spend with his father learning about his occupation. For one student, this meant spending two nights in Binghamton and taking part in a sales transaction.

Although the pilot program at Roxboro Middle School only lasted eight weeks it proved to be a great success. The pupil interest in the career education projects will result in further development of the program.

-30-

December 4, 1973

Michael Taber
Gary Houtz
West Genesee Junior High
Camillus, New York

West Genesee Junior High Participates in a Career Program

West Genesee Junior High School has been selected as one of six upstate schools to participate in a pilot program on careers offered by the State University College at Oswego.

Student teachers Michael Taber and Gary Houtz will be working with Eugene Field and William Stessen to create and present a unit on careers to be offered to the seventh, eighth and ninth grade pupils of industrial arts.

The program emphasizes broad career awareness and orientation. In a career education program, all young people, boys and girls, rich and poor, urban and rural, will have an opportunity to systematically explore occupational options. They proceed from broad exploratory efforts to in depth experience with hands on real life activities in major occupational clusters.

Such experience should contribute to a further under-

(more)

standing of their occupational interest and the implications of alternative career choices for their life style---in effect, their "non-work" life roles.

This information and these activities are extremely important to students at this early secondary level and West Genesee is grateful to have been selected to begin a program of this nature in its school.

-30-

December 18, 1973

William Van Gee
Oswego Middle School
Oswego, New York

Industrial Arts Pilot Program In Operation at Middle School

An Industrial Arts Career Education Pilot Program is presently being conducted at the Oswego Middle School.

At Oswego Middle School, two classes of seventh grade pupils are involved in the Career Education Pilot Program with William Van Gee, a student teacher at the State University College at Oswego. He is working under the supervision of Frank Bartello, industrial arts teacher at the middle school. Also involved with the program is Mr. Josegh Larsarski of the middle school English Department.

The program at the middle school is one of five Career Education Pilot Programs presently being field tested in the Oswego-Syracuse area in cooperation with Dr. Kolan Bisbee, Associate Professor, Department of Industrial Arts and Technology, S.U.C.O.

The course will last for six weeks. It will be concerned with field testing ways by which pupils at the middle school level will become more aware of career opportunities around them.

(more)

Industrial Arts Pilot Program In Operation at Middle School
2-2-2

Pupils at Oswego Middle School will be looking at careers in the construction industry in particular. They have set up a mock construction company in which they have formed for different construction jobs. Each student then works to find out more about his job through research, interviews, and by applying his technical knowledge and skills on an actual construction project in the job for which he applied. fo At the end of the program, each student will report his experiences and findings to the rest of the class. The pilot program is expected to increase the students' awareness of careers in this instance, in the construction field, and to develop their ability, and stimulate interest in finding out more about different career opportunities available to them.

-30-

News Release Style Sheet

1. Time, date and place should be in that order.
2. Use the day of the week, not today, last week etc.
3. Only abbreviate or capitalize a person's title when it comes before the person's name. Never abbreviate or capitalize the title when it comes after the name or when it stands alone.
4. Use the past and future tense. Avoid the use of the present tense.
5. Winners are first, second and third, not 1st, 2nd and 3rd.
6. $2, $6, not $2.00, $6.00
7. More than 500. Not over 500 attended.
8. Addresses: John Smith of Main Street. John Smith of 35 Main St. Abbreviate when there is a number in the address.
9. Ages and statistics are in numerals.
10. Addresses are written as N. Main Street, North Syracuse.
11. Trains and airplanes are due. Most events occur because of or were caused by.
12. Meetings are conducted or sponsored, but not held.
13. Smith graduated. Not Smith was graduated.
14. Use pick with fruits and vegetables. Otherwise, named, selected, chosen, appointed, etc.
15. Any figure higher than 999 use a comma - 1,890.
16. High School and under - pupil not student.
17. Names of school courses are not capitalized with such exceptions as English, Spanish, American.
18. Most persons are citizens of the United States and residents of Oneida, Oswego, Maple Avenue, etc.
19. It is not necessary to repeat the name of the community in the dateline after an address in the story.

20. Do not use FROM in giving the hours for an event. Sessions will be 2 to 4 and 7 to 9 p.m.

21. Olean RD 4, not RD 4 Olean. Also, no comma between Olean and RD.

22. Elected were John Smith, president: John Jones, vice president etc. No colon after were.

23. No periods when abbreviating organizations, except U.S., U.S.A., U.N. Thus: BPOE, OES, NORAD, but John Jones, R.N.

24. One is a member of a club. One does not belong to a club.

Public Relations Bibliography

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3. Hackett, Donald F., "Building Momentum Through Public Relations", Journal of Industrial Arts Education, Vol. 24, #1, 9-10/64, p. 13.

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8. Publicity Handbook, The Sperry & Hutchonson Co., Consumer Services, P.O. Box 935, Fort Worth, Texas, 1972

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   Vol. 1, 1957, ch. 9, 10
   Vol. 2, 1959, ch. 2
   Vol. 3, 1961, ch. 10&12
   Vol. 4, 1962, ch. 1 & 5
   Vol. 5, 1963, ch. 3 & 11
   Vol. 6, 1964, ch. 7 & 9
   Vol. 7, 1965, ch. 12 & 14

10. Tierney, William F., "Public Relations and the Industrial Arts Teacher", IAVE, Vol. 52, #7, 9/63, pp. 26-29.

11. Wilber, Gordon O., and Pendered, Norman C., Industrial Arts on General Education, 3rd Ed., International Textbook Co., Scranton, Pa., 1967, ch. 18, pp. 295-312.

CAREER CLUSTER INFORMATION SOURCES

The following section identifies additional sources of career information that are available both in the local community and on a national level. To assist the teacher in his search, the information is organized in a format of fifteen career clusters.

AGRICULTURE BUSINESS & NATURAL RESOURCES CAREER CLUSTER

1. Accountants
2. Conservationists
3. Engineers
4. Inspectors
5. Loggers
6. Managers
7. Miners
8. Office Workers
9. Park Managers
10. Researchers
11. Salesmen
12. Scientists
13. Truckers
14. Veterinarians

INFORMATION SOURCES

1. Agricultural Cooperative Extension Services
2. Agricultural suppliers
3. City water departments
4. Local dairy outlets
5. Professional societies

BUSINESS AND OFFICE
CAREER CLUSTER

1. Accountants
2. Bookkeepers
3. Computer Programmers and Operators
4. Machine Transcribers
5. Managers in Charge of Operations
6. Office Clerks
7. Office Machine Operators
8. Secretaries
9. Stenographers
10. Typists

INFORMATION SOURCES

1. American Bankers Association
   90 Park Ave.
   New York, N. Y. 10016

2. Large area businesses

3. Local banks

4. Local and national insurance companies

5. National Association of Legal Secretaries
   P.O. Box 7394
   Long Beach, Calif. 90807

6. Office and Professional Employees International Union
   1012 Fourteenth St.
   Washington, D. C. 20005

COMMUNICATION CAREER CLUSTER

1. Broadcasters
2. Computer Programmers
3. Creative Reporting Artists
4. Designers
5. Electronic Servicemen
6. Photographers
7. Recorders
8. Scientists
9. Teletype Servicemen
10. Teletype Operators
11. Telephone Operators
12. Telephone Servicemen
13. Telephone Linemen
14. Writers

INFORMATION SOURCES

1. Advertising agencies
2. Local newspapers
3. Superintendent of Documents, U. S. Government Printing Office, Washington, D. C. 20402
4. Telephone companies
5. Television and radio stations

CONSTRUCTION CAREER CLUSTER

1. Bricklayers
2. Buyers (material purchasing)
3. Carpenters
4. Cement Masons
5. Craftmen
6. Designers and Architects
7. Electricians
8. Equipment Operators
9. Interior Decorators
10. Landscapers
11. Office Workers
12. Painters and Paper Hangers
13. Researchers
14. Surveyors

INFORMATION SOURCES

1. American Federation of Labor and Congress of Industrial Organizations.
   Building and Construction Trades Department
   815 16th Street, N. W.
   Washington, D. C. 20006

2. Associated General Contractors of America, Inc.
   1957 E. Street, N. W.
   Washington, D. C. 20006

3. American Plywood Association

4. General Building Contractors Association
   Suite 1212
   2 Penn Central Plaza
   Philadelphia, Penn. 19102

5. International Brotherhood of Electrical Workers
   1200 Fifteenth St., N. W.
   Washington, D. C. 20005

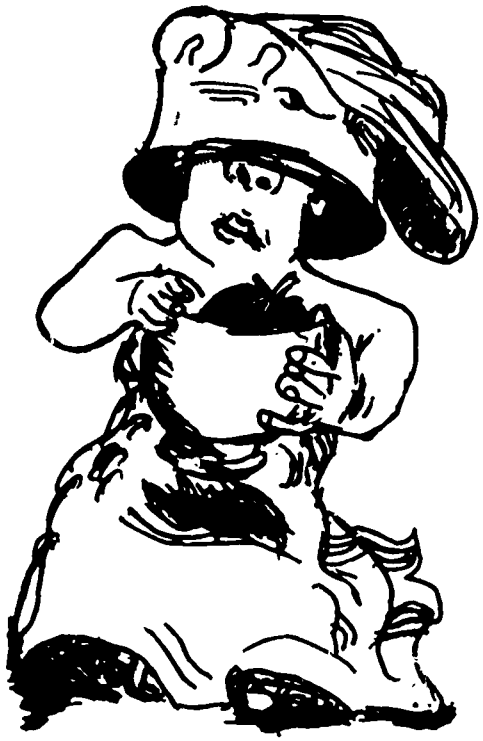
6. Local construction companies

7. Local construction labor union

8. Local builders exchange

9. National Association of Home Builders
   1625 L. Street, N. W.
   Washington, D. C. 20036

10. Window Glass Cutters League of America
    1078 South High St.
    Columbus, Ohio 43206



CONSUMER AND HOMEMAKING
CAREER CLUSTER

1. Cabinet Makers
2. Chefs
3. Childcare Nurses, Teachers
4. Clothing Designers
5. Dishwashers
6. Dry Cleaners
7. Food Testers and Researchers
8. Interior Decorators
9. Models
10. Researchers
11. Tailors and Seamstresses
12. Textile Workers
13. Upholsterers
14. Waitresses/Waiters

INFORMATION SOURCES

1. American Economic Association
   629 Noyes St.
   Evanston, Ill. 60201

2. Better Business Bureaus

3. Educational Foundation for the Fashion Industry
   227 West 27th Street
   New York, N. Y. 10001

4. Local consumer affairs units

5. Local Cooperative Extention Services

6. 4-H directors

ENVIRONMENT CAREER CLUSTER

1. Chemists
2. Designers
3. Physicians
4. Educators
5. Garbagemen
6. Inspectors
7. Law Enforcement Officers
8. Miners
9. Planners
10. Scientists
11. Surveyors
12. Researchers
13. Conservationists
14. Forest Rangers

INFORMATION SOURCES

1. American Forest Institute
   1835 K Street, N. E.
   Washington, D. C. 20006
2. City water departments
3. Local and state fish hatcheries
4. Local 200
5. Parks departments
6. State and national soil conservation departments

FINE ARTS AND HUMANITIES
CAREER CLUSTER

1. Actors
2. Artists
3. Carpenters and Painters
4. Composers
5. Designers
6. Electronic Technicians
7. Historians
8. Interpreters
9. Language Teachers
10. Make-up Persons
11. Musicians
12. Producers
13. Seamstresses
14. Writers

INFORMATION SOURCES

1. Art galleries
2. Local repertory theaters
3. Local symphony orchestras
4. Television and radio stations

HEALTH CAREER CLUSTER

1. Ambulance Drivers
2. Dentists
3. Inspectors
4. Maintenance Workers
5. Nurses
6. Physical Therapists
7. Physicians
8. Psychiatrists
9. Rehabilitation Therapists
10. Researchers
11. Scientists
12. Secretaries
13. Social Workers
14. Technicians

INFORMATION SOURCES

1. American Medical Association

2. American Public Health Association
   1790 Broadway
   New York, N. Y. 10019

3. International Society of Clinical Laboratory Technologists
   805 Ambassador Building
   411 N., 7th St.
   St. Louis, Mo. 63101

4. Local hospitals

5. Narcotics addiction control centers

6. National Association for Practical Nursing Education and Services

7. Nursing homes

8. Pharmaceutical laboratories

9. Red Cross and veterans hospitals

HOSPITALITY AND RECREATION CAREER CLUSTER

1. Artists
2. Athletic Directors and Instructors
3. Cashiers
4. Cooks
5. Counselors
6. Hostesses
7. Librarians
8. Managers in Charge of Operations
9. Museum Curators
10. Park Inspectors
11. Professional Athletes
12. Sales Clerks
13. Tour Directors
14. Waitresses/Waiters

INFORMATION SOURCES

1. American Hotel and Motel Association
   221 West 57th St.
   New York, N. Y. 10019

2. Boys Club of America

3. City parks departments

4. Council on Hotel, Restaurant, and Institutional Education
   Statter Hotel
   Ithaca, N. Y. 14850

5. Local university coaching staffs

6. Local YMCA/YWCA

MANUFACTURING CAREER CLUSTER

1. Artists
2. Assemblers
3. Bench Workers
4. Designers
5. Inspectors
6. Machine Operators
7. Maintenance Workers
8. Miners
9. Office Workers
10. Packagers
11. Processors
12. Researchers
13. Salesmen
14. Warehouse Workers

INFORMATION SOURCES

1. Bureau of Apprenticeship and Training Manpower Commission
   Department of Labor
   Washington, D. C. 20201

2. Local industrial plants

3. Local bakeries

4. Junior Achievement Inc.
   New York, N. Y.

MARINE SCIENCE CAREER CLUSTER

1. Chartologists
2. Computer Programmers
3. Divers
4. Inspectors
5. Laboratory Technicians
6. Maintenance Men
7. Navigators
8. Oil Drillers
9. Office Workers
10. Radio Operators
11. Researchers
12. Sailors
13. Seafood Processors
14. Surveyors

INFORMATION SOURCES

1. Local marinas

2. National Maritime Union of America
   36 Seventh Ave.
   New York, N. Y. 10011

3. Shipbuilders Council of America
   1730 K Street, N. E.
   Kellogg Biological Station
   Hickory Corners, Mich. 49060

4. U. S. Department of Interior
   Bureau of Comercial Fisheries
   Washington, D. C.

MARKETING AND DISTRIBUTION CAREER CLUSTER

1. Artists
2. Bankers
3. Brokers
4. Buyers
5. Designers
6. Economists
7. Exporters
8. Mail Order Sales
9. Managers in Charge of Operations
10. Office Workers
11. Realtors
12. Salesmen
13. Shippers
14. Mechanics

INFORMATION SOURCES

1. American Advertising Federation
   1225 Connecticut Ave., N. W.
   Washington, D. C. 20036

2. American Marketing Association
   230 North Michigan Ave.
   Chicago, Ill. 60601

3. City department stores

4. Local insurance companies

5. Local restaurants

6. National Association of Direct Selling Companies
   165 Center St.
   Winowa, Minh. 55987

PERSONAL SERVICES CAREER CLUSTER

1. Animal Trainers
2. Artists
3. Barbers
4. Beauticians
5. Dieticians
6. Masseurs
7. Physical Directors
8. Physicians
9. Researchers
10. Salesmen
11. Testers
12. Teachers
13. Writers
14. Funeral Directors

INFORMATION SOURCES

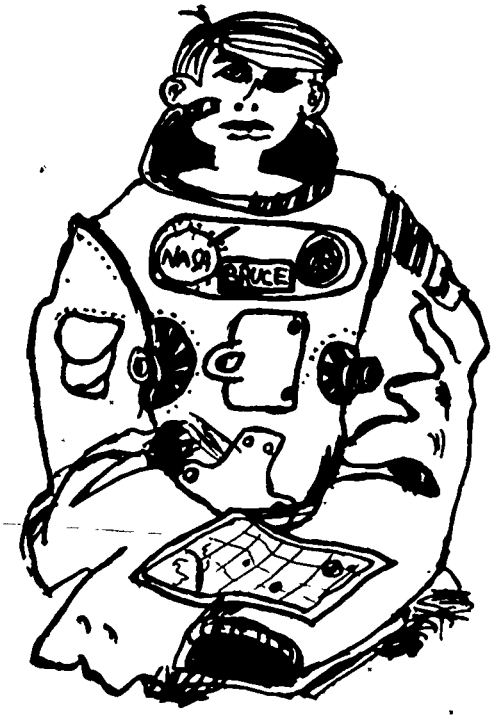
1. Airlines
2. Beauty and barber schools
3. Dry cleaning plants
4. Local funeral homes
5. Local stock brokerage agenicies
6. Motels and hotels

PUBLIC SERVICES
CAREER CLUSTER

1. Attorneys
2. Child Welfare Workers
3. Counselors
4. Garbagemen
5. Gas and Water Meter Readers
6. Highway Maintenance Workers
7. Immigration Officers
8. Judges
9. Law Enforcement Officers
10. Mailmen
11. Nurses
12. Public Park Workers
13. Public Transportation Operators
14. Social Workers
15. Teachers

INFORMATION SOURCES

1. American Personnel and Guidance Association
2. Department of Health, Education and Welfare
3. Local Director of Consumer Affairs
4. Local fire departments
5. Local police departments
6. Local water departments
7. Military recruiters
8. Nursery schools
9. Social Security Administration
10. Society of Fire Protection Engineers
    60 Batterymarch St.
    Boston, Mass. 02110
11. State employment agencies



TRANSPORTATION CAREER CLUSTER

1. Aviators
2. Computer Programmers
3. Construction Workers
4. Designer
5. Dispatchers
6. Drivers
7. Electronic Technicians
8. Engineers
9. Inspectors
10. Mailmen
11. Merchant Marine Seamen
12. Navigators
13. Ticket Agents
14. Ship Pilots
15. Stewardesses/Stewards

INFORMATION SOURCES

1. Airline Employees Association
   5600 South Central Avenue
   Chicago, Illinois 60638

2. American Automobile Club

3. Bus and train companies

4. International Organization of Masters, Mates,and Pilots
   39 Broadway, New York, N. Y. 10006

5. Office of Maritime Manpower
   Maritime Administration
   U. S. Department of Commerce
   Washington, D. C. 20235

6. State departments of transportation

7. Trucking firms

GLOSSARY

ability -	job or acts that a person is capable of performing
apprentice -	one who learns by practical experience under the supervision of a skilled worker
automation -	controlling a process by means other than the use of a man
biased -	showing only one side of a question or issue
blue collar worker -	skilled or semi-skilled hourly wage earner
blue print -	photographic print, white on a blue background, used for copying plans, maps, etc.
career -	successful pursuit of an occupation; course of or progress of a worthy activity
career clusters -	jobs related to a major field of employment
career exploration -	gathering of occupational information related to a specific job
community resources -	source of information and assistance which are available in the community
culture -	social characteristics of different peoples
curriculum development -	logically thought out approach to a course of study
dividend	share of surplus profits paid to a stockholder
evaluation -	appraisal of behavioral changes through the use of observation, written materials and skills
fixture or jig -	device to hold and guide work securely for various operations
flow chart -	device used to organize and regulate the flow of materials, parts, and personnel between stations in mass production

foreman -	a person supervising a group of workers
goal -	a desired end which a person must apply his energies in order to achieve
gross profit -	total profit before expenses
interest -	desire or attraction toward a thing, place or person
job -	specific duty involved in the act of work
job application -	background information form required by an employer
journeyman -	a person certified to perform tasks in a skilled trade
labor -	working force composed mostly of skilled, semi-skilled and non-administrative persons
management -	a group of people who make up the administrative work force; decision makers
net profit -	profit remaining after deduction of charges, outlays, losses, etc.
occupation -	a specific area of employment
production line -	systematic arrangement of machinery, materials, supplies and personnel necessary to manufacture a product with dispatch and efficiency
promotion -	an advance in position
public relations -	communication process between an organization and its public
resume -	short account of one's career and qualifications prepared typically by an applicant for a position
salary -	fixed compensation paid regularly for services
saleable skill -	specific training which allows one to compete in the job market

self awareness -	knowing ones aptitudes, capabilities, interests and needs
team teaching -	the use of two or more instructors in presenting materials
trade -	a skilled occupation requiring manual or mechanical abilities
unemployed -	not engaged in a gainful occupation
union -	a coalition of workers united for a common purpose
unskilled -	a job which is not dependent on training or experience
wages -	payment for services rendered
white collar worker -	usually a salaried employee with administrative or office skills
work -	a specific task, duty or function
working papers -	protect a minor against over-work, under pay and dangerous jobs

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