The fourth grade instructional unit, part of a grade school level career education series, is designed to assist learners in relating present experiences to past and future ones. Before the main body of the lessons is described, field testing results are reported, and key items are presented: the concepts, the estimated instructional time, the vocabulary introduced, the resources required, and the instructor preparation tasks. Instructional procedures are presented in three sections—introduction, learners' tasks, and a summary. Some supplemental activities are presented, strategies and resource profiles provided, and assessment procedures outlined. The unit's primary intent is to develop career awareness, employability skills, and an understanding of task completion as a job responsibility. Major topics stress job specialization and dependency on others to complete a task. Lessons demonstrate the meaning of job specialization and dependency and include the planning and playing of a softball game, the observation of workers, and the building of a model house. The 20-hour unit, suitable for group instruction, relates to the math, art, and language arts areas. Instructional materials for a model house are included. An instructional strategy guide and an alternate lesson plan with transparency masters are appended. (MW)
DOING YOUR THING

FOURTH GRADE

Principal Writer: Beverly Potter
Mesa Public Schools

REVISED
1974
Studies over the past five years within Arizona show parents as the most influential sources of the student's occupational and educational choices. Because of parent influence and the community interest in career education, it is strongly recommended that the content of this unit be reviewed with parent advisory groups.
"Reinforcing the three R's - relevance through Career Education" is the refrain echoing across the country today.

Career Education combines the academic world with the world of work. It must be available at all levels of education from kindergarten through the university. A complete program of Career Education includes awareness of the world of work, broad exploration of occupations, in-depth exploration of selected clusters, and career preparation for all learners. This calls for all basic education subjects to incorporate Career Education as an activity. Education and Career Education are synonymous terms.

GOALS OF CAREER EDUCATION

LEARNING TO LIVE - means promoting the learners' awareness of their capabilities and developing their ability to deal with leisure time and society in general.

LEARNING TO LEARN - involves motivating the learners so that they want to learn the basic educational subjects. This can be done by making the subjects meaningful and by relating them to the real world of work.

LEARN TO MAKE A LIVING - means preparing learners so that they have the capability to support themselves economically and to become productive members of the community.
This instructional unit, which relates to the Career Education outcomes, has been field tested in the State of Arizona. A report of the field test results is available upon request.

This unit is a suggested procedure. Feel free to adapt it to meet the needs of your particular students and situation. The following are suggestions made by the field test teachers.

Lesson 1:

a. Some teachers found the vocabulary in this lesson difficult for minority students. You may wish to make up a vocabulary study unit to accompany each lesson or change the wording to meet the vocabulary level of your students.

b. The assessment items could be answered orally.

c. Students might take pictures of workers within the community.

Lesson 3:

a. The job specialization areas used could be something other than hospitality services and newspaper publishing.

b. The assessment on page 57 could be changed to have students identify the two items requested as class discussion, small groups, or individual assignments.

Lesson 4:

a. Students could role play the jobs described by the guest speakers.

b. It was suggested that in place of interviewing for assessment, that each student be given a copy of "Possible Points of Discussion for Speakers," page 71, on which students would take notes and hand in the notes for assessment.

Lesson 5:

a. The guest speaker in this lesson should be given a copy of "Sequence of Tasks," page 93.
b. An alternative lesson begins on page 263.

c. Rather than using individual interviews for assessment, you might use class discussion.

Lesson 6:

a. One constraint in this lesson would be the amount of material and resources required on pages 117-119.

b. It was suggested that the "Hello, World" series or some other kind of resource should be added to this lesson.

Lesson 7:

a. Some teachers had difficulty with the blueprints, pages 139-239. Note the explanation on pages 140-141.

b. Even though this is a culminating activity, you may wish to make this an optional or supplementary activity.
APPENDICES

APPENDIX A

Instructional Strategy Guides
Field Trip Strategy ........................................ 245
Guest Speaker Strategy ................................... 251
Listening Skills Strategy ................................. 255

APPENDIX B

Lesson 5 - Alternate ..................................... 263

BIBLIOGRAPHY ........................................... 313
UNIT DESIGN

OVERALL PURPOSE

This instructional unit will become an integral part of a total K-12 career education curriculum. This unit has been developed to afford the instructor maximum flexibility in its utilization. When planning for the use of this unit, it will be helpful for the instructor to give attention to the following characteristics.

GOALS

The goals of this career education unit are stated expectations toward which the instruction/learning effort is directed. It is intended that these goals be implicit in the total curriculum and also consistent with the accepted maturation patterns of learners.

PERFORMANCE OBJECTIVES

The performance objectives are derived from the goals of the unit and are intended to specify the expected behavior of the learners.

LESSONS

The lessons are the means by which the performance objectives will be delivered and are designed to assist learners in understanding how present experiences relate to past and future ones. The lessons are broken down into several parts. Before the main body of the lesson is described,
key items are presented: the concepts to be taught, the estimated time required for the lesson, the vocabulary to be introduced, the resources to be gathered, and the preparation tasks to be completed by the instructor prior to beginning the lesson.

The procedures the instructor is to follow are presented in three sections:

INTRODUCTION. This section provided continuity within the unit and makes the learners aware of what they are to accomplish, how they will accomplish it, and why they are studying the particular concepts of the lesson.

TASKS. This section provides a detailed description of the content and activities used to delivery the specified outcomes. An attempt has been made to ensure that the activities are learner-oriented, free from irrelevancies, interesting, presented in small, sequential steps, and complete. Each lesson includes tasks which allow the learners to practice the desired outcome. Sample questions and responses are provided along with suggestions to the instructor for accomplishing the task.

SUMMARY. This section provides closure on the lesson and, if possible, a culminating activity for the learners. It also provides transition from one lesson to another.

On occasion, supplemental activities are included in the lesson to assist in obtaining the desired learner outcomes.

RESOURCES

Instructional resources (materials, equipment, and/or persons) are suggested in each lesson. These resources have been designed and developed so that an instructor may deliver the lessons with minimal preparation time. Worksheets are prepared so that the instructor need only take the page in the unit and use it with an opaque projector or prepare a transparency or ditto master. A Unit Resource Profile has been prepared and is provided in the early part of the unit. Materials used in a lesson are located at the end of that lesson.
ASSESSMENT PROCEDURES

The purpose of the assessment procedures is to determine the learners' level of achievement of the performance objectives. The descriptions, directions, and keys to all items are presented along with the lesson description. Assessment items are placed directly after the lessons, but before any worksheets. This will allow the instructor to administer the assessment item(s) after each lesson. However, in Lesson 6 there is an Instructor Interview Form to be used at the beginning of the lesson and in Lesson 7, there is a Product Assessment Form to be used throughout the entire lesson.

Most of the items may be used to preassess learners before they begin the unit of the instructor desires.

INSTRUCTIONAL STRATEGY GUIDES

This unit contains several types of instructional strategies: listening, guest speaker, and field trip. Instructor guides for these strategies are presented in Appendix A, with specific references given in the lessons. A Unit Content Strategy Profile, which is also a quick reference to the strategies used in each lesson, is provided in the front part of this unit.
UNIT OVERVIEW

Purpose of This Unit

The primary intent of this unit is to develop career awareness and employability skills. Overall, the learners will demonstrate the ability to participate in a group in order to facilitate the attainment of individual as well as group goals. The learners will also be made aware of the responsibility involved in the completion of a task.

The major topics included in this unit stress job specialization and dependency on others to complete a task. To aid in attaining awareness of the meaning of job specialization and dependency, one lesson will include the planning and playing of a softball game. One lesson is concerned with the observation of workers involved in the tasks necessary to complete a project. A final application of the meaning of job specialization and dependency is demonstrated by actually building a model house.

Intended Use of This Unit

This unit was developed by experienced classroom instructors and reviewed by curriculum personnel not associated with its development.
GRADE PLACEMENT
Fourth grade

SUBJECT AREA
Math, art, language arts

DURATION
Twenty hours

GROUPING
Large and small

PREPARING TO TEACH THIS UNIT
Two Unit Profiles which follow this section have been prepared to give you an overview of the time, content, instructional strategies, and resources required for delivery of each lesson in this unit. These profiles provide a synopsis which will assist you in gaining a general understanding of the entire unit.

SPECIAL CONSIDERATIONS
Read the total unit and obtain resource materials before beginning.

Read each strategy in Appendix A.

A transparency is suggested in Lesson 2. An opaque projector could be used or a copy reproduced for each learner.

Prepare the summary of Lesson 3, and prepare needed materials.

Duplicate the material for the guest speaker in Lesson 4.

Prepare for the field trip in Lesson 5.

Duplicate the Permission Slip and Proposed Field Trip Information Sheet for Lesson 5. If a field trip cannot be arranged, use the alternative lesson in Appendix B.
When the learners are working in the library during Lesson 6, stress that the purpose is to look for the products they will use, not the way in which the tasks are actually performed on the job.

Read the blueprints and directions in Lesson 7 before starting the unit.

BE PATIENT. This unit has already been tried out and successfully completed in a fourth grade class. Try not to expect perfection in the final product (Lesson 7). The purpose is to make the learners aware of their responsibilities and the dependency involved.

Offer as much help as needed, but do not do the work for the learners.

Plan other tasks the rest of the class may be working on while the individual groups are working on the model house (Lesson 7).

Suggestions for materials needed in Lesson 7, as well as directions for their use, are given in the lesson.
### UNIT CONTENT/STRATEGY PROFILE

<table>
<thead>
<tr>
<th>Lesson</th>
<th>Time</th>
<th>Content</th>
<th>Instructional Strategies</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>30 min.</td>
<td>Learners identify tasks performed either in or out of school that may be accomplished by one person and those that may be accomplished by several people. A list of tasks is provided in the lesson.</td>
<td>Discussion Questioning</td>
</tr>
<tr>
<td>2</td>
<td>135 min.</td>
<td>Learners plan and play a softball game to show job specialization. They will list the job specializations in this lesson.</td>
<td>Discussion Game Questioning</td>
</tr>
<tr>
<td>3</td>
<td>45 min.</td>
<td>Learners list as many job specializations as possible within the areas of hospital services and newspaper publishing.</td>
<td>Discussion Game Questioning</td>
</tr>
<tr>
<td>4</td>
<td>120 min.</td>
<td>Guest speakers in the occupational area of education relate their responsibilities and their relation to other members of the staff.</td>
<td>Guest speakers</td>
</tr>
<tr>
<td>5</td>
<td>240 min.</td>
<td>Learners sequence steps in order to show dependency and will match the names of occupations to the tasks those workers perform</td>
<td>Field trip Questioning</td>
</tr>
<tr>
<td>6</td>
<td>120 min.</td>
<td>Learners select an occupation and design and produce a product to be used in that project.</td>
<td>Inquiry</td>
</tr>
<tr>
<td>7</td>
<td>540 min.</td>
<td>Learners construct a model house.</td>
<td>Simulation</td>
</tr>
<tr>
<td>Lesson Number</td>
<td>Within Unit</td>
<td>To Be Acquired By Instructor</td>
<td></td>
</tr>
<tr>
<td>---------------</td>
<td>------------------------------------------------------------------------------</td>
<td>-----------------------------------------------------------------------</td>
<td></td>
</tr>
</tbody>
</table>
| 1             | Pictures of a farmer, milk tester, milk delivery person, grocery cashier     | Tagboard (optional)  
Carton of milk  
Duplicating machine |
|               | **List for Chalkboard and Tagboard**                                         |                                                                        |
|               | Assessment item                                                              |                                                                        |
| 2             | **Responsibilities for Players on a Softball Team**                          | Overhead or opaque projector  
Softball or kick-ball  
Duplicating machine  
Bats  
Mitts  
Book on softball rules  
Paper for writing names |
|               | **Softball Diamond Diagram**                                                 |                                                                        |
|               | **Basic Rules for Slow-pitch Softball**                                     |                                                                        |
|               | Assessment item                                                              |                                                                        |
| 3             | **List of Occupational Groups and Specializations**                          | Tagboard  
Glue  
Scissors  
Duplicating machine |
|               | Assessment item: Interview Form                                              |                                                                        |
| 4             | **Listening Strategy (Appendix)**                                            | One large sheet of paper per learner  
Guest speakers  
Duplicating machine |
<p>|               | <strong>Guest Speaker Strategy (Appendix)</strong>                                       |                                                                        |
|               | <strong>Listen for These Points</strong>                                                  |                                                                        |
|               | <strong>Points for Discussion</strong>                                                    |                                                                        |
|               | Assessment item: Interview Form                                              |                                                                        |</p>
<table>
<thead>
<tr>
<th>Lesson Number</th>
<th>Within Unit</th>
<th>To Be Acquired By Instructor</th>
</tr>
</thead>
<tbody>
<tr>
<td>4 (Cont'd)</td>
<td>Activities To Be Completed Before, During, and After Guest Speakers</td>
<td>Permission from principal, parents, and contractor to visit construction site</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Rules to follow on field trip</td>
</tr>
<tr>
<td>5</td>
<td>Proposed Field Trip</td>
<td>Permission Slip</td>
</tr>
<tr>
<td></td>
<td>Sequence of Steps</td>
<td>List of Preparation Tasks for Field Trip</td>
</tr>
<tr>
<td></td>
<td>Field Trip Strategy (Appendix)</td>
<td>Assessment item: Interview Form</td>
</tr>
<tr>
<td></td>
<td>Permission Slip</td>
<td>Alternate Lesson (Appendix)</td>
</tr>
<tr>
<td></td>
<td>List of Preparation Tasks for Field Trip</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Assessment item:</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Interview Form</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Alternate Lesson (Appendix)</td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>List of Library Books and Films</td>
<td>Magazines (home design and decorating)</td>
</tr>
<tr>
<td></td>
<td>List of Occupations to Use for Selection</td>
<td>Library books on construction</td>
</tr>
<tr>
<td></td>
<td>List of Occupations, Products, and Materials</td>
<td>Library time</td>
</tr>
<tr>
<td></td>
<td>Labor Contract</td>
<td>A set of encyclopedias</td>
</tr>
<tr>
<td></td>
<td>Assessment items:</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Interview Form</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Product Assessment Form</td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>Blueprints for:</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Floor plan</td>
<td>Scrap material (carpet, tile, cloth)</td>
</tr>
<tr>
<td></td>
<td>Foundation (2)</td>
<td>Cement or plaster of Paris (cement and vermiculite preferred)</td>
</tr>
<tr>
<td></td>
<td>Framing (outside walls)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Elevation (front, sides)</td>
<td></td>
</tr>
</tbody>
</table>
## UNIT RESOURCE PROFILE

<table>
<thead>
<tr>
<th>Lesson Number</th>
<th>Within Unit</th>
<th>To Be Acquired By Instructor</th>
</tr>
</thead>
<tbody>
<tr>
<td>7 (Cont'd)</td>
<td>Blueprints for:</td>
<td>Miter box and saw</td>
</tr>
<tr>
<td></td>
<td>House exterior (2)</td>
<td>(use diagram if</td>
</tr>
<tr>
<td></td>
<td>Cross section</td>
<td>making one)</td>
</tr>
<tr>
<td></td>
<td>Corner and roof detail</td>
<td>Tempera (all colors)</td>
</tr>
<tr>
<td></td>
<td>Wood size</td>
<td>Cellophane or plastic wrap</td>
</tr>
<tr>
<td></td>
<td>Bill of materials</td>
<td>Aluminum foil</td>
</tr>
<tr>
<td></td>
<td>Wall legend</td>
<td>Cardboard</td>
</tr>
<tr>
<td></td>
<td>Wall sections</td>
<td>Construction paper</td>
</tr>
<tr>
<td></td>
<td>Paper assembly</td>
<td>Wheat paste or</td>
</tr>
<tr>
<td></td>
<td>Landscaping</td>
<td>library paste</td>
</tr>
<tr>
<td></td>
<td>Roof</td>
<td>Glue</td>
</tr>
<tr>
<td></td>
<td>Framing (inside walls)</td>
<td>Crepe paper (use</td>
</tr>
<tr>
<td></td>
<td>Shingling (outside)</td>
<td>green and brown</td>
</tr>
<tr>
<td></td>
<td>Miter box</td>
<td>for landscaping;</td>
</tr>
<tr>
<td></td>
<td></td>
<td>use other colors</td>
</tr>
<tr>
<td></td>
<td></td>
<td>if learners want</td>
</tr>
<tr>
<td></td>
<td></td>
<td>flowers)</td>
</tr>
<tr>
<td></td>
<td>Explanation of Blueprints</td>
<td>Toothpicks</td>
</tr>
<tr>
<td></td>
<td>Legend of Blueprints</td>
<td>Cotton</td>
</tr>
<tr>
<td></td>
<td>Assessment item:</td>
<td>Wood (specifications on bill of</td>
</tr>
<tr>
<td></td>
<td>Product Assessment Form</td>
<td>materials in</td>
</tr>
<tr>
<td></td>
<td>Recipes for Cement and</td>
<td>Lesson 7)</td>
</tr>
<tr>
<td></td>
<td>Plaster of Paris</td>
<td>Styrofoam ¼&quot; thick</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Sponge</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Newsprint</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Sand (fine)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Straws</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Wax paper</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Masking tape</td>
</tr>
</tbody>
</table>
INSTRUCTIONAL SEQUENCE
NUMBER OF PEOPLE REQUIRED FOR DOING A JOB

Lesson One

Goal

The learners will identify tasks performed either in or out of school that may be accomplished by one person and those that may be accomplished by several people.

Performance Objective

Given a list of tasks performed in a school setting, the learner will identify those tasks that may be accomplished by one person.

Given a list of tasks performed in a nonschool setting, the learner will identify those tasks that may be accomplished by one person.

Given a list of tasks performed in a school setting, the learner will select the tasks that require the cooperation of several persons.

Given a list of tasks performed in a nonschool setting, the learner will select the tasks that require the cooperation of several persons.

Lesson Time

30 minutes

New Vocabulary

work - the tasks done by a person on his job.
RESOURCES REQUIRED

Tagboard (or chalkboard)
Carton of milk
Assessment items
Pictures - farmer, milk tester, delivery person, cashier (provided in lesson)

INSTRUCTOR PREPARATION TASKS

Write the list of tasks on the chalkboard or tagboard.
Obtain a small carton of milk.
Show pictures of farmer, milk tester, delivery person, and cashier during introduction of lesson (provided in lesson).
Duplicate the multiple choice assessment items for each learner (provided in lesson).

INSTRUCTIONAL PROCEDURES

INTRODUCTION

For the next few weeks we're going to be working on a unit called, Doing Your Thing. We will be talking about tasks we do at school and at home, and about jobs we may have as adults. We will identify tasks that require the cooperation of others, as well as tasks that can be done by one person.

Have any of you ever thought about how many people it takes to provide this milk for you?
Show a carton of milk.

How many people do you think it might take?

Accept one or two responses.

Possible response: 50 or 75

It takes many people to provide milk for you. Some of these are the dairy farmer, the milk tester, the delivery man and the grocer.

Show pictures provided in lesson.

All of these people have special jobs or job specialties. These people depend on each other to do their tasks so they can provide milk for you.

We are going to learn about the many kinds of workers it takes to provide one item for you to use or own. These workers do different kinds of jobs to make and provide one item. All these different jobs are called job specialties.

Later on in this unit, we are going to talk about what would happen if someone did not finish his task or job. What would happen if a mechanic did not repair the milk truck he was supposed to, and the next day the truck was sent out to deliver milk?

Possible response:

1. The truck may stall and the milk would not be delivered.
2. The milk might spoil.

In today's lesson, we are going to play a game. The game will help you find out if you know which occupational, school, and family activities can be done by one person and which ones need to be done by several people.

TASKS

Look at these three lists on the board.
Lists are provided. You may add any responses necessary.

The first list shows school tasks, the second shows occupational tasks, and the last shows family tasks. Does anyone know what I mean by occupational task?

Call on learner for response: Jobs, like a mechanic's, might be to tune up the engine of a car.

Actually, the work that he does is the task. Not all tasks are jobs. Some things you do are tasks.

Are there any school tasks, occupational tasks, or family tasks in these lists I left out that you would like to add?

You may accept any appropriate answer. Continue until an adequate number on the list is obtained.

Now, I am going to point to a school task, an occupational task, or a family task. If the task can be done by only one person, I want you to raise one hand. If the task needs to be done by several persons, raise both hands.

Write No. 1 beside the tasks that the class feels need only one person and No. 2 beside those that need several persons.

Now that the list is numbered, would you like to change any of your answers?

There may be questions about phone installation, writing a book, etc. The finished product and/or service requires the involvement of other workers. When installing a phone, there are two people necessary: the installation man and the relay person at the substation. You will be discussing specialization later. Allow the learners to change the responses anyway they wish provided they can give a good reason for making the change.

Use multiple choice assessment items at this time.

I am going to pass out a paper with four questions on it. Read the directions and see if you can answer the questions. If you have any trouble reading the directions, raise your hand.
SUMMARY

So far we have talked about occupation tasks, school tasks, and family tasks that may be done by one person and those that need the help of several persons.

Call on one learner.

What activity does your father or mother do either at home or at work?

Learner's response depends on specific person.

Should we call that a one or a two activity or both?

Response depends on activity. Use more than one learner for an example.

In our next lesson we will be choosing a specific school task and listing the job specializations necessary to complete the task.

ASSESSMENT PROCEDURES

DESCRIPTION

Four multiple choice items are used to assess achievement of the objective for Lesson 1. The learners will select those tasks that may be done by one person and those that require the cooperation of several people.

DIRECTIONS

The learners will read each item and record their responses. Assistance with vocabulary may be given by the instructor.

KEY

1-b, 2-a, 3-c, 4-d
Name

Date

Lesson 1

ASSessment Item

1. Circle the letter in front of the school task that is BEST done by one person.
   a. Plan a party
   b. Write a poem
   c. Put on a play
   d. Play a baseball game

2. Circle the letter in front of the work task that is BEST done by one person.
   a. Driving a bus
   b. Building a bridge
   c. Printing a newspaper
   d. Putting on a TV show

3. Circle the letter in front of the school task that requires the help of several persons.
   a. Write a letter
   b. Work a math problem
   c. Put on a talent show
   d. Study for a spelling test

4. Circle the letter in front of the work task that requires the help of several persons.
   a. Decorating a cake
   b. Waiting on tables
   c. Fixing a woman's hair
   d. Performing a medical operation
## LIST FOR CHALKBOARD OR TAGBOARD

### SCHOOL TASKS

<table>
<thead>
<tr>
<th>Task</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reading a book</td>
<td>1</td>
</tr>
<tr>
<td>Drawing a mural</td>
<td>1 or 2</td>
</tr>
<tr>
<td>Sharpening a pencil</td>
<td>1</td>
</tr>
<tr>
<td>Practicing penmanship</td>
<td>1</td>
</tr>
<tr>
<td>Cleaning the playground</td>
<td>2</td>
</tr>
<tr>
<td>Playing a kickball game (football, softball)</td>
<td>2</td>
</tr>
<tr>
<td>Working on student council</td>
<td>2</td>
</tr>
<tr>
<td>Practicing arithmetic</td>
<td>1 or 2</td>
</tr>
<tr>
<td>Cleaning or changing classroom</td>
<td>1 or 2</td>
</tr>
</tbody>
</table>

### OCCUPATIONAL TASKS

<table>
<thead>
<tr>
<th>Task</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Changing oil</td>
<td>1</td>
</tr>
<tr>
<td>Writing a book</td>
<td>1 or 2</td>
</tr>
<tr>
<td>Delivering mail</td>
<td>1 or 2</td>
</tr>
<tr>
<td>Typing a letter</td>
<td>1</td>
</tr>
<tr>
<td>Filling a cavity</td>
<td>1 or 2</td>
</tr>
<tr>
<td>Directing a movie</td>
<td>1 or 2</td>
</tr>
<tr>
<td>Installing a phone</td>
<td>1 or 2</td>
</tr>
<tr>
<td>Printing a newspaper</td>
<td>2</td>
</tr>
<tr>
<td>Putting a car together</td>
<td>2</td>
</tr>
<tr>
<td>Driving a car (salesman)</td>
<td>1</td>
</tr>
<tr>
<td>Vacuuming a car</td>
<td>1</td>
</tr>
<tr>
<td>Building a house</td>
<td>2</td>
</tr>
<tr>
<td>Running a zoo</td>
<td>2</td>
</tr>
<tr>
<td>Running a gas station</td>
<td>2</td>
</tr>
<tr>
<td>Waiting on tables</td>
<td>1</td>
</tr>
<tr>
<td>Helping a dentist</td>
<td>1</td>
</tr>
<tr>
<td>Modeling ladies apparel</td>
<td>1 or 2</td>
</tr>
<tr>
<td>Ironing clothes</td>
<td>1</td>
</tr>
<tr>
<td>Taking care of children</td>
<td>1</td>
</tr>
</tbody>
</table>

### FAMILY TASKS

<table>
<thead>
<tr>
<th>Task</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Brushing your teeth</td>
<td>1</td>
</tr>
<tr>
<td>Making tortillas or biscuits</td>
<td>1 or 2</td>
</tr>
<tr>
<td>Cleaning the yard</td>
<td>1 or 2</td>
</tr>
<tr>
<td>Babysitting for mother</td>
<td>1</td>
</tr>
<tr>
<td>Cleaning your room</td>
<td>1</td>
</tr>
<tr>
<td>Herding sheep</td>
<td>1 or 2</td>
</tr>
<tr>
<td>Irrigating fields</td>
<td>1 or 2</td>
</tr>
<tr>
<td>Washing dishes</td>
<td>1 or 2</td>
</tr>
</tbody>
</table>
AREAS OF JOB SPECIALIZATION

LESSON TWO

GOAL

The learners will be asked to plan and play a softball game to show job specialization, then list the job specializations in this activity.

PERFORMANCE OBJECTIVE

Given a school activity where the learners function as a group, the learner will list the areas of job specialization within that group.

LESSON TIME

90-135 minutes

NEW VOCABULARY

Job specialization - work done in one area of an occupational group

PREREQUISITE KNOWLEDGE

Understanding of occupational, school, and family tasks

and A. 4 rules for softball
RESOURCES REQUIRED

- List of Softball Rules (provided in lesson)
- Book on softball rules
- Softball
- Overhead projector
- Duplicating machine
- Bats and mitts
- Paper
- List of Responsibility of Softball Players (provided in lesson)
- Roll book
- Assessment item

INSTRUCTOR PREPARATION TASKS

- Review a book on softball rules with the class.
- Review list of Softball Rules provided in the lesson.
- Read over Responsibilities of Players (list provided in lesson).
- Obtain a softball, mitts, and bats.
- Obtain the study sheet of a softball diamond. Duplicate, make transparency, or use opaque projector (master provided in lesson).
- Obtain overhead or opaque projector.
- Prepare one multiple-choice assessment item per learner.
- Give a sheet of paper to the captains for the lists of names.

INSTRUCTIONAL PROCEDURES

INTRODUCTION

In our last lesson, we talked about occupational tasks, school tasks and family tasks that are done by one person and those that need to be done by several persons. Yesterday, I also mentioned job specialization. To help you understand what that means, we are going to select one school activity and identify the job specializations within that activity. What school activity am I thinking of?
Hold up softball.

Possible responses: softball, baseball

*If the learners say baseball, explain the difference in the two balls. A softball is larger and softer.*

**TASKS**

First, let's talk about the words *job specialization*. Is there anyone who can tell us what these words mean?

Possible response: When you work in one area or group

*Job specialization can be found in nearly every occupational situation. For example, an occupational situation such as banking might have an accountant, a teller and loan officer. In food services, we would call being a waitress a job specialty. A nurse is a specialist in health services. All of these people do specific jobs in an occupational situation.*

Let's see if we can use our definition and figure out what job specialization we would find on a professional softball team.

Possible responses:

1. Pitcher
2. Umpire
3. Captain
4. Catcher
5. Baseman
6. Batter
7. Scorekeeper
8. Fielder
9. Shortstop

*Write the learner responses on the board.*

Why don't we plan a softball game and try to use the things we have talked about in the last two lessons. First let's select two people to be captains and then we will form the teams.

*Pick two learners. Ask them to select a number between one and the total number of children in your class. Look at the roll book and read the names of the two people whose names are next to the numbers selected. These children will be captains.*
Now have the entire class number off by twos. These groups will form the teams.

Now that your teams are ready, I want you to meet together and decide which job you would like to choose. The captains will write down your name and the job you choose.

Supervise the two groups, but allow freedom of choice on the part of the learners. Changes may need to be made later. Have all the "Ones" meet on one side of the room and all the "Twos" on the other side.

Before we can play a game, we need to discuss our job responsibilities. Let's begin with the responsibilities of the captain. What do you think your responsibilities might be?

Use the list of possible responses provided on Responsibilities for Players on Softball Team and continue with each position.

What are the main responsibilities of everyone on the team?

Use the list that has been provided.

Because you have worked so hard on your plan, we are going to use your plan and really play a softball game. Before going out, let's decide the batting order.

Give each learner a number, starting with one. The groups will be expected to line up in this order and stay in that order throughout the game. Example: If No. 5 bats and makes the last out, then No. 6 will up to bat when it is that team's turn to bat again.

Suggestions for the Instructor

1. The instructor should umpire.
2. Go over the rules as the children play the game.
3. Explain the placement of players.
4. Show the children how to bat.
5. Use three innings only (both teams up to bat three times).
6. Go over the softball rules, using the list provided in the lesson.
7. Extra players may be rovers; two shortstops may also be used. (Refer to Responsibilities for Players on Softball Team and Softball Diamond.)
After completion of the game, take time for discussion.

Now that we have played our game, let’s talk about the responsibilities we did not do well and those that were carried out quite well. What things do you feel we should have done to make the game better?

Stress the idea of specialties within a group, as well as the help the learners give each other.

Possible responses:

1. Practice before the game.
2. Train those who did not know how to bat or catch a ball.
3. Back each other up better.
4. Watch the ball at all times.
5. Share responsibility, but be careful not to take over someone else's responsibility.

What responsibilities were taken care of and were expected?

Possible responses:

1. Sportsmanship from everyone
2. Teamwork from fielders
3. Everyone trying to do his best

I am going to give you another paper with one question on it. See if you can answer the question. Raise your hand if you need help with the words.

Use multiple-choice assessment item here.

SUMMARY

I hope the planning and playing of our softball game helped us to understand what is meant by job specialization. To be sure you understand, let’s pretend we are playing a game.

Here is a picture of the softball field.

Display the study sheet showing the softball diamond.

If you are the second baseman and someone hits a ground ball between second and third base, do you get the ball?
Possible response: No, the shortstop does.

What if the shortstop misses the ball?

Possible response:
The left fielder or a rover, if you use one, will get it.

A fly ball goes to center field, should the first baseman get it?

Possible response: No, the center fielder should.

If the batter bunts the ball, does the pitcher field it?

Possible response:
Maybe, but the catcher, the first baseman, and the second baseman are also responsible.

There are two runners on base, one on first and one on second. A ground ball is hit between second and third and the shortstop catches it. Where should the ball be thrown?

Possible responses:

1. Third base to get second baseman for single play
2. Second base to put first base runner out, and first base to put batter out, possible double play
3. Third base to put second base runner out, second base to put first base runner out, and first base to put batter out, possible triple play

You may provide other situations, if you desire. Use the list of responsibilities to help you.

That was good. Is there anyone who still does not understand job specialization?

If yes, then continue with more of the game and stress the specific job of each player.

In our next lesson, we are going to select job specialization within occupational groups.
SUPPLEMENTAL ACTIVITY

The same procedure described above can be used with a kick-ball game. Less time should be devoted to the introductory section and emphasis placed on job specialization. The same players and similar rules can be used.

ASSESSMENT PROCEDURES

DESCRIPTION

A multiple-choice item is used to assess achievement of the objective. The learner will circle the letter in front of the school task that does not require job specialization.

DIRECTIONS

The learners will read the item and record their responses. Assistance with vocabulary may be given by the instructor.

KEY

a
Circle the letter in front of the school task that does NOT need job specialization.

a. Reading a book
b. Painting a mural
c. Putting on a play
d. Playing a softball game
RESPONSIBILITIES FOR
PLAYERS ON SOFTBALL TEAM

EVERYONE

Main responsibilities: sportsmanship, fair play
knowledge of rules

1. Know where to throw the ball on a double play.
2. Know where to cover on a bunt.
3. Hit the ball toward first base if a runner is on first base.
4. Never throw the ball behind a runner.
5. Stay behind the backstop.

SCOREKEEPER

Keep an accurate score for both teams.

UMPIRE

1. Keep the game going.
2. Know the order of batters.
3. Move from behind the plate when necessary, down the first base line or down the second base line.
4. Remember the count of balls and strikes.

CAPTAIN

1. Know the batting order.
2. Keep the batters in order.

CATCHER

Know where the players are at all times.

PITCHER

Guard against loss of the ball. Yell the name of the person who is to catch a fly ball.
RESPONSIBILITIES FOR PLAYERS
(Continued)

FIELDERS

1. The right fielder backs up the first baseman.
2. The center fielder backs up the second baseman and the shortstop.
3. The left fielder backs up the third baseman and the shortstop.

BASEMEN

Be aware of where the batters are and be ready to catch and throw the ball at all times.

SHORTSTOP

1. Back up the basemen.
2. Act as a fielder, if necessary.

ROVERS

Back up the fielders and the basemen.
RESPONSIBILITIES FOR PLAYERS (Continued)

PLACEMENT OF PLAYERS

BACKSTOP

umpire

catcher

scorekeeper

batters

pitcher

first

second shortstop

rover

right fielder

rover

second

center fielder

left fielder

first shortstop

rover

second shortstop

rover

right fielder

rover

left fielder

second shortstop

rover

right fielder

rover

LEFT FIELDER

PLACEMENT OF PLAYERS

FIRST

SECOND SHORTSTOP

ROVER

RIGHT FIELDER

SECOND

CENTER FIELDER

Lesson 2
Lesson 2

BASIC RULES FOR SLOWPITCH SOFTBALL

1. Stay on base until the ball is thrown by the pitcher.
2. Use an underhand pitching style.
3. The umpire determines the "outs." Three "outs" are allowed.
4. No base stealing or bunting is allowed.
5. If a fly ball is caught, the runner must return to the base he just left.
Lesson 2

SOFTBALL DIAMOND

1. Catcher
2. Pitcher
3. First base
4. Second base
5. First shortstop
6. Third base
7. Right field
8. Center field
9. Left field
10. Second shortstop
11. Right rover
12. Center rover
13. Left rover
14. Batters
15. Scorekeeper

Note: This may be used as a master transparency, duplicated for each lesson, or used "as is" with an opaque projector.
Lesson 2

SOFTBALL DIAMOND

Center Field

Center Rover

Right Rover

Left Field

Left Rover

Second Base

Second Shortstop

First Shortstop

First Base

Third Base

Pitcher

Catcher

Batters

Scorekeeper
JOB SPECIALIZATIONS WITHIN SPECIFIC GROUPS

Lesson Three

Goal
The learners will be asked to list as many job specializations as possible within the areas of hospital services and newspaper publishing.

Performance Objective
Given examples of goods and services where workers function as a group, the learner will list the job specializations within the group.

Lesson Time
45 minutes

Prerequisite Knowledge
Knowledge of the concept of job specialization within a group

Resources Required
List of Occupational Titles and Specializations (provided in lesson)
Tagboard
Glue
Scissors
Assessment item
INSTRUCTOR PREPARATION TASKS

Cut up the list of Occupational Titles and Specializations provided in the lesson.
Glue the occupational titles on tagboard.
Fold the names of job specializations in half and place them in a container.
Review the list of Occupational Groups and Specializations for use in the summary of the lesson.
Duplicate one copy of Instructor Interview Form for instructor's use.

INSTRUCTIONAL PROCEDURES

INTRODUCTION

In our last lesson, we used a school activity, our softball game, to learn more about job specialization. Today we are going to discuss two different occupational situations. We are going to see if you can name the job specializations within these occupational groups. Some day, you will need to decide what job you would like and this lesson will help you be aware of how many jobs might be available to you.

TASKS

The first occupational situation I would like you to think about is health services. What job specializations can you think of in this situation?

Write responses on the chalkboard.

Possible responses:

1. Doctor
2. Nurse
3. Nurse's aide
4. X-ray technician (a person who takes pictures of broken arms)
5. Administrator (a person who runs the hospital)
6. Lab technician (a person who takes blood and does tests)
7. Cook
8. Intern (a person who is studying to be a doctor)
9. Receptionist (one who greets callers and/or answers their questions)

That is a very good list. Now let's try a harder occupational service, such as communication. Since there are so many kinds of communication, I want you to think about just one, the newspaper.

First, I want you to write down the names of three job specialties in the newspaper business. Use this sheet of paper to make your list.

Hand out sheet.

If you cannot think of a name to call the job, then describe it.

Give the learners time to write responses.

Using your list, tell us what kind of job specializations it takes to get a newspaper to the public.

Write responses on the chalkboard.

Possible responses:
1. Typesetters (a person who gets things ready to print a newspaper)
2. Publishers (a person who provides money for publishing a newspaper)
3. Reporters
4. Editors
5. Photographer
6. Press people
7. Delivery person
8. Bundlers (people who put the newspapers in a bundle)

If learners describe the occupations, then supply the correct names for them.

That was very good. Tomorrow we are going to learn about specializations within educational occupations. We are having some guest speakers, so we should go over some of our listening skills.
Refer to Listening Strategy in Appendix A. Obtain responses from learners and add any suggestions not listed. Use Instructor Interview Form at this time.

SUMMARY

Today we talked about occupational specializations. Now let's see if we can place ourselves in the right occupation.

Using the attached list, Occupational Groups and Specializations, cut out each occupational title and then cut out each specialization. Fold each slip and put in a container. Instruct the learners to leave them folded until everyone has picked one.

I want each of you to take a slip of paper out of this container.

Pause for the learners to do this.

Now see if you can find the rest of the people who are specialists in the same occupational area as the one you picked.

As soon as the learners are in the correct occupational group, have them do the following:

Now that you are in the correct occupational group, place yourselves in the order necessary to complete your task. For example, which occupational task is done first in your occupational group?

Select one group to use to demonstrate.

Now, who do we depend on to help complete the next step in your occupational group. Now the rest of you see if you can do this.

Do one group at a time, and give help where necessary.

Now we are going to glue these on our tagboard under the occupational group where it belongs.

Glue the occupational title on the tagboard. Have the learners glue their job specialties underneath these titles in the correct order.
In our next lesson, we will learn more about the occupations within our school and the responsibilities each specialization has and how they all depend and work with one another.

Refer to resources in Lesson 4 - Points for Discussion, and Guest Speaker Strategy in Appendix A. A ditto sheet of Points for Discussion should be given to the speakers at least two weeks prior to their presentation.

**Assessment Procedures**

**Description**

The instructor will interview each learner and record his responses on the checklist.

**Directions**

Use the checklist to record the learner's response to the following:

1. Name an occupational task.
2. Name at least two job specialities within that task.

**Key**

Instructor satisfaction
INSTRUCTOR INTERVIEW FORM

<table>
<thead>
<tr>
<th>Name</th>
<th>Occupational Task</th>
<th>Job Specialities Within That Task</th>
</tr>
</thead>
</table>
| Example | Production of a newspaper | 1. Typesetter  
|        |                         | 2. Editor                          |
OCCUPATIONAL GROUPS AND SPECIALIZATIONS

Automobile Mechanic
- Radiator Installer
- Painter
- Brake Installer
- Welder
- Car Tester

Film Making
- Script Writer
- Cameraman
- Director
- State Manager
- Actor/Actress

Clothing Assembly
- Designer
- Weaver
- Seamstress
- Model
- Alterations

Banking
- President
- Teller
- Auditor
- Loan Officer
- Secretary

Grocery Store
- Manager
- Check-Out Clerk
- Stock Person
- Produce Manager
- Food Wholesaler

Book Printing
- Editor
- Writer
- Artist
- Binder
- Sales Person
GOAL

The learners will be listening to guest speakers in the occupational area of education who will tell about their responsibilities and explain their relation to other members of the staff.

PERFORMANCE OBJECTIVE

Given examples of goods and services which require worker interaction, the learner will identify ways in which the members of the work group depend on each other in order to complete specific tasks.

LESSON TIME

120 minutes

PREREQUISITE KNOWLEDGE

Knowledge of the concept of job specialization within a group
RESOURCES REQUIRED

Large sheet of paper
Guest Speaker Strategy
Points for Discussion
Listening Skills Strategy
Listen For These Points
Assessment item

INSTRUCTOR PREPARATION TASKS

Obtain speakers from school personnel.
Review Listening Skills Strategy.
Review Guest Speaker Strategy.
Duplicate Points for Discussion (provided in lesson) and give to speakers so they may plan their talk.
Review Listen For These Points.
Duplicate Instructor Interview Form.

INSTRUCTIONAL PROCEDURES

INTRODUCTION

In our last lesson, we talked about occupational groups and job specializations in the newspaper area and the hospital area. Today, we are going to learn about occupations within our school and the responsibilities each specialization has and how they all depend and work with each other. This lesson will help you get to know the people in your school who can help you and it may also help you think about jobs in the future. As the speakers are talking, I want you to listen for these three things.

Use list provided in lesson.
TASKS

Our principal, ____________, has come today to talk to you. He/she will be explaining his/her responsibilities to you, to the people who work for her/him, and to his/her boss. Listen carefully so we can talk about her/his responsibilities later.

The speaker should be allowed 15 minutes to discuss his topic and 5 minutes for questions. Refer to Guest Speaker Strategy in Appendix A for further information.

Our secretary ________________, will now explain her/his responsibilities to our school.

Continue with the other occupations within the school such as custodian, librarian, or cafeteria manager. The learner should write thank you notes to these speakers.

Possible questions from learner to speaker:

1. How much education do you need?
2. Do you like your job?
3. How long have you been doing your job?
4. How long have you been at this school?
5. How old do you have to be to begin working in this job?

See attached sheet for speaker outline.

SUMMARY

Today we heard about specialized occupations within the school. Can you think of anyone we left out who works at our school?

Possible responses:

1. Teacher
2. Coach
3. Groundskeeper
4. Maintenance workers

Let's draw pictures of one responsibility each of these people have.

Supply a large sheet of paper. Divide the sheet into the number of squares you need. (It depends on the number of people the children list.) Let the children...
draw a picture to illustrate one responsibility each of these people might have. Ask guest speakers to remain and help by acting as consultants while the learners draw their pictures.

In our next lesson, we are going to see some specialized jobs in construction. Be ready to name as many specialized jobs as you can when we get back from our field trip.

Use Instructor Interview Form at this time.

SUPPLEMENTAL ACTIVITY

If possible, use business personnel instead of school personnel for guest speakers and/or schedule a field trip to a local business. Ask the learners to observe and list jobs that depend on one another.

ASSESSMENT PROCEDURES

DESCRIPTION

The instructor will interview each learner and record the answers on the checklist.

DIRECTIONS

The instructor will interview each learner and record the responses to the following question after the instructor provides the name of an occupational task that requires worker interactions:

Tell me someone in that occupation who depends on someone else and why?

Sample occupational tasks that require worker interaction:

1. Managing a hospital
2. Assembling a car
3. Producing bread

KEY

Instructor satisfaction
## INSTRUCTOR INTERVIEW FORM

<table>
<thead>
<tr>
<th>Name</th>
<th>Occupational Tasks That Require Worker Interaction</th>
<th>Ways They Depend On Each Other</th>
</tr>
</thead>
<tbody>
<tr>
<td>Example</td>
<td>Running a school</td>
<td>The principal depends on the secretary to type his letters before he can sign them.</td>
</tr>
</tbody>
</table>


ACTIVITIES TO BE COMPLETED BEFORE, DURING, AND AFTER GUEST SPEAKERS

1. Introduction of school tasks, occupational tasks, and family tasks done by one person and those done by more than one person

2. Planning and playing a softball game to illustrate group functions and areas of job specialization

3. Becoming aware of job specializations in the areas of health, services, and communication

4. Guest speakers to help learners become aware of worker interaction and dependency

5. Observing worker interaction in progress by taking a field trip to a construction site

6. Research and development of products to be used in building a model home

7. Using products and building a model home
LISTEN FOR THESE POINTS

1. Two responsibilities each speaker has that help you.

2. Two people that each speaker must work with in order to do his job.

3. How the speakers help the people they work with in order to do their jobs.
A TRIP TO A CONSTRUCTION SITE
AND SEQUENCING THE STEPS

Lesson Five

Goal

The learner will sequence steps in order to show dependency, and will match the names of the occupations to the tasks those workers perform.

Performance Objective

Given the problem of completing a group project, the learner will list the steps necessary to complete the task.

Given the problem of completing a group project, the learner will identify the tasks which are dependent for completion on the performance of other tasks and place them in order.

Given a list of tasks necessary to complete a group project and the related occupations, the learner will match the task to the occupation.

Lesson Time

240 minutes

New Vocabulary

Dependent - relying on someone else to help complete a task

Research - finding information about a topic
Prerequisite Knowledge

Knowledge of the term job specialization

Resources Required

Field Trip Strategy
Permission Slips (provided in lesson)
List Of Occupations (provided in lesson)
Sequence Of Tasks (provided in lesson)

Prepare for Lesson 5
(Use Preparation Tasks for Field Trip provided in Lesson 5)
Assessment item
Proposed Field Trip (provided in lesson)
Suggested discussion ideas for the Contractor (provided in lesson)

Instructor Preparation Tasks

Review Field Trip Strategy. (Appendix A)
Use form Proposed Field Trip to obtain approval.
Plan list of rules you wish learners to follow at construction site.
Duplicate and pass our Permission Slips (provided in lesson).
Review Occupational List provided in lesson with contractor, so he will know which specialities will be of particular interest to the class.
Review Sequence of Tasks.
Duplicate Instructor Interview Form (provided in lesson).
Duplicate multiple-choice assessment items for each learner (provided in lesson).
Review Suggested Discussion Ideas for the Contractor (provided in lesson).
INTRODUCTION

We have talked about jobs that may be done by one person and by many people. We listed and heard about job specializations within three occupational situations. Today, we are going to see some job specializations in action by taking a field trip to a construction site. Before we do, I think we should review some things we need to remember while we are on our trip.

TASKS

Who can start our list of things to remember?

Refer to Appendix A for Field Trip Strategy and the list provided in the lesson. Set up the trip with a construction site foreman. Try to find an area that is close to the school so that the class can walk there. The foreman needs to lead the tour and talk to the children. Ask him to use the term job specialization as you are walking around reviewing different jobs. It would help to ask some parents to go along for the sake of safety. Send a thank you note to the foreman and to his superior after the trip.

While on the field trip, help the foreman tell things that learners need to know by asking questions that lead to responses you plan on developing later. Plan for time at the end of the field trip for questions even though questions may be asked during the trip. Noise may be a problem so some questions may have to be answered later. After returning, continue with the rest of the lesson. Allow about two hours for the trip. If a field trip is not possible, use the alternative lesson in Appendix B.

Now that we have visited a construction site, we are going to start planning for our own project. Let's start by listing the steps necessary to complete the project of building a house and let's try to put the tasks in the order they are done.

Place on chalkboard.

What must be done first before anyone can start his job?
Possible responses:
1. Buy the land
2. Draw the blueprints

What occupation would take care of drawing the blueprints?
Desired response: Architect

Write responses on the chalkboard.

If we were building a real house, we would have to check the ground to find out how level it is. Who would do this task?
Desired response: The surveyor

Since we won't need to know this, we will skip that step.

What will be our first task after we have the blueprints?

Use a ruler or tape measure and the blueprints to outline the house so we will know where to dig the footings.

What occupation will do this job?
Desired response: Excavator

The stakes have been placed and the footings located, now what happens?
Desired response: A person will dig the ditch for the footings.

What is the name of that occupation?
Desired response: Excavator

The ditches have been dug, now what goes into those ditches to help support the house?
Desired response: Concrete and metal bars for the footings.

Who puts the cement in the ditches?
Desired response: Concrete finish helper
Before the footings are poured, forms must be built. Who will make these forms?

Desired response: Carpenters

The footings are in; what comes next?

Desired response: The stem

Since the stem is above the ground, what has to be done before the stem can be poured?

Desired response:

The carpenters make forms to pour the concrete. Sometimes the footings and the stem are all poured at the same time.

Since concrete is still being used, the same occupation can finish the stem. Before the stem dries, something is added to attach the frame if it is a wood house. What is this?

Desired response: The bolts

After all the concrete dries, what is the next step?

Desired response: Rough plumbing

Right; who puts the rough plumbing in?

Desired response: Plumber

Remember, he will have to come back to connect everything later.

What is next?

Desired response: Floor

Is the concrete poured right on the ground?

Desired response: No

What is put between the ground and floor?

Desired response: Gravel

Where does this gravel come from?

Desired response: A truck driver beings it from the gravel company.
After the gravel is poured, it is treated for termites and the termite inspector comes to see if it has been treated.

The house is now ready for the floor. Who pours the floor?
Desired response: Cement finisher

Who smooths it out?
Desired response: Cement finisher

What else could be poured at the same time?
Desired response: The sidewalks and driveway

After all the concrete dries, the project may continue.

What happens now?
Desired response:
Framing of exterior walls if wood house, block laying of exterior walls if block house

When are the window openings and door openings put in?
Desired response:
During the framing or block laying of the exterior walls

Who does the framing on a wood house?
Desired response: Carpenter-framer

Who lays the block?
Desired response: Block mason

The mortar between the blocks must dry if it is a block house, but if it is a wood house, the inside walls and the roof can be framed. On a block house, the inside framing is done by the
Desired response: Carpenter

When the framing is finished, what is the next step?
Desired response: The roof

This step is taken care of by whom?
Desired response: The roofer
When the roof is finished, what comes next?

Desired response:

Prewiring of electricity and installation of phone

Who does these jobs?

Desired responses: Electrician, telephone installer

Now it is time for the cooling and heating ducts to be installed. Who will do this job?

Desired response: Refrigeration installer

What is needed before the drywall is put up?

Desired response: Insulation

You may have to give a hint such as, "something that helps keep the heat out in the summer and the cold out in the winter."

Who puts the insulation in?

Desired response: Insulator

In a block house, the insulation could be put down the holes in the block, but in a wood house the insulation is put up before the drywall. Is the insulation put in the ceiling now?

Desired response: No

Who hangs the drywall?

Desired response: Hangers

What needs to be done to the drywall before painting?

Desired response:

It is hung, perf-a-taped, sanded, and textured.

After the drywall has been perf-a-taped and sanded, who textures it?

Desired response: Sprayer
Now some things that have not been completed may be done. What are these?

Desired responses:

1. Windows
2. Hang doors
3. Paint
4. Hang and install cabinets and hardware
5. Install counter tops
6. Connect plumbing
7. Set and hang plumbing
8. Lay ceramic tile in shower stall and bath tub
9. Wire ceiling lights
10. Place switch covers, phone covers, outlet covers
11. Place sinks and appliances
12. Install cooling and heating unit
13. Blow insulation in ceiling

Who performs these tasks?

Desired responses:

1. Finish carpenter
2. Glazier
3. Plumber
4. Tile setter
5. Cooling and heating installer
6. Electrician
7. Insulation installer
8. Painter

There are two more things that might be done. What are these?

Desired responses: Landscaping, fence

The finish carpenter checks everything with the contractor to be sure all the touch up and cleanup has been done.

After certain steps, it is necessary for an inspector to be called. What things will he inspect?
Desired responses:
1. Electrical wiring
2. Plumbing
3. Gravel under floor
4. Framing
5. Final product

Now it is time to finish the house to prepare it for someone to live in. What would be finished last?

Desired responses:
1. Interior decorating
2. Floor tile
3. Carpets
4. Draperies
5. Bath mirrors
6. Any other decorations necessary

Who helps make suggestions for the decorations?

Desired response: Interior decorator

How many of you understand the word dependent?

A show of hands will give some indication of knowledge. If very few understand the word, go over the meaning before continuing with the next question.

Possible discussion: Can anyone tell us what dependent means?

Possible response: Relying on someone else to help complete a task.

If you get a reasonable response, continue with the next question.

Were the workers we talked about today and the tasks they performed dependent on each other?

Desired response: Yes, but some could be done at the same time.

Did we find occupations that had to depend on another occupation before they could do their work?

Desired response: Yes
Can you name some?

Possible responses:

1. The cement finisher cannot pour the floor until the footings, the stem, and gravel are in.
2. The framer cannot work until the cement finisher puts in the floor.
3. The electrician, telephone installer, heating and cooling installer cannot prewire without the framer.
4. The drywall hanger cannot hang drywall unless the framer, insulation installer, electrician, telephone installer, and plumber do their jobs.
5. The roofer cannot put the roof on without the carpenter.
6. The painter would have nothing to paint unless the blockmason, framer, drywall applicator, and all the others mentioned before did not do their jobs.

There may be more responses.

As you can see, there are many specialized occupations within construction, but we also found out they depend on each other to be able to perform their specialty.

SUMMARY

We have learned a great deal about job specialization. In our next lesson, we are going to choose an occupation you would like to represent and then we will do some research on those occupations in the library. Can anyone tell us what research means?

Possible response: Finding information about a topic

Explanation further if necessary.

While you are doing your research, you will also be deciding on what materials you might use when we build our model house. Since materials used on a real house would be too large and expensive, we need to think of other materials we might use. What materials do you have at home that might be used to represent the materials we need for our project?

Have the learners name some and list them on the chalkboard.
Perhaps tonight you can find some more materials and some more ideas for our project.

Use multiple choice assessment items here.

Before we stop for the day, let's do our questions. If you need help, raise your hand.

Use Instructor Interview Form during any available time before next lesson.

SUPPLEMENTAL ACTIVITY

Plan another project, such as planting a garden, making a mural, or putting on a play. Be sure the project includes job specialization.

ASSESSMENT PROCEDURES

DESCRIPTION

The objectives of Lesson 5 are assessed by a multiple-choice item, a matching item, and verbal learner responses to questions asked by the instructor. The learner will identify the sequence of tasks, dependent tasks, and occupations relating to specific tasks.

DIRECTIONS

The instructor will interview each child and record the responses on the checklist. The following may be used for group tasks.

a. Play tag.
b. Draw a mural.
c. Plan a party.
d. Plan a field trip.

The instructor will give the learner an example of a group task, along with the following instructions:

Name three steps necessary to complete this project.
The learners will read the two multiple choice items and record their responses. Assistance with vocabulary may be given by the instructor.

1. a-2, b-1, c-4, d-3
2. a-1, b-3, c-4, d-2
<table>
<thead>
<tr>
<th>Name</th>
<th>Group Task</th>
<th>Three Steps Necessary to Complete Task</th>
</tr>
</thead>
</table>
| Example | Drawing a mural | 1. Design  
2. Sketch  
3. Color |
|       |                    | 1.  
2.  
3.  |
|       |                    | 1.  
2.  
3.  |
|       |                    | 1.  
2.  
3.  |
|       |                    | 1.  
2.  
3.  |
|       |                    | 1.  
2.  
3.  |
|       |                    | 1.  
2.  
3.  |
|       |                    | 1.  
2.  
3.  |
|       |                    | 1.  
2.  
3.  |
|       |                    | 1.  
2.  
3.  |

Lesson 5
1. All of the following are tasks necessary to prepare the drywall for the inside of a house. Put the number one in front of the task the drywall man would do first. Put a number two in front of the task he would do second. Put a number three in front of the task he would do third. Put number four in front of the task he would do last.

   ___ a. Tape
   ___ b. Hang
   ___ c. Paint
   ___ d. Texture

2. Match the task in Column A with the occupation in Column B that performs the task.

<table>
<thead>
<tr>
<th>A</th>
<th>B</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. Lays pipe</td>
<td>1. Plumber</td>
</tr>
<tr>
<td>b. Checks work</td>
<td>2. Architect</td>
</tr>
<tr>
<td>c. Hangs doors</td>
<td>3. Inspector</td>
</tr>
<tr>
<td>d. Designs blueprints</td>
<td>4. Carpenter (finish)</td>
</tr>
</tbody>
</table>
PREPARATION TASKS FOR FIELD TRIP

1. Reproduce the Permission Slips.

2. Visit the construction site. Try to select one that is close to the school.

3. Talk to the foreman and give him an idea of what you expect.

4. The foreman should lead the tour and talk to the children.

5. Decide when the children will be allowed to ask questions.

6. Ask the foreman to use the term job specialization where it is appropriate.

7. Ask two or three parents to accompany the group.

8. Allow about two hours for the trip.

9. The Field Trip Strategy will give other suggestions that might apply to your class and situation.

10. Provide the contractor with a copy of Suggested Discussion Ideas for the Contractor (provided in the lesson).
Lesson 5

SEQUENCE OF TASKS

1. Buy the land.
2. Draw the blueprints.
3. Stake out the footings and dig the footings.
4. Level the area.
5. Pour the footings, the stem, and place the metal bars (re-bars).
6. Place the rough plumbing.
7. Pour the gravel (ABC) and place the wire mesh.
8. Pour the foundation.
9. Build the outside walls. Frame the roof, windows, and doors; install the cooling and heating ducts.
10. Install the plumbing.
11. Wire for the phone and electricity.
12. Tar and shingle or tile the roof.
13. Install rolled insulation on walls.
15. Finish the plumbing.
16. Paint the outside and inside.
17. Put in the doors, windows.
18. Finish the electrical work.
19. Install the cabinets, counter tops, hardware, and appliances.
20. Install the floor tile, carpet, and draperies.
21. Do paint touch up and cleaning.
22. Landscape the outdoor area.
23. Complete the interior decoration.
24. Final inspection.
PROPOSED FIELD TRIP

Name of Teacher: _________________ School: ____________
Class: _________________
Proposed Trip Location: _________________
Contact Person (if any): _________________
Position: _________________

Purpose(s) of the Field Trip: _________________

Time: _________________ Date: _________________

Approved ( )
Disapproved ( )

Principal
1. Show the contractor the *Sequence of Tasks* in the lesson.

2. Give the names of each occupation as he discusses them.

3. Point out areas of dependency.

4. Describe the method of preparing the footings and the stem.

5. Discuss the rough plumbing.

6. Discuss the steps that are necessary before the floor is poured.

7. If possible, point out the cooling and heating ducts.

8. If possible, point out the prewiring.

9. Discuss the steps used in installing drywall and texturing.

10. Discuss the inspectors and what they inspect. (Types of inspectors: city, county, and bank)
Lesson 5

PERMISSION SLIPS

Dear Parents or Guardians,

Our class has been studying about job specializations. Since many job specialities are found in the construction industry, we are planning a field trip on (date) __________________ to a construction site. We will be walking to the site which is _______ blocks away. We would like for you to sign the permission slip below and return it by ____________________.

Thank you,

__________________________
(Instructor's Signature)

I do give __________________ permission for my
do not give __________________
child __________________ to go on a field trip to a construction site.

(Name)

__________________________
(Parents Signature)
GOAL

Each learner will select an occupation, and design and produce a product to be used in that project.

PERFORMANCE OBJECTIVE

Given a list of occupations necessary to complete a group project, the learner will select an occupation that he wishes to represent and identify the element(s) he will contribute to the finished product which will reflect the functions of that occupation.

The learner will design and produce the element(s) he has selected to contribute to the group project.

LESSON TIME

120 minutes

NEW VOCABULARY

Products - things made to complete a project
PREREQUISITE KNOWLEDGE

The steps necessary to complete the chosen project and the occupations that accompany them.

RESOURCES REQUIRED

<table>
<thead>
<tr>
<th>Magazines (as many as possible)</th>
<th>List of Occupations, Products and Suggested Materials (provided in lesson)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Encyclopedias (library)</td>
<td>Occupations Task/Materials/Tools Report (provided in lesson)</td>
</tr>
<tr>
<td>Library books (suggested list given in lesson)</td>
<td>Instructor Interview Form</td>
</tr>
<tr>
<td>List of Occupations and Number of Children Needed (provided in lesson)</td>
<td>Product Assessment Form</td>
</tr>
</tbody>
</table>

INSTRUCTOR PREPARATION TASKS

Obtain magazines (relating to home design and decorating) from learners, library, and other teachers.

Schedule a time to use the library.

Read over the book list (provided in lesson).

Obtain a set of encyclopedias (library).

Provide books on the list (if available).

Review list of Occupations and Number of Children Needed (provided in lesson).

Review list of Occupations, Products, and Suggested Materials (provided in lesson).

Duplicate Occupations Task/Materials/Tools Report (one per occupational group).
Duplicate the Instructor Interview Form and the Product Assessment Form.

INSTRUCTIONAL PROCEDURES

INTRODUCTION

We have a list of the steps we need to take to complete a house and the occupations that perform the steps. How would you like to choose an occupation to help complete our own model house? While you are selecting an occupation, think about tasks that you might do alone and tasks that depend on someone else. There may also be tasks that require more than one person.

TASKS

Ask each student to select an occupation. Keep a record for yourself. Use Instructor Interview Form at this time for selection only.

Now that we have chosen our occupations, we will need to find out about the products our occupations produce, the materials we would use on the job, and what materials we are going to use to produce our products.

Let's use some examples. What tools and materials will a painter need?

Desired responses: Paint, brushes, paint buckets

If you are a painter, what are you going to use since you cannot use real house paint?

Possible response: Water colors or tempera

What kind of brushes would be best?

Possible response: Small brushes like we use to paint pictures

What can we use to put paint in?

Possible responses: Lids, juice cans
Let's use one more example. What will the roofers have for tools and materials?

Possible responses:
1. Tar
2. Ladders
3. Brushes
4. Shingles
5. Tar paper

What kind of materials will you use for these products, if you are a roofer?

Possible responses:
1. Glue with black paint mixed in it
2. Construction paper
3. Sand
4. Sandpaper

Is there anyone who does not understand what is meant by products?

If there is anyone who does not understand, question them to find out what they do not understand. A simple definition, such as "things made to complete a project," should suffice.

Since most of you probably do not know what materials you will need, we are going to go to the library and find some information on your occupation. I want you to find out what products and tools your occupation uses and then decide on the materials you are going to use for those products. You will be asked to make a report to the class on what materials you will need and what you decided to use for your materials.

Most of the information can be found in encyclopedias. Obtain magazines that deal with home improvement, landscaping, furniture, and carpeting. Provide a list of books and other materials available in the library. Use the Resource Sheet to help compile your list. There is also a list of products necessary for each occupation and a list of classroom and home materials to use as substitutes. Feel free to add any materials necessary to complete the project.

There will probably be more than one student for each occupation. It would be helpful to have them work together and compile one list. One person from the group
could give the report.

Since there will be more than one person in each occupation, we'll plan our reports as a group. One person in your group will give the report. Here is a form on which to write your report information.

Provide each occupational group with the labor contract form provided in the lesson.

Remember the following things when you are giving your oral report: stand up straight; talk to the whole class; speak loud enough so everyone can hear what you are saying. Be sure to practice at home before you give your report so you will feel at ease.

Go over each list before the report is given orally. Make corrections in spelling and add anything you feel might be missing. It will probably be necessary to give a sample list to help the learners understand what is required.

SUMMARY

To help you plan your report, let's do a sample. Pretend you are going to be a flower arranger. What products will you need to do the job?

Possible responses:

1. Plastic flowers
2. Real flowers
3. Vase
4. Material to hold flowers in place

What materials could you use if you did not have these items?

Possible responses:

1. Make your own flowers out of paper
2. Milk carton for vase
3. Wire or clay to hold flowers in place

List these and any other responses on the chalkboard.

We will begin our reports as soon as possible so we can start our project.
Allow about three days for library work.

Everyone should be ready to give the reports when it is time for that part of the project. Remember, one person within your group will give the report so be sure you help that person by giving them good ideas.

*Use the rest of the Instructor Interview Form and the Product Assessment Form during the library period and production period.*

**Assessment Procedures**

**Description**

The instructor will use the Instructor Interview Form to record answers to questions about the learner’s selection of an occupation and the tasks performed by him.

The instructor will observe the learner’s performance during the research, design, and production of the product and record observations on the Product Assessment Form.

**Directions**

A. The instructor will review the reports as to:

   a. What occupation did you select?
   b. What two tasks will you perform?

B. The instructor will observe and record performance on the Product Assessment Form by placing a check mark in the column if the research task, design task, and production task were completed satisfactorily.

**Key**

Instructor satisfaction
# ASSESSMENT ITEM

## INSTRUCTOR INTERVIEW FORM

<table>
<thead>
<tr>
<th>Name</th>
<th>Selected Occupation</th>
<th>Tasks to be Completed by Worker</th>
</tr>
</thead>
</table>
| Example | Carpenter, Finish Cabinet Maker | 1. Put knobs on doors  
2. Constructs cabinets for kitchen |
| | | 1.  
2. |
| | | 1.  
2. |
| | | 1.  
2. |
| | | 1.  
2. |
| | | 1.  
2. |
| | | 1.  
2. |
| | | 1.  
2. |
| | | 1.  
2. |
| | | 1.  
2. |
| | | 1.  
2. |
| | | 1.  
2. |
| | | 1.  
2. |
ASSESSMENT ITEM

PRODUCT ASSESSMENT FORM

<table>
<thead>
<tr>
<th>Name</th>
<th>Research</th>
<th>Design</th>
<th>Production</th>
</tr>
</thead>
<tbody>
<tr>
<td>Example</td>
<td>x</td>
<td>x</td>
<td>x</td>
</tr>
</tbody>
</table>

Lesson 6
I. RESEARCH MATERIALS

Books


Encyclopedias


- Carpentry Vol. 4, pp. 125-127
- Plumbing Vol. 12, pp. 227-228


- Building Construction Vol. 3, pp. 363-396
- Housing Vol. 2, pp. 242-257
- Plumbing Vol. 18, pp. 392-393

- Architects, Vol. 2, p. 150
- Construction Laborer, Vol. 2, p. 221
- and Hod Carrier, Vol. 2, p. 500
- Asbestos and Insulating Workers, Vol. 2, p. 596
- Bricklayer, Vol. 2, p. 612
- Carpenter, Vol. 2, p. 620
- Draftsman, Vol. 2, p. 436
- Electrician, Vol. 2, p. 644
- Glazier, Vol. 2, p. 658
- Painters - Paperhangers, Vol. 2, p. 710
- Plumbers, Vol. 2, p. 718
- Lumber, Vol. 2, p. 721
- Roofers, Vol. 2, p. 729


- Bricks and Masonry, Vol. 2, pp. 390-394
- Cement and Concrete, Vol. 3, pp. 165-166
- Plumbing, Vol. 15, pp. 341-343
- Stone, Vol. 17, p. 433
- Wood Working, Vol. 20, pp. 229-234


- Building Construction, Vol. 2, pp. 513-574
- House, Vol. 9, pp. 344-353
- Plumbing, Vol. 15, pp. 514-516

(See related articles and outline, p. 353.)
II. Films

"How Do We Get Our Homes." SVE Educational Filmstrips, Singer Education and Training Products, Chicago, Illinois.


### Lesson 6

#### OCCUPATIONS AND NUMBER OF CHILDREN NEEDED

<table>
<thead>
<tr>
<th>OCCUPATION</th>
<th>NUMBER</th>
<th>TASKS OR JOBS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Contractor</td>
<td>Teacher</td>
<td>Direct and check job</td>
</tr>
<tr>
<td>Cement finisher</td>
<td>2-4 children</td>
<td>Pour, level, float, and trowel concrete</td>
</tr>
<tr>
<td>Carpenter</td>
<td>3-6 children</td>
<td>Frame walls and roof; Assemble walls and roof</td>
</tr>
<tr>
<td>Dry-wall hangers</td>
<td>2-3 children</td>
<td>Cut and attach drywall to inside frame; cut inside walls</td>
</tr>
<tr>
<td>Taper</td>
<td>2-3 children</td>
<td>Tape corners and/or apply compound to make finished corners and walls</td>
</tr>
<tr>
<td>Sprayer</td>
<td>1-2 children</td>
<td>Texture and smooth walls</td>
</tr>
<tr>
<td>Painter</td>
<td>2-3 children</td>
<td>Paint interior and exterior walls</td>
</tr>
<tr>
<td>Roofer</td>
<td>2-3 children</td>
<td>Lay tar paper, spread tar, spread stone or shingle roof</td>
</tr>
<tr>
<td>Electrician</td>
<td>1-2 children</td>
<td>Make appliances and/or install wires in walls</td>
</tr>
<tr>
<td>Plumber</td>
<td>1-2 children</td>
<td>Make fixtures and/or run pipe in walls</td>
</tr>
<tr>
<td>Finish carpenter</td>
<td>1-2 children</td>
<td>Hangs cabinets, make and hang doors, put trim around doors</td>
</tr>
<tr>
<td>(cabinet maker)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gasser</td>
<td>1-2 children</td>
<td>Make and install windows</td>
</tr>
<tr>
<td>Tile setter (Ceramic, floor)</td>
<td>1-2 children</td>
<td>Lay tile on floors; place bathtub</td>
</tr>
<tr>
<td>Carpet layer</td>
<td>1-2 children</td>
<td>Put down carpet (cut and glue in place)</td>
</tr>
</tbody>
</table>

91
OCCUPATIONS AND NUMBER OF CHILDREN NEEDED

(Continued)

Lesson 6

Insulation installer

<table>
<thead>
<tr>
<th>Occupation</th>
<th>Number of Children</th>
<th>Task Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1-2 children</td>
<td>Install insulation on walls</td>
<td></td>
</tr>
</tbody>
</table>

Brick/block mason

<table>
<thead>
<tr>
<th>Occupation</th>
<th>Number of Children</th>
<th>Task Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1-2 children</td>
<td>Lay block and stone or brick panels on walls</td>
<td></td>
</tr>
</tbody>
</table>

Landscaper

<table>
<thead>
<tr>
<th>Occupation</th>
<th>Number of Children</th>
<th>Task Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1-3 children</td>
<td>Smooth, color, and finish grounds</td>
<td></td>
</tr>
</tbody>
</table>

Least number of children involved 23

Greatest number of children involved 43

NOTE: Some jobs may be omitted or combined to allow for individual class size.
### Lesson 6

**OCCUPATIONS, PRODUCTS AND SUGGESTED MATERIALS**

<table>
<thead>
<tr>
<th>OCCUPATION</th>
<th>MATERIALS</th>
<th>CLASSROOM MATERIALS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cement finisher</td>
<td>Concrete</td>
<td>Cement and vermiculite plaster of paris, cement (mortar mix)</td>
</tr>
<tr>
<td>Carpenter</td>
<td>Lumber</td>
<td>Cut scale lumber, Styrofoam board or polybead board, cardboard</td>
</tr>
<tr>
<td>Drywall applicator</td>
<td>Drywall nails (sheetrock)</td>
<td>Bristolboard, tagboard, heavy paper</td>
</tr>
<tr>
<td>Taper</td>
<td>Perf-a-tape, Taping compound</td>
<td>Paper strips (newsprint), library paste, masking tape</td>
</tr>
<tr>
<td>Roofer</td>
<td>Tar, tar paper, stone, shingles, shakes</td>
<td>Construction paper, glue (white), sand (fine), sandpaper</td>
</tr>
<tr>
<td>Plasterer</td>
<td>Plaster and spray texture</td>
<td>Water, glue, sand, and texture paint</td>
</tr>
<tr>
<td>Painter</td>
<td>Paint, wallpaper</td>
<td>Tempera, wallpaper, samples, straws, cardboard fixtures, wood, plaster of paris, soap</td>
</tr>
<tr>
<td>Electrician</td>
<td>Wire, cable, conduit pipe, switches, plugs, covers, appliances, fuse box</td>
<td>String, wire, cardboard, appliances from cardboard, wood, aluminum foil</td>
</tr>
<tr>
<td>Glazier</td>
<td>Glass, putty, glass block, mirrors</td>
<td>Plastic, cellophane, aluminum foil</td>
</tr>
<tr>
<td>Tile setter (ceramic,floor)</td>
<td>Ceramic (bath) tile, floor tile</td>
<td>Construction paper, self-stick paper (adhesive backed Mystic Tape), shelf paper</td>
</tr>
<tr>
<td>Carpet layer</td>
<td>Carpet</td>
<td>Cloth, carpet scrap, felt</td>
</tr>
</tbody>
</table>

---

93
**OCCUPATIONS, PRODUCTS AND SUGGESTED MATERIALS**  
Lesson 6  
(Continued)

<table>
<thead>
<tr>
<th>Occupations</th>
<th>Products</th>
<th>Suggested Materials</th>
</tr>
</thead>
<tbody>
<tr>
<td>Insulation installer</td>
<td>Insulation</td>
<td>Felt strips (bat-roof), cotton (loose)</td>
</tr>
<tr>
<td>Landscaper</td>
<td>Trees, bushes, grass</td>
<td>Sand, sponge, dried flowers, dry weeds, flock, glue</td>
</tr>
<tr>
<td>Brick/block mason</td>
<td>Brick, concrete block, slump block</td>
<td>Styrofoam patterns of wall sections</td>
</tr>
<tr>
<td>Finish carpenter</td>
<td>Moldings, door frames, doors, cabinets</td>
<td>Cardboard, construction paper, wood</td>
</tr>
</tbody>
</table>

**NOTE:** The materials that have been underlined work best.

**ADDITIONAL SUGGESTIONS**

Architectural students use the following materials to construct models. These materials are usually available at any drafting supply store.

- Balsa wood
- Plastic door and window framing
- Styrofoam
- Cork board
- Acetate
- Corrugated board

Landscaping materials - Architectural Models Inc.  
San Francisco, California

Scenic surroundings - Campbell Scale Models  
P.O. Box 121  
Tustin, California  92680

Modeling paste, Vanguard I - Hunt Manufacturing Co.  
Stateville, N. C.  28677
OCCUPATIONS, PRODUCTS AND SUGGESTED MATERIALS  Lesson 6
(Continued)

Building Paper
Includes:
- Walthers Specialities, Inc.
  Milwaukee 11, Wisconsin

Brick and stone
Wood siding
Roofing shingles
Doors and windows
During the construction of our model house we choose to be a/an _____________. Our tasks will include:

(occupation)

<table>
<thead>
<tr>
<th>Tools</th>
<th>Materials</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
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</tr>
</tbody>
</table>

On a real construction job some of the tools and materials we would use are:

<table>
<thead>
<tr>
<th>Tools</th>
<th>Materials</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
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</tr>
</tbody>
</table>

On this job the tools and materials we will use are:

<table>
<thead>
<tr>
<th>Tools</th>
<th>Materials</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
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</tr>
</tbody>
</table>
CONSTRUCTION OF A MODEL HOME

LESSON SEVEN

GOAL

The learner will construct a model home.

PERFORMANCE OBJECTIVE

The learners will construct a project to which each learner contributes, in the proper sequence, an element(s) he has designed and produced.

LESSON TIME

540 minutes

PREREQUISITE KNOWLEDGE

Understanding of dependency and job specialization; knowledge of the specific tasks necessary for the construction of the house
**RESOURCES REQUIRED**

- Blueprints (provided in lesson)
- Wood
- Cement
- Vermiculite
- Scrap material
- Paint
- Cellophane
- Aluminum foil
- Cardboard
- Masking tape
- Waxpaper
- Newsprint
- Sand (fine)
- Straws
- Construction paper
- Wheat or library paste
- Glue
- Crepe paper
- Toothpicks
- Cotton
- Styrofoam
- Sponge
- Product Assessment Form (provided in lesson)
- Recipes for Cement
- Explanation of Blueprints
- Legend of Blueprints

**INSTRUCTOR PREPARATION TASKS**

- Read all blueprints.
- Read Explanation of Blueprints.
- Read Legend of Blueprints.
- Obtain all resources (wood sizes and number listed on Blueprint 8).
- Have a father or custodian build Blueprint 7 (top half) and Blueprints 10 or 11 (10 preferred).
Place blueprints on table as shown in Blueprint 13. (walls and floor plan).

Tape blueprints to table.

Cover blueprints with waxpaper and secure with tape.

Use list of Occupations, Products and Suggested Materials in Lesson 6 for further help.

Use Instructor Interview Form from Lesson 6 for instructor information.

**INSTRUCTIONAL PROCEDURES**

**INTRODUCTION**

In our last lesson, all of you selected an occupation you wanted to represent and did research to find out what materials you must use to do your job. Now that you have done your preparation, we are going to start our project.

*Use Product Assessment Form during entire project.*

Where shall we begin?

Possible response: The contractor will prepare the ground.

The learners may not realize who is going to start so there may have to be some discussion. The learners need to realize an area must be prepared first. If they do not provide the suggested answer, find out why they made their selection. Continue the discussion and settle on a reasonable choice.

I am going to be the contractor and I will prepare the building site by constructing the frame or (having the frame constructed) for pouring the concrete floor.

Each group will be called on to give their reports before they begin work. You will be giving your report when it is time for your part of the project. Try to remember,
someday you may have a job specialization and people may be depending on you to do your job. This project will help you learn more about job specializations for this project and your responsibilities in completing your task.

**TASKS**

*Since there will be only a few learners working at a time, the other learners should be working on their materials to be used in the project or some other type of work you may wish to assign. Each learner will prepare his material and add it to the overall project at the appropriate time.*

What job speciality would work after the site preparation and footings are in?

**Desired response:** The plumbers

How are you going to know where the rough plumbing would go?

**Desired response:** Look at the blueprints

Since we have a small area, we will not put in the rough plumbing. But we will listen to the plumbers report even though they are not going to do their first task.

*Discuss where the plumbing might go. Use the blueprints for help.*

What would our next two steps be and what occupations would do these tasks?

**Desired responses:**

1. The next two steps would be putting in the gravel, and wire mesh and pouring the floor.

2. The occupations to do these tasks would be the gravel truck drivers, the cement finishers, and the ready mix truck driver.

Since we do not have a special person to deliver the gravel, we are going to skip this task. If we were going to do this task, we would pour the gravel, level it off, and lay the wire mesh.
Since we are not going to do this, let's pour the floor. Who will do this task?

Desired response: Cement finishers

Do you have your report? Let's find out what you are going to do.

One learner gives report.

Since we have to mix the concrete, we better read the directions very carefully.

Be sure to help with the process, since concrete dries rapidly. Directions for the concrete are given on page 137, Lesson 7.

After you pour the floor, be sure to level it out and make sure there are no air holes.

Pour and finish floor. Wait for everything to dry before proceeding with actual work. The discussion may continue.

While the floor is being poured, what else could be done?

Desired response: The driveway and sidewalks

Are these just poured or does something else need to be done?

Desired response:

No, it is necessary to dig out the carport and sidewalks so the forms can be placed.

Good. We are not going to do this task, though. So I think we are ready for the next step. What is it?

Desired response: The framing of the walls

Who does this job?

Desired response: The carpenters

What will be used to help the carpenters frame the house?

Desired response: The blueprints
Let's take time for the carpenters report right now.

One learner gives the report.

Now, the carpenters can begin their task. Remember to use the blueprints and measure carefully:

The wood size and the number of pieces needed are listed on each blueprint so the students will know which pieces to use for each area. The students will need to measure the pieces and stack them together. If this is done, they will only have to measure once. Remember, the roof will be done later. Follow the blueprints and information pages for assistance. Lay blueprints on a table and tape them securely. Cover them with waxpaper and tape it down. Start building each wall right on top. Before gluing the framing to the foundation, place the walls to see if they match. If they do, glue them to the foundation and to each other. Allow to dry for about 45 or 60 minutes.

Now that the framing is done we can go on to the next step. What will be done now?

Desired response: Prewire for electricity and phone

Yes; now who would do that job?

Desired response: The electrician and phone installer

We have not had a report from them yet, so let's listen to what they would do.

One learner will give the report.

Do you know what you would use to find out where to put the wiring?

Desired response: The blueprints

Good. We are not going to prewire because of our small area.

We have not talked about the bathtub, so perhaps we had better stop for a minute and do this. The bathtub needs to be put in now. Can anyone tell me why we need to put it in now?
Possible response:

The drywall or sheetrock cannot go behind the tub.
The tub must fit tight against the framing.

If you do not get this response, continue with the following explanation.

The plumber puts in the bathtub before the drywall because it must fit next to the framing. The drywall then comes to the top of the tub. The tub is fastened to the drywall with calking material. After the drywall is in, then we can put the bath tile on. You will not need to paint the drywall or texture it if you use tile.

If this discussion is not necessary, have the plumbers make the tub and put it in. Continue with the rest of the lesson.

What is our next step?

Desired response: Put insulation in

If there are drywall applicators and insulation installers, the insulation installers must complete their task before both sides of a wall are drywalled. If no insulation installers are to be used include the following discussion.

Why is insulation used in a house?

Desired response: To help the house stay cool in summer and warm in winter

Let's have a report from the insulation installers.

One learner gives the report.

Remember to use the blueprints as you put in the insulation and/or the drywall. The insulation is inside the wall and the drywall covers it over. Our drywall applicator can tell us how the drywall is hung.

One learner gives the report. Supervise, but allow learners to do the job on their own.

The drywall is not complete until it has been perf-a-taped and textured. The reasons for taping, the tools and materials, and what the tapers do will be reported by our taper.
One learner gives the report.

If you are going to use wallpaper, you do not need to texture. The plasterer and painters will have to get together and decide which walls will be painted and which will be wallpapered. Before we start to texture the walls, our texture sprayer will report to us.

One learner gives the report. Take some time to decide on wall finishes.

Now that you have made your decision, you may begin to texture. When the walls are dry, we can go on to the next step.

What happens next?

Desired response: The painters can paint and hang the wallpaper

We have not had a report from the painters and wallpaper hangers, so let's take some time out and listen to their report.

One learner gives the report.

Remember what you decided about the wallpaper and the paint. You also need to decide what colors you are going to use.

If the learners need any help, feel free to give it, but encourage them to work on their own.

Let's stop for a little bit and see what things are left to be done. What are some of these tasks?

Desired responses:

1. Finish electricity and phone
2. Hang doors and mirrors
3. Put in sinks and cabinets
4. Finish plumbing
5. Put hardware on doors

Finish these steps before continuing.
We have had reports from the electricians and plumbers, but we have not heard from the finish carpenter. Let's see what he/she has to say.

One learner gives the report.

Now what is our next step?

Desired response: Tile and carpet

We have not had the tile layers and carpet layers report so we will hear from them now.

One learner gives the report.

I guess you are ready to do your job. Remember to decide which rooms will have tile and which ones will have carpet.

It looks like we are ready to finish our project. What should be done now?

Desired response: Landscaping and interior decorating

Their report will be the last one. Let's listen carefully.

You seem to be ready to do your job. When you are finished we will check to see if we have done everything.

**SUMMARY**

We have finally finished our house. What do you think of what we have done?

Possible response: A lot of work, fun, too much time taken to do it

Have some discussion and then continue.

As we built our house, we found there were many jobs necessary to complete it. Do you remember what term we used for occupations within a specific occupational situation?

Desired response: Job specializations
If they can't give the answer, then help them by giving the answer.

We used many job specialities during our project. You also found that your job speciality probably depended on someone else to complete a task before you could do yours. How many of you had to wait while someone else did a task?

Desired response: All learners should raise their hands.

If someone does not raise his hand, have him explain why he did not.

There is something I think we should remember. If we had had an architect draw our blueprints instead of using the ones provided, the architect could have done his job without any other job speciality. The blueprints might not have been used, but he could have drawn them.

One other thing we need to remember is that there were some jobs that could have been done by one person and there were some that needed many people. Can anyone tell us one job that could have been done without the help of more than one person? Before you answer, remember that most of the jobs could have been done alone, but it is easier with more than one person.

Possible responses:

1. Plumber
2. Painter
3. Telephone man

Other responses may be accepted if the learners can justify their response.

Which jobs had to be done by more than one person?

Possible responses:

Carpenters, and any other responses the learner can justify.

Now that we have finished our lesson on Doing Your Thing, you have seen that some tasks may be done best with the assistance of another person and that many tasks require other people. Our softball game showed this. You had a
"special" task, but you had to depend on others to do theirs as well. The same was true for the home we constructed. You had your job specialization and it needed to be completed in order for your friend to complete his or her task.

The experience of living involves depending on others just as the world of work does. In "Doing Your Thing" don't forget someone else may be doing his. He may need your assistance and cooperation just as you need the assistance and cooperation of others.

As you continue through school and finally get a job, remember other people depend on you to do your work so they can do their work. And that means you are depending on each other.

**ASSESSMENT PROCEDURES**

**DESCRIPTION**

The instructor will observe each learner's behavior and record it on the *Product Assessment Form*.

**DIRECTIONS**

The instructor will observe each learner's product for completion, proper sequencing of steps, and performance met. The observations will be recorded on the *Product Assessment Form* provided.

**KEY**

Instructor satisfaction
## ASSESSMENT ITEM
### PRODUCT ASSESSMENT FORM

<table>
<thead>
<tr>
<th>Name</th>
<th>Element Completed</th>
<th>Proper Sequence</th>
<th>Performance Met</th>
</tr>
</thead>
<tbody>
<tr>
<td>Example</td>
<td>x</td>
<td>x</td>
<td>x</td>
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</tbody>
</table>

Lesson 7
RECIPES FOR CEMENT OR PLASTER OF PARIS

Cement

Mix one part dry cement with two parts gravel. Add enough water to make the mixture workable. Gravel will help to prevent cracking. Pour into foundation forms. Level and smooth out.

Plaster of Paris

Select an enameled container for easiest cleaning after mixing. Pour in the amount of water needed (about half the finished plaster of paris mixture.) Without stirring, slowly sift plaster of paris into the water and continue as long as it sinks. When enough has been added so that it stays on top without being absorbed, stir it and pour out into foundation forms. Use immediately, before it dries.

Directions for Mixing and Pouring Concrete

Ingredients: One part cement, one part vermiculite, water added slowly to make a thick paste

Procedure:

1. Mix dry cement and vermiculite, using a hoe or shovel in a wheelbarrow or trough.

2. Using the dry mix, make a mound with a dish or hole in the center. Add water to this mound by pouring it into the dish small amounts and mix to a thick paste consistency.

3. Dump, shovel, or pour mixture into the form. Chicken wire fencing can be added to the form and concrete to increase the strength.

4. Level the concrete by sliding a board back and forth across the top of the form boards. Fill in any holes that may be left and relevel concrete. Tamping or vibrating the concrete will give a better finish and stronger material.
5. Float or trowel the concrete to provide a smooth finish on the floor. A float is a metal or wooden board which is swept over the concrete surface to smooth it. A trowel is a metal blade which is also swept over the concrete surface to smooth it. A trowel gives a smoother finish. The tools may be borrowed from a local contractor or builder or from parents.

**Suggestion**

Cement made with vermiculite works better than plaster of paris since it does not dry as fast. When this unit was being tested in the classroom, cement was used with success.
Lesson 7

LEGEND OF BLUEPRINTS

1. House exterior, page 143
2. House exterior for learner planning, page 145
3. Floor plan (detailed), page 147
4. Elevations for exterior walls and floor plan, page 149
5. Corner and roof detail
6. Miter box and size of wood
7. Amount of wood needed
8. Wall legend
9. Frame for foundation
10. Frame for foundation
11. Various types of exterior walls
12. Assembly of paper for construction of walls
13. Plans for construction

Right 1-5 } Floor plan, actual size
Left 1-5

Front 1-5 Outside walls
Rear 1-5 Actual size

Left side 1-3 Center 1-3 Inside wall, actual size
Right side 1-3 Roof 1-4 Actual size

Inside walls B-3 2 parts
B-2 2 parts
Lesson 7

EXPLANATION OF BLUEPRINTS

1-6. Not applicable.

7. MITER BOX

Have the custodian or a parent build this box. It will help when cutting the wood, and the safety factor is important. Most any type of saw will work on this box. Someone may have a miter box at home.

WOOD SIZE

Ask someone in the high school industrial arts program or a parent to cut the wood. Get all the wood cut prior to beginning the unit. This will take a lot of time.

8. AMOUNT OF WOOD

Complete in conjunction with number seven above.

9. WALL LEGEND

Some inside walls have no drawing. These are solid walls and only need to be measured.

10. FRAME FOR FOUNDATION - PREFERRED METHOD

This is the lightest frame and will probably be more usable. The learners can do the mixing and pouring of the cement outside and then move the entire frame inside. Use the following recipe:

1 part cement
2 parts vermiculite
Add enough water to mix into stiff paste

11. FRAME FOR FOUNDATION

This mixture itself is easy to work with, but the frame cannot be moved once the cement is poured. The recipe for this cement is found in Appendix B.

12. EXTERIOR WALL TEXTURES

These may be used to enhance the house exterior. Duplicate if desired.
13. **ASSEMBLY OF WALLS**

This is a guide to the method of overlapping of the wall plans.

14. **PLANS FOR CONSTRUCTION**

All walls are drawn except those that are solid walls. The floor plan may be lapped over and laid out on the foundation for easy construction.

**Suggestion**

When using the wall and floor plans, tape them down. Cover them with wax paper and tape it down. The glue will stick to the wax paper which can be torn off easily.
RESIDENCE / OPTIONAL EXTERIOR TREATMENTS
CORNER DETAIL
(HOW TO BUILD CORNERS)

FRONT WALL
SIDE WALL
TOP PLATE
FRONT STUD
L BLOCK
SIDE STUD
WALLBOARD

CORNER DETAIL
(HOW TO BUILD CORNERS)

PEBBLES (SAND)

TAP PAPER-FELT (BLACK CONE7 PAPER)

TAR (GLUE)

EDGING (3X5 CARP)

RAFTER

ROOF DETAIL
Miter Box for Cutoff

<table>
<thead>
<tr>
<th>Size</th>
<th>Standard Uses</th>
</tr>
</thead>
<tbody>
<tr>
<td>2x4</td>
<td>stud, plate, sole, sill</td>
</tr>
<tr>
<td>2x6</td>
<td>rafter, header</td>
</tr>
<tr>
<td>2x10</td>
<td>header</td>
</tr>
</tbody>
</table>

Assembled from 1x2's

Cutting materials

Saw cut with fine tooth blade
**Bill of Materials**

<table>
<thead>
<tr>
<th>PART</th>
<th>SCALE SIZE</th>
<th>ACTUAL SIZE</th>
<th>NUMBER</th>
<th>STRUCTURE</th>
</tr>
</thead>
<tbody>
<tr>
<td>STUD</td>
<td>2&quot;x4&quot;x7'7&quot;</td>
<td>3/4&quot;x4&quot;x7'3&quot;</td>
<td>140</td>
<td>WALLS</td>
</tr>
<tr>
<td>PLATE</td>
<td>2&quot;x4&quot;</td>
<td>3/8&quot;x4&quot;x7'3&quot;</td>
<td>260 INCHES</td>
<td>WALLS</td>
</tr>
<tr>
<td>SOLE</td>
<td>2&quot;x4&quot;</td>
<td>1/8&quot;x4&quot;x7'3&quot;</td>
<td>130 INCHES</td>
<td>WALLS</td>
</tr>
<tr>
<td>RAFTER</td>
<td>2&quot;x6&quot;x15'-3&quot;</td>
<td>1/8&quot;x2&quot;x13'9&quot;</td>
<td>50</td>
<td>ROOF</td>
</tr>
<tr>
<td>HEADER</td>
<td>2&quot;x6&quot;x26'-8&quot;</td>
<td>3/8&quot;x2&quot;x26'</td>
<td>5</td>
<td>ROOF</td>
</tr>
<tr>
<td>HEADER</td>
<td>2&quot;x10&quot;</td>
<td>1/8&quot;x3&quot;x26'</td>
<td>100 INCHES</td>
<td>WALLS</td>
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</tbody>
</table>

**Note:** Extra quantities of materials are included.
<table>
<thead>
<tr>
<th>IDENTIFICATION</th>
<th>MATERIAL</th>
<th>OPENINGS (ACTUAL SIZE)</th>
<th>NUMBER OPENINGS</th>
<th>DRAWING</th>
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<tbody>
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<td>Frame</td>
<td>8 x 20-1/2</td>
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<tr>
<td>Right</td>
<td>Frame</td>
<td>8 x 20-1/2</td>
<td>0</td>
<td>Yes</td>
</tr>
<tr>
<td>Rear</td>
<td>Frame</td>
<td>8 x 33</td>
<td>1W, 3D</td>
<td>Yes</td>
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<tr>
<td>Center</td>
<td>Frame</td>
<td>8 x 20-1/2</td>
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<td>Yes</td>
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<tr>
<td>K-1</td>
<td>Foam, Plastic</td>
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<td>B-1</td>
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<tr>
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<td>8 x 11-3/4</td>
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<td>B-3</td>
<td>Foam</td>
<td>8 x 17-1/4</td>
<td>4D</td>
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<td>B-4</td>
<td>Foam</td>
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<td>No</td>
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<td>B-5</td>
<td>Foam</td>
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<td>Foam</td>
<td>8 x 8-1/2</td>
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<td>No</td>
</tr>
<tr>
<td>C-1</td>
<td>Foam</td>
<td>8 x 2-1/2</td>
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<td>No</td>
</tr>
<tr>
<td>C-2</td>
<td>Foam</td>
<td>8 x 1-1/2</td>
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</tr>
<tr>
<td>U-1</td>
<td>Foam</td>
<td>8 x 3</td>
<td>0</td>
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</tr>
<tr>
<td>U-2</td>
<td>Foam</td>
<td>8 x 5-1/2</td>
<td>0</td>
<td>No</td>
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</tbody>
</table>

Key:  
W = Window  
D = Door  
All dimensions given in inches. Model needs ONLY one of each wall specified. Foam refers to styrofoam or polystyrene bead board plastics 1/4 thick.
OPTIONAL FRAME - USED WITH LIGHTWEIGHT CONCRETE. CONCRETE STAYS IN FRAME. AIDS MOBILITY.

MATERIALS

2 1x2x22 PINE
2 1x2x37 PINE
1 24 x 36 1/4" HARDBOARD (MASONITE)
4 3" NAILS
10 3/4" TACKS

X SHELLAC FRAME BEFORE USING CONCRETE

FRAME FOR FOUNDATION
INSIDE DIMENSIONS
22" WIDE X 34" LONG

MATERIALS

2 1x2x35 1/2 PINE
2 1x2x22 PINE
8 2" COMMON NAILS

FRAME FOR FOUNDATION
TO BE USED WHEN FOUNDATION WILL NOT BE MOVED.
Exterior Wall Sections
LAPPED SHEETS

FLOOR PLAN

FRONT & REAR WALLS

LEFT
RIGHT CENTER WALLS

PAPER ASSEMBLY FOR CONSTRUCTION 12
HEADER 2-2x10

LEFTSIDE 3
BREAK, INDICATES ROOF TOO LONG FOR PAPER.

ROOF 3

ROOF
HIGH RAFTER 2x6x18'-9" SCALE 7/8x12x19 3/4 ACTUAL
RAFTERS - SPLIT 2x6x17'-4 1/2" SCALE 7/8x12x17 3/8 ACTUAL
CEILING
Roof 4

Headers
2x6x26'-0" scale
1/8 x 1/2 x 26" actual

Low only
APPENDICES
APPENDIX A

INSTRUCTIONAL STRATEGY GUIDES
FIELD TRIP STRATEGY

A field trip or instructional trip is "a trip arranged by a instructor or other school official and undertaken for educational purposes; the transportation of pupils to places where the materials of instruction may be observed and studied directly in their functional setting, such as a trip to a factory or to a city waterworks".¹ Like any other activity undertaken for educational purposes, the field trip should be planned in advance with a definite purpose in mind. If a field trip could satisfy the objectives of a particular lesson and seems to be the best method available, the following considerations² should be kept in mind.

A. Instructor Preparation

1. Make preliminary arrangements well in advance.
   a. Obtain parental permission. Send a permission slip describing the field trip and its major educational objectives to the parents.
   b. If parental help is needed, solicit that help well in advance.

c. Finalize transportation plans with parents, drivers, and/or school officials.

d. Arrange for participants' meals if the trip will interfere with typical mealtimes. If learners are required to bring a lunch, make sure each is marked for identification.

e. Prepare a tentative route plan with interesting sites to see to and from your destination. If learners are informed of sites to watch for, discipline problems will be reduced.

f. The instructor should make plans to visit the site of the field trip and, if possible, take an advantage tour as well as discuss planning with personnel scheduled to conduct the tour.

   (1) Check for rest stops.
   (2) Check for restrooms.
   (3) Indicate specific points of interest that should be emphasized during the tour.
   (4) Prepare a preliminary time schedule for the tour. This will enable those responsible for conducting the tour to do
so without unnecessary time delays.

5. Explain to the guide about the age level, attention span, and depth of knowledge of the learners.

g. Make plans with learners concerning ways to document the field trip.

1. Some students may have cameras or tape recorders which could be used to record the trip.

2. Make use of the talents and resources of learners. Some might be able to sketch scenes of interest and others might be adept at recording important points in an outline.

h. Notify newspaper, TV, or radio if coverage of the field trip is desirable.

i. Make arrangements for children who cannot go on the field trip, physical handicaps will make special arrangements necessary.

j. Make plans to involve as many learners as possible in the task of working out appropriate thank-you letters.

B. Learner Preparation

1. Prepare a list of objectives for the field trip and make sure all learners understand the
1. Review proper field trip behavior with the learners concerning courtesy, responsibility, and safety.

2. Discuss appropriate dress for the field trip.

3. Before the trip, a variety of learning materials and/or activities should be used to enable the learner to engage in selective viewing during the tour.

4. Compile a list of questions which the learners have about the content area of the field trip. If possible, do not answer the questions prior to the trip, but allow the learners to seek out the answers during the field trip.

5. Follow-up activities can be planned prior to or after the field trip. The following are suggestions:
   a. Art project
   b. Bulletin-board display of the actual trip
   c. Reports on related subjects
   d. Guest speakers
   e. Creative writing exercises about the field trip.
   f. Worksheets
g. Discussion sessions

C. During the Trip

1. Use the "buddy" system. If students are aware of each other, it provides less of a problem for the teacher.

2. Put slow-moving students ahead of the group.

3. Put monitors, preferably adults, at the end of the line to prevent stragglers.

4. Discourage purchasing anything during the tour.

5. Encourage learners to follow all safety rules during the tour - crossing streets, traveling on buses, etc.

6. Be sure everyone returns to the school. After returning the students to the school, your obligation is fulfilled.

Good instructional trips should include careful preplanning and classroom follow-up activities. Field trips should be evaluated by instructors and learners, and a written evaluation made available for review before future trips are planned.
GUEST SPEAKER STRATEGY

Community residents are valuable instructional resources, and are usually happy to help the schools. When information for the learners could be better or more interestingly delivered by a resource person, the following items should be considered.  

A. **Contact the Resource Person**

1. If possible, a person known to be able to make a good presentation.

2. Contact should be made far enough in advance of the presentation to enable the instructor to plan relevant classroom activities. Early contact also gives the guest time to prepare his presentation.

3. Explain the developmental and psychological level of the learners to the resource person. He can use this as well as other information (age, grade level, size of class, etc) as guidelines for preparation of his presentation.

4. Give the speaker a brief summary of the learner’s knowledge about the presentation subject.

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5. Set a time limit for the presentation after discussing it with the speaker.
6. Give the resource person any software (worksheets, etc.) that will be used in conjunction with the presentation. Supply an outline and/or list of questions which describe specifically what the presentation should cover.
7. Describe the media available to the speaker.
8. A description of the classroom sequence prior to and after the presentation might be helpful to the speaker.
9. If appropriate, ask the guest speaker to wear his work clothes or uniform.

B. Instructor Preparation
1. Have enough background information on the speaker to develop a good introduction.
2. Make arrangements to meet the visitor when he arrives at the school.
3. Inform the principal of speaker schedule and content of presentation. This information should be provided verbally as well as in written form.
4. Arrange for follow-up activities, including writing thank-you letters to the speaker.
5. Some learners should be chosen to take notes on the presentation. Others should be reminded of
listening skills.

6. Make sure all audio visual material requested by the speaker(s) is available.

7. Provide arrangements for visitors and late arrivals.

C. The Presentation Period

1. After warm-up remarks from the instructor, a previously chosen learner should be asked to introduce the guest.


The community contains a limitless number of opportunities for learning. Among the community resources available are people. Learners seem to respect the opinions of those members of the community that take time from their jobs to speak to them. Therefore, wise use of resource people can enhance almost any classroom instructional unit. A written evaluation of the experience should be prepared and made available for review before another presentation is scheduled.
LISTENING SKILLS STRATEGY

Few skills are as widely used and abused as those that deal with listening. Few instructors consciously attempt to improve their students' listening skills. Many feel inadequately prepared to teach listening skills. Yet teaching listening skills is no different from teaching other skills. The art of listening should be taught through exploration and discovery experiences. The following suggestions might prove helpful in deciding what and how to teach in terms of listening skills.

A. Notes to the Instructor

1. The first job an instructor faces is selling the importance of developing good listening habits. Listening oriented games often encourage enough interest to enable the instructor to demonstrate the poor listening habits possessed by most learners. From this point, the instructor can demonstrate to the class how practice and concentration improve listening skills.

2. Instructors should be cognizant of the fact that good listening skills vary depending upon the reasons for listening and the circumstances surrounding the act of listening. For example, we can listen in order to learn, to analyze, to
create, to converse, or for pleasure. During each act of listening, we listen differently; therefore, learners should be given some insight into those different circumstances.

The following categories are as broad or specific as an instructor wishes to make them. The individual segments of each category are intended to be used only where applicable. The material used, the method of presentation, etc., are left to the creativity of the instructor.

B. Listen to Learn

1. If background material is needed for the learner to understand the lesson, provide it.

2. List several points for learners to listen for during a listening exercise. Gradually increase the amount of material to be assimilated in a given lesson.

3. Combine note-taking exercises that enable a learner to assimilate more information in a shorter period of time, with listening exercises. Begin note-taking with a single paragraph of informational material read aloud along with definite directions for listening. Gradually increase their complexity. When note-taking is a new skill, distribute mimeograph copies of your notes to students so that they have a good
example to follow.

4. Involve learners in different ways. Use tapes of classroom reports and appropriate lessons as listening exercises.

5. During lectures, teach the learner to listen for lesson titles and the main ideas of each lecture.

6. Teach learners to listen for such key words and phrases, as I will explain why, The reason being, In conclusion, To summarize, etc.

7. Provide practice in listening for topic sentences.

C. Listen to Analyze - We often criticize speeches and speakers, but are unable to pinpoint the reasons that stimulate that criticism. Learners can be taught to objectively analyze speeches and speakers.

1. Provide time to analyze speeches. Determine why a speech is liked or disliked. Analyze the speaker's voice and manner of presentation.

2. Analyze the content of the speech. Did the speaker say anything that could be agreed or disagreed with?

3. Determine what a speaker thinks and stands for by analyzing what he has said. By analyzing a speaker's thoughts, we often find that a speaker has aroused his audience by manipulating emotions and has provided very little information.
On the other hand, a speaker who does not motivate his audience to become involved may have a lot of important ideas worth listening to.

4. Teach learners to pick out the strong points of a speech or conversation rather than the flaws.

5. Explain and discuss basic propaganda techniques. Help learners become aware of the connotations of words, the sometimes unquestioned acceptance given to testimonials and authoritative statements, and the use of emotionally oriented phrases.

D. Listen to Converse

1. Give the person speaking your undivided attention. Do not become a "cut-in" listener. People that interrupt during the course of conversation indicate that they place no worth on what the other person is saying.

2. Try to involve quiet people in your conversation by asking appropriate questions. The secret of being a good listener is being thoughtful of others.

E. Listen for Cues

Anger, frustration, sorrow, joy, and other moods are transmitted through voice tones and facial expressions, and body movements. Listening and
watching for cues will enable a listener to become more aware of a speaker's real feelings. Each mood mentioned above registers a subtle message, and the ability to distinguish one from another will determine the sophistication of one's listening habits.

F. Listening to Create

Listening in order to use what you have heard to create something new is probably the highest form of the listening act. Listening in order to create combines an ability to think for yourself and the ability to use the suggestions of others.

G. Listening for Pleasure

Listening for sheer pleasure is one of the most useful of all skills. Use practice exercises to stimulate listening for pleasure - music, drama, recorded readings, etc.

Teaching listening skills can be a rewarding experience. Regardless of whether you teach listening skills as a unit or incorporate the study of these skills into a structured lesson or another topic, listening is a habit that should be cultivated.

The above material has been adapted from Mauree Applegate, *Easy in English* (New York: Harper and Row, 1960), pp. 85-125.
TRIP TO CONSTRUCTION SITE AND SEQUENCING STEPS

Lesson Five - Alternate

Concepts

The learner will sequence steps in order to show dependency, and will match the names of the occupations to the tasks the workers perform.

Performance Objectives

Given the problem of completing a group project, the learner will list the steps necessary to complete the task.

Given the problem of completing a group project, the learner will identify the tasks which are dependent for completion on the performance of other tasks and place them in order.

Given a list of tasks necessary to complete a group project and the related occupations, the learner will match the task to the occupation.

Lesson Time

60 minutes
NEW VOCABULARY

Footing - a narrow, thin, slab foundation
Form - a mold for concrete
Frame - skeleton of a house
Drywall - hard board for walls
Texture - material that makes walls feel rough
Dependent - relying on someone else to help complete a task
Research - finding information about a topic

PREREQUISITE KNOWLEDGE

Knowledge of the term job specialization

RESOURCES REQUIRED

Occasion and Tasks In the Story
Pictures of occupations

INSTRUCTOR: PREPARATION TASKS

Duplicate one copy of Occupations and Tasks In the Story per learner.
Read the story once.
Put the pictures in order of presentation.

INSTRUCTIONAL PROCEDURES

INTRODUCTION

We have talked about jobs that may be done by one person and those that may be done by people working in a group.

In our last lesson, we listed and heard about job specializations within three occupational situations.
Today, we are going to go on a field trip, but we are not going to leave our seats. This lesson will be a "let's pretend" field trip to a construction site. As we visit the construction site, let's watch for job specializations. At the end of the lesson, we will see how many you can name.

**TASKS**

We are going on our field trip with the Phillips family.

*Show the picture and point to each character.*

This is Mr. Phillips, Mrs. Phillips, Ruth Phillips, Bobby Phillips, and Georgia Phillips.

*Place picture in chalk tray.*

Mr. and Mrs. Phillips and their children decided to build a new house. Mr. Phillips said, "Let's go visit Mrs. Young, the architect, and see if she can plan a house for us."

*Show the picture of Mrs. Young; place the picture next to the Phillips family.*

The family got into the car and went to Mrs. Young's office. They told her what they wanted and she said, "I would be happy to design your house plans." She wrote down all their ideas and then they left.

*Move the picture of the family away from Mrs. Young.*

"Now we need to find a lot to build our house on," said Mr. Phillips.

"We should have Mr. Jones, the real estate salesman help us," said Mrs. Phillips.

Mr. Jones was helpful and they found their lot right away.

Mrs. Phillips found a contractor, someone who builds homes, and their house was started. The first day they went to see if anything had been done. As they got close to the lot, Ruth saw many boards.
"What are all those boards being used for?" asked Ruth.

Mr. Phillips told her about the workers who build the forms or molds and then pour cement in them. He said, "After the cement is poured the workers remove the forms. The cement that is left is called a footing. It is a thin, narrow slab of concrete. They hold up the house like your "footings" hold you up. Tomorrow the workers will be back to pour the cement in the forms. We will come back and see what they are doing."

When the Phillips family went to see the footings, Mr. Johnson, the contractor was there.

Show picture of cement finishers. Place the Phillips family next to those two pictures.

Bobby wanted to know what the men who were working with cement were doing.

Mr. Johnson said, "They are pouring concrete into the forms and then they smooth it out and tap it down to be sure the air bubbles are gone. If they are careful and get all the bubbles, the cement may not crack as it dries."

As soon as some of the cement was poured, the cement finishers starte smoothing it out. Mr. Johnson told Bobby, "The concrete will need to dry about two days."

Ruth asked, "What comes next?"

"The floor, sidewalks, driveway, and carport are next," said Mr. Johnson.

"We will be doing that job also," said the cement finishers.

"We will be back in a couple of days," said Mr. Phillips.

"Leave the pictures where they are."

When the Phillips family returned, they saw the cement finishers at work again. "As soon as the cement dries the block mason and the carpenters will start putting up the walls," said Mr. Phillips.

"We will be back again soon," said Bobby.

Remove picture of family.
After about three days, the Phillips family went to see if the carpenters and the block masons were there. This time Mr. Wilson, the framer, was there.

Show family again.

Ruth asked, "What are you going to do?"

"I am going to frame. I will put up the inside walls as soon as the block mason gets finished. You must have a frame before you can put up the solid part of the inside walls. The frame is like the bones of your body. It is the skeleton to hold the rest of the house together," said Mr. Wilson. Mr. Wilson told them that Mr. Davis, the roofer, would frame the roof tomorrow and put the roofing materials on. He also told them that the phone installer and electrician would probably come out to put in the wiring in about two days.

Remove picture of family.

Mr. Wilson was right. By the time the Phillips family went back, the roof was being finished by Mr. Davis.

Show picture of Mr. Davis and Phillips family.

The wiring for the phone and the electricity was done. Mr. Anderson, the plumber, was also there.

Show Mr. Anderson.

He was working on the plumbing in the kitchen and the bathrooms.

"Now that the wiring is in, what will the next step be?" Mrs. Phillips asked.

"They will bring a hard board which is called drywall," said Mr. Phillips.

"The drywall will probably be here in a few days," said Mr. Johnson, the contractor.

Remove picture of family.

The next time the Phillips family went by, the drywall was being put up. Of course, Georgia wanted to know if the walls were going to be gray. She asked, "Mr. Johnson, will our walls look like this forever?"
"No, the drywall hangers or sheetrockers will finish shortly and the walls will be taped and sanded. They put a kind of tape, called "perf-a-tape" over each place where the sheets of drywall come together. They also tape the corners. All of the drywall is sanded or rubbed with sand paper, so it will be smooth," explained Mr. Johnson.

While the family watched, the sheetrockers then sanded the drywall with an electric sander. The sheetrockers finished and Mr. Johnson explained that the sprayers would do their job next. "They will put a special mixture on the walls which is like plaster. It will make the walls rough, and we call this texture."

The Phillips watched for awhile and then they left.

On the way home, Mr. Phillips told the family the texture would need to dry before the painters would do their job. Mrs. Phillips said, "Let's go pick out our floor tile, bath tile, cabinets, counter tops, and paint."

"Who will help us do that?" asked Ruth.


Soon the Phillips family, with the help of the decorator, picked out these items in the colors they wanted. The painters could do their job now.

The painters, Mrs. Farmer and Mr. Green, were working on the house when the Phillips family arrived the next time.

Mrs. Farmer told them that the cabinets, counter tops, and tile could be put in as soon as the paint was dry.

"How long will that take?" Bobby asked.

"Everything should be dry in about two days," said Mr. Green.
When the Phillips family returned, the floor tile setters and the ceramic tile setters were putting in the bathtile and the floor tile.

*Show the pictures of these workers.*

The carpenter was working on the cabinets and the counter, tops. The Phillips family watched them for awhile and then they left.

*Remove picture of family.*

When the Phillips saw their new house the next time, the appliances were there to be put in and the plumber had been there to hook up the water. "The electrician will be here tomorrow to hook up the appliances, the furnace and the air conditioning," Mr. Phillips said.

Mr. Phillips went to visit the nursery to buy plants and plan any other landscaping necessary. The landscapers were very helpful and they agreed to do the work as soon as he called them.

"The things left to be finished are the backyard wall and the landscaping. The carpenters need to hang the doors and put the doorknobs on. The electrician will hook up the electricity and the phone installer will be here to install the phone," said Mr. Phillips. "I also talked to the landscapers yesterday and they should be ready to put in the trees and plants as soon as the wall is up."

"Let's go see if anyone is working," said Mrs. Phillips.

When they got to the house, everything Mr. Phillips had called about was being done or had been done. The electrician was there.

*Show the picture of the electrician.*

The carpenter was putting on the doorknobs and handles on the cabinets.

*Show the picture of the carpenter.*

The block layers were outside doing the backyard wall.

Mrs. Phillips decided it was time to see the interior decorator again to plan for carpets and draperies.
Since the house was now ready for the Phillips family, the inspector came to check it to be sure everything was safe and done the way the Phillips' wanted it. He told Mr. Phillips they could move in anytime now.

Mr. Phillips had a day off from work, so he and his family moved in with the help of a moving company.

Now that we have heard the story about the Phillips family, let's see if you can put down the names of the occupations and the tasks the workers perform and list them in the right order. Here is a sheet of paper.

Duplicate worksheet titled Occupations and Tasks of Construction Workers. Fold it in half. Demonstrate the correct procedure.

At the top of this sheet on the left-hand side is the word occupations. On the right hand side is the word tasks. Under the word occupations write the names of occupations that were in the story. Put them in the order that the people did their work. Let's do one example. Who was the first person the Phillips family visited?

Desired response: The architect.

Correct. Write architect in the occupations column.

Wait for class to do this.

Now, what tasks did she do?

Desired response: She designed the plans.

Yes. Now write that in the tasks column across from the occupation of architect.

Wait for class to do this and check each learner's paper.

Now you finish. Do as many as you can. If you do not know them all, don't worry. Also, spelling won't count. These papers will not be collected. Remember, do the best you can.

Give class time to finish.

After the class is finished, use the following discussion.
Who did you list after the architect?

Desired response: Real estate salesman

Good, who was next?

Desired response: Contractor

Continue with discussion until you have covered all the occupations within the story.

OCCUPATIONS WITHIN STORY

1. Architect
2. Real estate salesman
3. Contractor
4. Concrete company or men to pour concrete
5. Cement finishers
6. Blockmason
7. Carpenters (framers)
8. Roofer
9. Phone installer, electrician (p. ewire)
10. Plumber
11. Drywaller, sheetrocker
12. Sprayer
13. Interior decorator
14. Painters
15. Tilesetters, carpenters (cabinets)
16. Plumber
17. Electrician, phone installer
18. Block layers
19. Landscaper
20. Interior decorator

The workers listed together could do their tasks at the same time and the list shows those used more than once. Give assistance as needed.

How many of you understand the word dependent?

A show of hands will give some indication of knowledge. If very few understand the word, go over the meaning before continuing with the next question.

Possible discussion: Can anyone tell us what dependent means?

Possible response: Relying on someone else to help complete a task
If you get a reasonable response, continue with the next question.

Were the workers we talked about today, and the tasks they performed dependent on each other?

Desired response: Yes, but some could be done at the same time.

Did we find occupations that had to depend on another occupation before they could do their work?

Desired response: Yes

Can you name some?

Possible responses:

1. The cement finisher cannot pour the floor until the footings and gravel are in.
2. The framer cannot work until the cement finisher puts in the floor.
3. The electrician, telephone installer, heating and cooling installer cannot pre-wire without the framer.
4. The carpenters cannot hang drywall unless the framer, insulation installer, electrician, telephone installer and plumber do their jobs.
5. The roofer cannot put the roof on without the carpenter.
6. The painter would have nothing to paint unless the block mason, framer, drywall applicator, and all the others mentioned before did not do their jobs.

There may be more responses.

As you can see, there are many specialized occupations within construction, but we also found out they depend on each other to be able to perform their speciality.

SUMMARY

We have learned a great deal about job specialization. In our next lesson, we are going to choose an occupation you would like to represent and then we will do
some research on those occupations in the library. Can anyone tell us what research means?

Desired response: Finding information about a topic

Explain further if necessary.

While you are doing your research, you will also be deciding on what materials you might use when we build our model house. Since materials used on a real house would be too large and expensive, we need to think of other materials we might use. What materials do you have at home that might be used to represent the materials we need for our project?

Have the children name some and list them on the chalkboard.

Perhaps tonight you can find some more materials and some more ideas for our project.

Use multiple-choice assessment items here.

Before we stop for the day, let's do our questions. If you need help, raise your hand.

Use Instructor Interview Form during any available time before next lesson.

SUPPLEMENTAL ACTIVITY

Plan another project, such as planting a garden, making a mural, or putting on a play. Be sure the project includes job specialization.

ASSESSMENT PROCEDURES

DESCRIPTION

The objectives of Lesson 5 are assessed by a multiple-choice item, a matching item, and verbal learner responses to questions asked by the instructor. The learner will identify the sequence of tasks, dependent tasks, and occupations relating to specific tasks.
DIRECTIONS

The instructor will interview each child and record the responses on the checklist. The following may be used for group tasks.

a. Play tag.
b. Draw a mural.
c. Plan a party.
d. Plan a field trip.

KEY

Instructor satisfaction

DIRECTIONS

The instructor will give the learner an example of a group task, along with the following instructions:

Name three steps necessary to complete this project.

The learners will read the two multiple-choice items and record their responses. Assistance with vocabulary may be given by the instructor.

KEY

1. a-2, b-1, c-4, d-3
2. a-1, b-3, c-4, d-2
1. All of the following are tasks necessary to prepare the drywall for the inside of a house. Put the number one in front of the task the drywall man would do first. Put a number two in front of the task he would do second. Put a number three in front of the task he would do third. Put number four in front of the task he would do last.

   ___ a. Tape
   ___ b. Hang
   ___ c. Paint
   ___ d. Texture

2. Match the task in Column A with the occupation in Column B that performs the task.

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<th>A</th>
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<td>___ a. Lays pipe</td>
<td>1. Plumber</td>
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<td>___ b. C.recks work</td>
<td>2. Architect</td>
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<td>___ c. Hangs doors</td>
<td>3. Inspector</td>
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<td>___ d. Designs blueprints</td>
<td>4. Carpenter - finish</td>
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<td>Name</td>
<td>Group Task</td>
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<td>Example</td>
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