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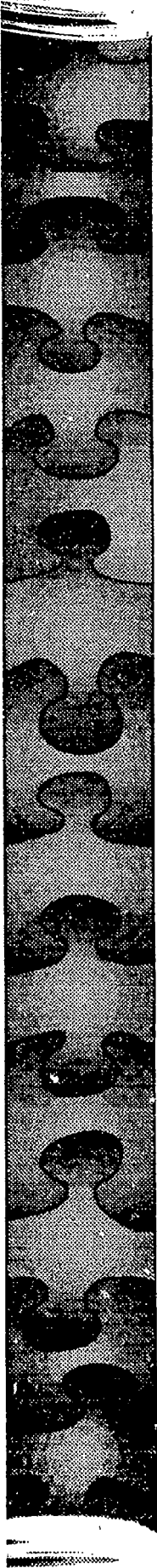
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ABSTRACT

This guide is intended to provide guidance on planning and developing a coordinated, competency-based course of instruction in vocational education for students with limited English proficiency. Directed by both the vocational and the English-as-a-Second-Language (ESL) instructor, it has been designed as a reference to be used when planning such programs. Ten chapters focus on the following topics: student assessment and classroom management; writing a job description and a duty and task inventory; describing tasks; writing performance objectives and course outlines; selecting learning activities and resources; constructing tests; identifying job-specific terminology; preparing a job-related ESL course of instruction; writing job-related ESL performance objectives; and developing job-related ESL learning activities. Samples and examples are provided throughout. Eleven resource organizations are listed at the end of the publication. (YLB)

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Planning Instruction

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A Manual for Vocational Education and ESL Instructors

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PREFACE

In 1985 the U.S. Department of Education funded a contract to provide training and technical assistance to federally funded bilingual vocational training projects. The outcome was *A Guide for Planning Instruction in Bilingual Vocational Training Projects*, a reference manual for vocational and job-related English-as-a-Second Language (ESL) instructors.

To respond to the growing demand for materials to assist vocational education programs to better meet the educational and employment needs of limited English proficient students and to make this information more readily available, the U.S. Department of Education has published a shortened version of that guide. Entitled *Planning Instruction: A Manual for Vocational Education and ESL Instructors*, its purpose is to provide guidance on planning and developing a coordinated, competency-based course of instruction in vocational education for limited English-proficient individuals.

So that you, the reader, can quickly locate the sections that pertain to your work, the three main sections have been color-coded: green for vocational education instructors, yellow for ESL instructors, and white for both. You will also find a brief list of selected resources at the back of the guide.

INTRODUCTION

The principal goals of bilingual vocational training are to provide limited English proficient (LEP) students with marketable vocational skills, the language skills needed to work in an English-speaking environment, and employment. The vocational skills are taught using the native language, either by a bilingual vocational instructor or by an English-speaking instructor aided by a bilingual aide (who can translate for the students as needed) and/or by using bilingual handouts and other resources. Since the native language of the students is used for vocational instruction, the program can ensure that the students understand:

- the vocational instruction,
- the job's specialized terminology and concepts,
- the importance of on-the-job safety, and
- the instructor's assessment of their skills.

Bilingual vocational training is **competency-based**, whereby instruction is based on specific, clearly stated tasks which describe precisely what students need to learn to be prepared for employment. In a competency-based course, the instructor is available to students to help solve problems; explain or demonstrate a concept, idea or process; reinforce what has been learned; assess students' performance; and increase their self-sufficiency in learning.

In bilingual vocational training, job-related English language skills are taught concurrently with vocational instruction. Job-related English is based on the communicative tasks needed to perform a job competently in an English-speaking work environment. The job-related ESL component, consequently, focuses on English that is:

- specific to the vocational skills being taught,
- needed for speaking with co-workers and others in the work place, and
- required to find and retain a job.

Students learn communication tasks and the grammatical patterns, structures and job-specific vocabulary necessary for communicating and comprehending job-related messages. Grammatical accuracy and pronunciation are given less emphasis than comprehension and the production of an understandable message. Vocabulary is limited to a specific subject area.

Because these two instructional components are so integrated, close coordination between the two instructors—the vocational instructor and the job-related ESL instructor—is critical. Through such coordination, instruction becomes more effective, and gaps in instruction can be identified and avoided. The vocational and job-related English instructors have joint as well as separate responsibilities in curriculum development and adaptation, in lesson planning, and in assessing student learning styles, progress, and achievements. Close coordination enables the vocational instructor to provide the ESL instructor with materials to make the English language training job-specific. It also enables

the ESL instructor to assist the vocational instructor in using simplified English designed to increase student comprehension in the vocational classroom. Together, the two adapt and develop materials and learning activities so that each instructional component supports and complements the other.

CHAPTER 1: STUDENT ASSESSMENT AND CLASSROOM MANAGEMENT

Assessing Students—Step by Step

When a bilingual vocational education program begins, the vocational and the ESL instructors meet to assess the characteristics and needs of the students. Working together, they can ensure that the activities and resources they use are relevant to the students' levels, abilities, learning styles, and backgrounds; and they can prevent problems that might interfere with the students' participation in the program. Of course, much of this background information can be gathered at the intake interview, using the questions on page 4 as a guide. It may be necessary to delete some items and add others, depending on the characteristics of the vocational program.

Step 1→ Conduct a screening interview to obtain the information necessary to assess the following:

- How much and how well each student produces and understands, orally and in writing, in both the native language and English.
- How students participate in instruction.
- Which student may require special or extra help.
- Which students may be able to help other students.
- Which learning activities and resources are not appropriate for the students.

Step 2→ Consider the following factors early in the development of a program and before each training cycle:

- From which style of instruction do individual students benefit the most? Visual presentations? Demonstrations? Hands-on practice? Oral explanation? Reading manuals and textbooks?
- Do the students expect to hear lectures, learn by rote, receive small group instruction or individual instruction?
- What types of work experience have the students had?
- Are the students realistic regarding the program outcome and what is expected of them?
- Do the students communicate their feelings and lack of understanding directly or do they keep silent?
- Do the students expect the project staff to be formal and authoritarian or informal and personal?

- Do the students believe in traditional sex roles that may conflict with the learning environment?
- Do the students have misperceptions of themselves regarding their own abilities?
- Are the students independent or dependent in nature? Are they willing to accept assistance?
- Do the students expect to be told what to do or to proceed on their own?
- Are the students resentful of or amenable to acculturation and adaptation to a new culture?
- Are the students reserved or quiet in class or boisterous and interruptive?
- Are the students competitive or cooperative in nature?
- What is the meaning of nonverbal behaviors demonstrated by students from different cultures?
- Do students of any particular group feel inferior or superior to members of other ethnic groups or social classes? Are classroom conflicts likely to occur as a result of these attitudes?

Along with social class, gender, age level and education, culture is one of the many influences on adult behavior. Because these students come from different cultures, they may be sensitive to different behavior than their American instructors. When teaching these students, keep in mind that what is expected and understood in one culture may be surprising or incomprehensible in another and that cultural differences can lead to misunderstanding.

As Americans, we are sometimes quite unaware of these differences. Attitudes and customs related to the world of work—the proper relationship between superiors and subordinates, ways to solve problems and give feedback, delegating responsibility, concepts of time, decision making—may be quite different for a Cambodian, Russian or Guatemalan learner. It is important for the vocational and ESL instructors working with these students to not only be aware of these differences, but to make adjustments in approach, material or classroom protocol whenever feasible and to ensure that their students understand the American work attitudes that they will encounter on the job.

SAMPLE INTAKE INTERVIEW QUESTIONNAIRE

Identifying Information

- | | | |
|---------------------|--------------------|----------------------------------|
| 1. Name | 5. Native Language | 9. Years Lived in U.S. |
| 2. Address | 6. Ethnic Group | 10. No. of Dependents |
| 3. Telephone Number | 7. Age | 11. No. of Children in Household |
| 4. Place of Birth | 8. Sex | 12. Family/Household Income |

Education/Work Background

- | | |
|---|---|
| 13. Number of Years of School Completed | 21. Current Employment Status: |
| 14. Countries Where Attended School | a. Employed |
| 15. Language Usually Used by Teachers | b. Unemployed, Seeking Work,
Length of Time Unemployed |
| 16. Prior Vocational Training | c. Unemployed, Not Seeking Work |
| a. Where Received | 22. (If employed) Nature of Job: |
| b. Length of Training | a. Job Title |
| c. Job Skills Learned | b. Wage |
| 17. Year Last Attended: | c. Days and Hours of Work |
| a. School | d. Length of Time Employed |
| b. Vocational Training | 23. Previous Jobs |
| 18. Number of Years Worked: | a. Job Title |
| a. In U.S. | b. Wage |
| b. In Other Countries | c. Days and Hours of Work |
| 19. Usual Occupation | d. Length of Time Employed |
| 20. Highest Wage Earned | |

Goals/Expectations

24. (If not born in U.S.) Do you plan to stay in the U.S.?
25. Do you plan to remain in (local area)?
26. Why do you want to come to the program here?
27. What kind of work would you most like to do?
 a. (If never worked for pay) What kind of work do you think you would like to do?
28. What other kinds of work interest you?
29. How much do you think you would be able to earn if you completed the training program?
 a. (If much higher than the going wage) How would you feel about earning only (going wage)?

Occupation-Specific Information

30. Do you have any health problems or physical disabilities that restrict:
 a. the amount of work you can do?
 b. the kind of work you can do?
31. The training (and jobs you might get) require (insert any special requirement, such as standing, lifting).

Potential Problems/Obstacles

32. The training hours are from (time) to (time), (day of week) through (day of week). Would you have any problems attending at those times?
33. The training will start on (date). Would you be able to start on that date?
34. The training will last from (date) to (date). Would you be able to attend all of that time and complete the training?
35. How will you get to (the training site)?
36. Do other members of your family know that you want to attend training?
37. (If appropriate) Do you have arrangements for child care?
38. (If health or physical problem is indicated) Would (condition) be a problem in attending training?

Managing the Classroom—Step by Step

In competency-based instruction, the instructor develops with each student a plan for what the student will accomplish during the course.

Step 1 → Choose from the following the most practical and appropriate system(s) for tracking student progress:

Performance Agreements

Performance agreements show what the student and instructor have selected as the competencies that will be mastered and specifies what amount of time it will take to master them. The instructor can help the student plan and select appropriate competencies by looking at the available learning resources, the competencies the student has already mastered, those which are prerequisites for other competencies, the sequence and difficulty of each, and the appropriate number which can be mastered in a specified time period.

The chances of a performance agreement being met by the student are much greater if the student understands and "buys in" to the agreement. The instructor can facilitate this in many ways, including:

- translating the performance objectives and learning activities to the students' native language(s) (with the help of a bilingual aide or bilingual peer tutor);
- providing both the translated and English versions;
- discussing the objectives and learning activities with the students individually, as needed, for each step in the process; and
- giving the performance objectives (and corresponding learning activities) for the whole unit to the students who can work individually, with little assistance from the instructor or aide.

Progress Charts

Progress charts, which show the level of competence a student has mastered, can include different ratings that can improve over time when the student demonstrates the competency a second or third time, until mastery is attained. Communication skills, work habits, and other attitudinal factors can also be recorded on these charts.

Time Cards

These cards can document the amount a time a student spends on different competencies.

Monitoring System

Like a progress chart, this system enables instructors to see at a glance the progress of all students by reviewing the charts to determine strengths and weaknesses.

Individual files (sometimes called portfolios) can be maintained for each student and can include the completed performance tests, instructional activities, assignments, special projects, etc.

CHAPTER 2: WRITING A JOB DESCRIPTION AND A DUTY AND TASK INVENTORY

In the initial stages of planning a job training program, two pieces of information are vital: (1) a job description, containing specific information about the duties an employee is expected to perform and (2) an inventory of job duties and tasks to ensure that the students will learn the skills that will make them competent in the job described. While the job description is helpful to instructors in planning a course, an inventory is the true basis of a vocational program: the tasks that are identified become the skills the students will master during the program. Thus, instructors can use the inventory to establish sequence in teaching and to determine what skills or performance to assess.

Writing a Job Description—Step-by-Step

In general, a job description outlines the major activities an employee performs on the job, but often includes the special abilities and aptitudes and the level of education and/or training the employee needs in order to competently perform the job. When appropriate, however, a job description may also include (1) working conditions, (2) equipment or instruments the employee uses, (3) licensing requirements, (4) advancement opportunities, and (5) any special restrictions.

STEP 1 → Research resources, such as:

- the *Dictionary of Occupational Titles* (the D.O.T.)
- the *Occupational Outlook Handbook*,
- other employment and training manuals, and
- other job descriptions.

STEP 2 → Interview employers, advisory committee members and other instructors.

STEP 3 → Adapt and revise the job description to accurately reflect the specific occupation for which training is provided.

See the sample job descriptions at the end of this chapter.

Writing an Inventory of Job Duties and Tasks—Step-by-Step

STEP 1→ Determine job duties by identifying the broad categories of tasks employees perform on the job (e.g., in general, a clerk-typist handles mail, fills out forms, and types correspondence, forms, and reports.)

STEP 2→ Determine the job tasks by compiling a list of tasks to be mastered within each duty. Such information can be obtained by interviewing and/or observing employees doing the job being described and by referring to other sources, such as the D.O.T., occupational analysis data, and Curriculum Coordination Centers.

- Concentrate on one job duty at a time and list all the separate job tasks within that duty. Continue until you feel you have described completely all the work activities performed by an entry-level employee in that occupation.
- Review the tasks in each duty and make any changes needed.
- Sequence the duties in the order in which the student might master them.
- Rewrite each duty with the tasks listed in order from simple to complex, basic to advanced.

NOTE: The sequence of duties does not need to follow the order in which duties are performed on the job. Rather, it should be as flexible as possible to give the student as much freedom of choice as possible.

STEP 3→ After analyzing and revising the information, restate the task briefly and precisely and break it down into steps.

NOTE: The task statements contain at least two components: performance (e.g., install, compute, repair) and what is used or produced (e.g., awnings, data, windshields). In addition, the statements may contain qualifying adverbs if they are needed to distinguish the tasks from similar tasks.

STEP 4→ Verify the duties and tasks by:

- reviewing them for clearness, completeness and conciseness;
- having them reviewed and critiqued by individuals with first-hand knowledge of the occupation you are analyzing;
- tabulating and analyzing the results of their critique; and
- revising the tasks and duties as needed.

STEP 5→ List all the sequenced duties and tasks on one chart and give the chart to the students.

STEP 6→ Determine the knowledge tasks, that is, the major units of knowledge the student will need in order to perform several job tasks, and list them separately on the tasks listing. (Some occupations will not have knowledge tasks.) Like the job task statements, the knowledge task statements must contain two components: performance (e.g., describe, explain, identify) and area of knowledge (e.g., structure of teeth, operation of a heating system, proofreading marks).

STEP 7→ Review the inventory every year with former students, employees in the occupation, supervisors and advisory committee members. Add new and emerging tasks, drop obsolete tasks, and reword tasks that are too general or unclear.

See the samples of duties and job tasks and knowledge tasks at the end of this chapter.

SAMPLE JOB DESCRIPTIONS

Cook

Prepares, seasons and cooks soups, meats, vegetables, desserts and other foodstuffs for consumption.

Reads menu to estimate food needs; orders food from supplier.

Adjusts thermostat controls to regulate temperature of ovens, broilers, grills, roasters and steam kettles.

Measures and mixes ingredients according to recipe, using a variety of kitchen utensils and equipment.

Bakes, roasts, broils and steams foods.

Seasons foods during mixing or cooking according to personal judgment and experience.

Observes and tests food being cooked.

Carves meats, portions food on serving plates, adds gravy, sauces and garnishes to servings to fill orders.

May supervise other cooks and kitchen employees.

May wash, peel, cut, shred vegetables and fruits. May cut, trim and bone meat.

Electrician Helper or Winer Helper

Assists electrician to install and repair electrical wiring, fixtures, and equipment.

Measures, cuts and bends wire and conduit.

Drills holes for wiring and pulls or pushes wiring through opening.

Assists in lifting, positioning and fastening objects, such as wiring, conduit and motors.

Performs minor repairs, such as replacing fuses, light sockets, bulbs, and switches.

Maintains tools and equipment.

Keeps supplies and parts in order.

Disassembles defective electrical equipment (e.g., motors).

Bookkeeper (small firm)

Maintains systematic and up-to-date records of accounts and business transactions in journals, ledgers, and other accounting forms.

Prepares periodic financial statements showing money received and paid out.

Analyzes and records all financial transactions, verifies and enters details of transactions from sales slips, invoices, check stubs, inventory records, requisitions.

Summarizes details on separate ledgers, using adding or calculating machine; transfers data to general ledger.

Balances books, calculates the firm's payroll, and makes up employee paychecks.

Compiles reports to show statistics, such as cash receipts and expenditures, accounts payable and receivable, profit and loss.

Prepares and mails customer bills and answers the telephone.

Nurse Aide

Assists with care of selected patients. Performs assigned treatment and diagnostic procedures, such as taking vital signs, giving enemas. Records care given.

Prepares patient for examination by performing procedures such as temperature, pulse, and respiration and assists in the examination process; records findings.

Participates in nursing and interdisciplinary health team conferences to assess patients' and families' needs and to plan nursing care.

Assists in recreational and other activities of nursing care programs.

Sets up and arranges examining room. Cleans, sterilizes and sets up instruments, trays and other equipment.

Assists in clinic, in admission procedures and in regulation of visitors. Cares for patients' clothing and property on the ward.

Prepares patients for meals and helps feed them as necessary.

Changes lincn and makes beds. Keeps wards, utility and treatment rooms in a neat and orderly condition.

Provides postmortem care.

May perform auxiliary services in laboratories, pharmacies and other areas.

SAMPLE DUTIES AND JOB TASKS

Duty: Installing Electrical Hardware

Tasks:

1. Install and ground circuit breaker and meter panel.
2. Measure, cut, bend, thread, assemble and install electrical conduit.
3. Install non-metallic sheathed cable.

Duty: Handling Mail

Tasks:

1. Compute postage for out-going domestic mail.
2. Prepare small packages for mailing.
3. Use zip code directory.
4. Prepare incoming mail.

Duty: Servicing Audio Circuits

Tasks:

1. Analyze audio symptoms to isolate defective stage.
2. Clean or replace volume control.
3. Complete audio I.F. alignment.
4. Locate distortion.

EXAMPLES OF KNOWLEDGE TASKS

Performance	Area of Knowledge
Describe	structure of teeth.
Describe	operation of a 4-stroke engine.
Explain	operation of a heating system.
Identify	proofreading marks.
Trace	major steps in the refrigeration cycle.

CHAPTER 3: DESCRIBING TASKS

Once the major job duties and tasks have been identified and verified, it is time to describe these tasks in detail. The result, known as a task description or performance guide, differs from the duty and task inventory in that it details each step required to perform a task and includes the knowledge and attitudes needed to perform it successfully. Such a description enables the student to understand the specific steps he or she must follow to perform the task, while enabling the instructor to determine the following:

- how much needs to be taught;
- how much time to spend teaching;
- the tools and materials needed;
- the safety knowledge, skills and attributes needed by the students;
- the instructional materials based on each step; and
- the order in which to present information.

Describing a Task—Step by Step

When describing tasks, be sure to include minor steps and as much detail as necessary for your particular group of students, but omit trivial steps that are common knowledge; only include what is necessary to perform each step accurately and safely (how tight, what happens if not, when, how many, etc.).

Step 1→ Identify the steps and knowledge used in performing each task by:

- Performing the task as it would be performed on the job.
- Writing down each step as you perform it.
- Adding to each step any background information, technical knowledge or safety knowledge directly related to performing it.

Step 2→ Try to perform the task or ask a student to do so by following the steps you've written.

Step 3→ Revise the steps and knowledge as needed.

NOTE: If the task can be performed several ways, describe the way that is easiest to master or the most common way to perform it.

Task listings have already been developed for many occupations and can be adapted for use in a BVT program. They are available from sources such as the V-TECHS catalogues (Vocational-Technical Education Consortium of States), Curriculum Coordination Centers,

ERIC documents, textbooks and shop manuals and manufacturer's instructions.
Descriptions adapted from these sources should be verified by trying them out before the training program begins.

CHAPTER 4: WRITING PERFORMANCE OBJECTIVES AND COURSE OUTLINES

Once the sequence of job duties and task descriptions have been completed, the next step is to write the performance objectives for each task and the course outline.

Writing Performance Objectives—Step by Step

A performance objective is a brief statement describing clearly and precisely what the student needs to do to show that he or she has mastered a task. Performance objectives contain three major components: conditions (the situation under which the student is to perform the task); performance (the observable and measurable action the student is to perform); and criteria (how well the students is required to perform the task).

STEP 1→ Identify the task to be learned (e.g., feeding an infant, typing a letter).

STEP 2→ Determine the setting (the specific circumstances, limitations, materials, equipment) in which the student will perform the task (e.g., given patient assignment sheet and infant patient; given a written draft of a letter).

STEP 3→ Identify the performance to be demonstrated by the student at the end of the learning activity. This should be an action that is precise, observable, and measurable.

STEP 4→ Determine the criteria against which the student's performance of the task will be judged. Identify how the student is to perform the task and how the finished product should turn out.

See examples of performance objectives at the end of the chapter.

Writing a Course Outline—Step by Step

A one- or two-page course outline similar to the one at the end of this chapter will (1) aid coordination between the vocational and job-related ESL instructors and the job developers/counselors; (2) ensure that instructors and students have the same understanding about requirements and procedures; (3) allow students to plan for holidays, field trips and evaluations; (4) ensure that all essential duties and tasks are covered; and (5) help project directors monitor the vocational instruction component of the program.

STEP 1→ Write the name of the program, the vocational instructional staff and a brief course title or description.

STEP 2→ List the sequence of duties and tasks or a content outline of the material to be covered and the intended sequence of instruction. If possible, include the maximum time allowed for mastering the duties and tasks and meeting each performance objective.

STEP 3→ Write a schedule for the course if there is no program schedule, including the dates of the first and last class sessions, holidays and field trips, and graduation.

STEP 4→ List the materials, supplies and equipment that the students need to buy and their cost, and those that the instructor will supply.

STEP 5→ List the types of evaluations (e.g., performance tests, written tests, work attitudes) that will be used.

SAMPLE COURSE OUTLINE*

PROGRAM: American Vocational-Technical Center

VOCATIONAL INSTRUCTOR: Ms. Julie Parker

INSTRUCTIONAL AIDE: Mr. Julio Jimenez

COURSE TITLE: Basic Drafting and Design

COURSE DESCRIPTION: In this course, students will develop the basic skills required to perform selected drawing assignments and will also be exposed to the importance of design as the language of industry.

COURSE OBJECTIVES: To enable the student, by the end of the course, to:

1. List the various occupations in drafting.
2. Identify and use drafting instruments.
3. Letter drawings using three different techniques.
4. Solve selected geometric construction problems.
5. Construct selected multiview drawings.
6. Reproduce drawings using a diazo machine.
7. Construct selected sectional view drawings.
8. Draw selected auxiliary views.
9. Draw working drawings.
10. Determine dimensions of required drawings.

CONTENT OUTLINE:

- I. The Graphics Language
 - A. Types of Drawings
 - B. Principles of Drawings
- II. Instrumental Drawing
 - A. Basic Equipment
 - B. Drafting Rules
 - C. Basic Skills and Techniques
- III. Lettering
 - A. Types of Lettering
 - B. Methods of Lettering
- IV. Geometric Constructions
 - A. Points and Lines
 - B. Polygons
 - C. Arcs

* Adapted from "How to Write a Course of Study." A booklet in the series *Competency-Based Vocational Education*. Crespatown, MD: Maryland Vocational Curriculum Management System, 1984.

- V. Occupational Information
 - A. Scientist
 - B. Engineer
 - C. Technician
 - D. Drafters
- VI. Multiview Projection
 - A. Two-View
 - B. Three-View
- VII. Drawing Reproduction
 - A. Blue Print
 - B. Diazo
 - C. Thermo-Fax
- VIII. Sectional Views
 - A. Full Sections
 - B. Partial Sections
- IX. Auxiliary Views
 - A. Primary Auxiliary
 - B. Secondary Auxiliary
- X. Working Drawings
 - A. Detail Drawings
 - B. Revisions
- XI. Dimensioning
 - A. Line Work
 - B. Size
 - C. Location
 - D. Notes

INSTRUCTIONAL MATERIALS, SUPPLIES AND EQUIPMENT:

Required Textbook:

Martin, C. Leslie. Design Graphics, New York: The MacMillan Co., 1968.

Required Materials and Equipment:

T-square

Diazo machine

Thermo-Fax

All required materials and equipment will be supplied by the instructor.

EVALUATION:

Based on worksheets, drawings, final project and work attitudes (i.e., participation, cooperation, effort, safety practices, responsibility, and attendance).

EXAMPLES OF PERFORMANCE OBJECTIVES

Task: Compute postage for outgoing mail.
Condition: Given 10 pieces of mail, postal scale, postage meter, and rate chart.
Performance: Affix the correct current first-class rate of postage.
Criteria: With 100% accuracy in 30 minutes.

Task: Measure and cut material.
Condition: Given a fully equipped power hacksaw, job specifics, work piece, steel rule, file, scribe, saw vise, and floor stand.
Performance: Measure and cut off material.
Criteria: to $\pm 1/16$ " accuracy.

Task: Identify parts of a car engine.
Condition: Given pictures of 10 parts of a car engine.
Performance: Identify the parts orally by name.
Criteria: With 100% accuracy within 2 minutes.

Task: Measure the voltage, current, and total resistance in a series circuit.
Condition: Given access to meters, any series wired circuit board, and using no references.
Performance: Measure and record the circuit voltage, current, and total resistance.
Criteria: Within 10 minutes. Readings must be within $\pm 2\%$ of their actual value. Care and use of meters must be in accordance with the meter checklist.

CHAPTER 5: SELECTING LEARNING ACTIVITIES AND RESOURCES

Learning activities are the steps that students follow when learning a task. These activities (1) provide information in different ways so that all students can learn what is needed to perform the task, (2) allow students to practice the task, and (3) let the students check their progress. Because students vary in the ways in which they acquire, remember, and use new information and relate that information to what has already been learned, it is important to use a variety of learning activities. The same holds true for the materials, tools, equipment manuals, books, instruction sheets and other resources used in a vocational education program.

Selecting Learning Activities and Resources—Step by Step

STEP 1→ Look at the performance objective for each task to determine (a) the specific performance that students need to learn and (b) the conditions under which they are to perform the task.

STEP 2→ Obtain information on the students' characteristics by:

- talking with the job developer and project director about the students' education, work and cultural backgrounds, their vocational skills and aptitudes, their abilities in English, and their reading and writing skills in their native languages. (This information should be obtained during the intake interview before classes begin.)
- observing and talking with students informally to determine their learning styles.

STEP 3→ Keeping the students' characteristics in mind, list a variety of learning activities and resources that will help the students meet the performance objective.

STEP 4→ Determine materials, tools, equipment, supplies and time available and what changes need to be made to adapt these resources to the needs of the students. When doing so, consider:

- the cost of the resources,
- the need for adaptation, particularly with regard to print and audiovisual materials and the English-proficiency levels of the students,
- the need for developing additional materials,
- their technical accuracy, quality, practicality and relevance, and
- the ease with which the students can use them.

Before adapting materials and resources, consider:

- the difficulty and time involved,
- the cultural bias of the material, and
- the sex stereotyping in the material.

Possible resources include print (textbooks, manuals, journals and instruction sheets) and audiovisual materials (audio and video tapes, films, slide, drawings and models). Refer to the end of this chapter for examples of instruction sheets.

STEP 5→ Based on what you have determined, select the most practical learning activities.

STEP 6→ Arrange the activities in a logical order, bearing in mind that practice of the skill should be the last activity.

STEP 7→ Provide information to students on their progress by discussing their strengths and weaknesses with them individually, providing them with self-checks during instructional activities, and observing them during practice.

NOTE: The use of English or the students' native language(s) varies with their ability in both languages, the instructional staff's ability in each language and the English requirements of the occupation for which they are being prepared. In general, it is appropriate to use the students' native language(s) for safety instructions, use of specific tools, explaining theoretical concepts, clarifying new information, and checking comprehension. English is appropriate for the names of tools and components, reinforcing language skills taught in job-related English class, and routine messages used on the job. As the students master more and more job-related English, it is appropriate to decrease the use of the students' native language(s) in the vocational classroom and increase the use of English.

BASIC TYPES OF INSTRUCTION SHEETS

JOB SHEET

(Lists steps, tools, material and supplies needed to do a job.)

Sample Titles:

1. Make a drift punch.
2. Construct a tripod.
3. Type a manuscript.

OPERATION SHEET

(Describes how to perform a step or operation in the order it is to be performed.)

Sample Titles:

1. How to turn a taper with taper attachment.
2. How to harden and temper carbon tool steel.
3. How to prepare hard wood for finishing.
4. How to type a footnote.

ACTIVITY SHEET

(Provides questions, procedures, problems, projects, exercises, instructional games, etc., for the students to complete.)

Sample Titles:

1. Identify the parts of a drill.
2. Sketch different views of an object.
3. List series circuit problems.
4. List the ingredients and utensils needed for preparing a basic cream sauce.

INFORMATION SHEET

(Provides specific information related to occupation or subject. The instructor may gather information from several sources and paraphrase.)

Sample Titles:

1. Types of tool steels.
2. Characteristics of American cabinet woods.
3. Opportunities in the auto repair business.
4. Principles of the gyroscope.

CHAPTER 6: CONSTRUCTING TESTS

Typically, two types of tests are used to assess what a student has learned: performance tests and written and oral tests. Performance tests measure the student's skills in performing a task, while written and oral tests assess the student's mastery of concepts and knowledge relating to successful performance of a task. Tests are useful in identifying the student's competence, weaknesses, and strengths at a given point, in providing information to each student about his or her progress, in assessing the student's mastery of a task, and in evaluating the training materials and instruction. When working with limited English proficient students, it is important to always be clear about the purpose of a particular test so that the assessments of the students' vocational skills, concepts and knowledge do not become confused with the assessments of the students' English language proficiency. In the past, such confusion has led to an incorrect assessment of the vocational ability and aptitude of limited English proficient students.

Constructing a Performance Test—Step by Step

Performance tests are particularly useful in vocational education because they:

- compare student progress with a measurable objective;
- are based upon established minimum standards of levels of acceptability;
- require the student to perform a task in a job-like setting, thus allowing the instructor to check the student's safety procedures, work habits, and attitudes;
- are comprehensive, objective, reliable and valid measures of a student's ability to perform a task; and
- increase the quality and flexibility of the vocational program.

STEP 1→ Identify what the student will be required to do to demonstrate mastery of the task by looking at the performance component of the task objective.

STEP 2→ Determine what type of checklist is needed. Are you measuring how the task is performed (process) or the result of the task (product)? Base your decision on what is required or critical for job competence.

STEP 3→ Construct the specific test items that will be rated. Process-related test items are based on the critical steps that were identified for the task description, that is, those items that distinguish between competence and lack of competence in performing a task. The product-related test items should include all the essential criteria necessary for a satisfactory product.

Items related to process should:

- include critical steps in the task performance;
- be observable as the student performs the task;
- be ordered as they would be performed and observed;
- be observable and measurable objectively; and
- include time as an item if it is important, as well as safety checks and critical work habits and attitudes.

Items relating to product should:

- include only critical characteristics of the finished product;
- include specific criteria (e.g., within 3 degrees, contains no errors) that indicate how competence will be determined for each characteristic; and
- be broken into components or characteristics of the completed product (e.g., size, color, shape).

All test items should:

- be worded so they can be rated YES or NO, with YES as the desired response;
- include one step only; and
- be independent of other items.

NOTE: If process and product are important to demonstrate competency of the task, both types of items should be used.

EXAMPLE

STEP

1. Is bare copper wire under head of terminals?
_____ Instructor checkpoint
2. Is wire wrapped around terminals in right direction?
_____ Instructor checkpoint

STEP 4→ Determine if checkpoints are needed after specific items so that the instructor can see and rate them before the next step is performed.

STEP 5→ Establish the minimum score needed for mastery.

STEP 6→ Write directions (they may be in the student's native language), including the task being measured, the testing conditions (e.g., time limits, restrictions), the criteria used to determine task mastery, and any other information the student needs to know.

STEP 7→ Include other information necessary for record keeping (e.g., student's name, test date, column for yes/no ratings).

STEP 8→ Include items that measure critical work and safety habits and attitudes.

STEP 9→ Ask another instructor to review or try out the test to ensure that all critical items are included. If possible, try the test out on one or two students.

STEP 10→ Revise the directions and items as needed to increase clarity.

Constructing Written Tests—Step by Step

There are two basic types of written test items: (1) recognition items, such as matching, true-false, and multiple choice, which allow the student to **select** the correct answer given several possibilities; and (2) recall items (completion, short answer, and essay), in which the student **supplies** the correct answer. Again, bear in mind that essay items when used with limited English proficient students often are more a measure of English language proficiency than vocational competency. Use them only when preparing an accurate written essay response in English is required for the job.

STEP 1→ Make sure that the test items measure the student's mastery as stated in the performance objective. Avoid including "trick" items. Include only those items needed to assess the student's competence in **critical** concepts or facts, and keep them realistic, practical, brief, and concise.

STEP 2→ Reword items if many students do not respond correctly to them.

STEP 3→ Make sure that each test item is independent of other test items and refers to only one idea.

STEP 4→ Order the test items according to increasing difficulty.

STEP 5→ Place similar types of test items together.

STEP 6→ Write directions clearly and simply, giving examples as needed. (Remember that directions can be given in the student's native language.)

Constructing Oral Tests—Step by Step

There are two main types of oral test items: recall and reasoning. **Recall tests** are based on memory, require factual information, and may require some thinking. The questions themselves are of the same type as found on a short answer test; that is, they use words like who, what, when, where, and how. **Reasoning tests** require logical reasoning, evaluation, making comparisons, and personal judgment, and are based on knowledge and understanding. The questions are the same type as are found in essay tests, using words like compare, discuss, describe, and explain.

STEP 1→ Make the questions clear, concise, brief, and concerned with only one idea.

STEP 2→ Compose the reasoning questions so that they stimulate thinking.

STEP 3→ Give the students some time to think about their answer before responding to the question.

NOTE: In written and oral tests, questions and answers can be given in the students' native language (if someone on staff speaks and reads the students' native language) if English-speaking ability is not being tested.

SAMPLE PERFORMANCE TEST

Task: Charge vehicle battery

Task No.: C-12

Directions: This test evaluates your ability to slow-charge a vehicle battery. You will be assigned a customer's vehicle. Clean and check the battery and slow-charge it to full charge. Write down the temperature and specific gravity each hour.

Caution: Have the instructor check your connections before turning on the battery charger.

Your performance will be evaluated using the items below; all must be "yes."

Number	YES	NO
1. Were any external defects in the battery detected during inspection?	_____	_____
2. If needed, were cells filled?	_____	_____
3. Was the battery cleaned and dried?	_____	_____
4. Was the battery removed from the vehicle or cable clamps disconnected (ground first) before charging?	_____	_____
5. Was the charger switch in the OFF position before being connected to the terminals?	_____	_____
6. If the battery was removed, was it placed on an insulating surface?	_____	_____
7. Was the charger connected to battery + to + and - to -?	_____	_____
8. Was the charger turned on?	_____	_____
9. Was the charging rate appropriate for the vehicle's battery?	_____	_____
10. Were the temperature and specific gravity checked every hour?	_____	_____
11. Was the charger turned off before being disconnected?	_____	_____
12. Was the battery reinstalled in the vehicle securely?	_____	_____
13. Were the cables reconnected + to + and - to -?	_____	_____
14. Is the battery fully charged?	_____	_____
15. Will the battery start the vehicle?	_____	_____

Student: _____ Attempt: _____ Date: _____

Instructor's Signature: _____

CHAPTER 7: IDENTIFYING JOB-SPECIFIC TERMINOLOGY

Job-specific terminology includes the signs and symbols, safety language, technical terms and words and expressions of a given vocation. It also includes words that have a job-specific meaning in the vocation; for example:

feather -	in welding, the tip of a flame.
crack -	in refrigeration, to open a valve slightly.
loop -	in electricity a closed circuit; in computer science, a series of computer instructions that repeat until a terminal command occurs.
come-along -	in automotive repair, a hand-operated winch containing a ratchet.
juice -	in electricity, a current.

Identifying such terminology enables the vocational instructor to anticipate student difficulties with directions and explanations; decide when and how much to use English or the students' native language(s) in class; supply students with translations or simple explanations of terms; prepare a study guide for written materials; allow for regional differences in terminology; and coordinate activities with the job-related ESL instructor.

Identifying Job-specific Terminology—Step by Step

STEP 1→ Identify the following:

- names of tools, equipment and parts;
- words and expressions designating activities and procedures;
- common words and expressions with special job-related meanings;
- signs and symbols;
- safety language; and
- slang or colloquial expressions used in the occupation.

STEP 2→ Collect job-specific terminology from the written and audiovisual materials you plan to use, the task descriptions you have prepared, and your own knowledge of the job.

STEP 3→ Prepare lists of these words and phrases, including definitions in simple English or in the students' native languages(s), that you can give to the students and the job-related ESL instructor.

CHAPTER 8: PREPARING A JOB-RELATED ESL COURSE OF INSTRUCTION

Job-related ESL instruction teaches the communicative skills, grammatical patterns or language structures and job-specific vocabulary a employee needs to perform specific job tasks competently. This type of instruction has the following characteristics:

- Its content focuses on the communications functions needed to perform a specific job (e.g., asking and answering work-related questions, reporting information about causes and results, completing job-related forms).
- Its vocabulary is the technical terminology of the specific occupation.
- Its grammatical structures are taught as they are needed for effectively communicating messages and specific performance objectives.
- Pronunciation is taught as needed for accurate communication of a message.
- Safety language and reading and writing are taught as needed for specific job tasks.

When preparing a job-related ESL course of instruction, the ESL instructor chooses materials, methods and techniques within the framework of the competency-based approach and bases his or her choice on the specified standards to be met, the objectives to be attained, the individual students' learning styles, and the instructor's preference.

Identifying Job-Specific Language—Step by Step

Job-specific language includes any communication that is used to perform the tasks of a specific job and may include communication (1) among employees or students performing tasks, (2) between employees and clients, and (3) between employees and supervisors. Several sources should be checked in order to:

- identify the essential communicative skills and vocabulary that will be needed by the student on the job;
- allow for differences in levels of formality in some sources; and
- allow for regional and individual differences in job-specific vocabulary and grammatical structures.

STEP 1→ Review the performance objectives provided by the vocational instructor to identify the situations in which the communication will take place.

STEP 2→ Analyze the task description for each objective to identify the steps in the performance of the task and the job-specific vocabulary needed to perform each step.

STEP 3→ Review instruction sheets, technical manuals, the vocational instructor's handouts, sales brochures, textbooks and other written materials.

STEP 4→ View training films, recorded slide presentations, and other audiovisual materials.

STEP 5→ Visit vocational classes to observe students performing specific job tasks and record or take notes on the language used.

STEP 6→ Visit work sites to:

- interview employees and supervisors;
- observe employees performing specific job tasks (note the periods of silence as well as times when speaking occurs and note when employees listen, speak, read, or write);
- tape-record and/or take notes on the language used;
- review the language; and
- collect samples of written formats and other materials.

STEP 7→ Talk to experienced employees in the particular occupation to ensure that the job-specific language you collected on the site visit and from other sources is appropriate, up-to-date and complete and that the communicative situations identified are realistic.

STEP 8→ Ask the vocational instructor what he or she feels is essential to include in the ESL lesson and to check that job-specific language collected from other sources is appropriate, up-to-date and complete.

NOTE: TXTPRO software for Apple and IBM computers has been developed to analyze language in terms of word frequency and concordance. Word frequency reports can be used to identify important job-specific vocabulary and frequently used parts of speech; concordance reports can be used to identify exact usage of a word in a vocational context and to determine word function, special meanings, grammatical patterns, two-word verbs, etc.

Identifying Language Functions—Step by Step

Once the essential language required by a specific job has been identified, the language needs to be analyzed in terms of the communicative functions employees perform on the job. These language functions may require different communicative skills: speaking, listening or reading comprehension, writing. The ESL instructor needs to identify these functions in order to:

- specify the communicative tasks and skills students need to master in order to perform a job;
- prepare performance objectives for each communicative task;
- analyze the essential language structures to be taught;
- compile the essential job-specific vocabulary to be taught;
- plan effective learning activities;
- prepare effective instructional materials; and
- produce a complete and useful course.

STEP 1→ Observe a successful employee or, preferably, several employees performing a specific job task, and note the communicative situations that occur during the performance of the task.

STEP 2→ Categorize the functions according to the major headings:

- Giving and seeking factual information (e.g., identifying self/objects, reporting information)
- Getting things done (e.g., suggestions, requests, instructions, advice)
- Socializing (e.g., greeting, introducing, taking leave)
- Expressing and finding out intellectual attitudes (e.g., agreement, capability, permission)
- Expressing and finding out emotional attitudes (e.g., likes/dislikes, interest, worry, intention)
- Expressing and finding out moral attitudes (e.g., apologies, approval, regret, concern)

STEP 3→ Group the functions according to the communicative skills required (speaking, listening comprehension, reading comprehension, writing).

STEP 4→ Note the job-related communicative functions that occur most frequently.

STEP 5→ Discuss the situations identified with the vocational instructor.

STEP 6→ Include only the critical content in the lesson plan.

STEP 7→ Group the functions according to the communicative skills required.

Analyzing Language Structures—Step by Step

The language used in any communicative situation contains specific structures (grammatical patterns). Different structures can be used to communicate a message, and one structure can be used to accomplish several communicative tasks. For example, the function "Identify Self" can be accomplished by using the following language structures:

My name is John Smith.

I'm John Smith.

This is John Smith. (telephone)

This is John Smith with the Ajax Service Company.

I'm John Smith from Ajax Service Company.

I'm John Smith from Ajax Plumbing, and I'm here to fix the sink.

Consequently, the ESL instructor must analyze the language structures used in performing specific job tasks in order to:

- identify those which are essential for the performance of the task;
- determine which to teach in a particular lesson;
- know which structures will **not** need to be taught in a particular lesson;
- write appropriate ESL performance objectives;
- construct appropriate tests;
- plan effective learning activities; and
- prepare effective instructional material.

STEP 1→ Observe one or more successful employees performing a specific job task, and note the essential communicative situations that occur during the performance of the task.

STEP 2→ Identify language functions accomplished in the situation.

STEP 3→ List the language structures used.

STEP 4→ Compare the language structures.

STEP 5→ Group similar structures (verb structures, questions, compound sentences, complex sentences, prepositional phrases, negatives, etc.).

STEP 6→ Group the structures according to whether they must be:

- understood orally,
- reproduced orally,
- understood in writing, or
- reproduced in writing.

STEP 7→ Note those essential structures which occur most frequently.

STEP 8→ Discuss with the vocational instructor the structures you have analyzed.

REMEMBER: Using only the critical communication structures identified as related to the job task:

- increases the ease of developing learning activities relevant to the vocational lesson;
- reinforces the learning taking place in the vocational class; and
- enables practice in the vocational setting of language patterns taught in the ESL class, particularly when the vocational and ESL instructors coordinate their lesson plans.

Compiling Job-specific Vocabulary—Step by Step

Job-specific vocabulary is the specialized terminology of a specific occupation and includes signs and symbols, slang, jargon and safety language. For example, the vocabulary specific to the job of receptionist includes the words *area code*, *extension* and *urgent*, numerals, and words with special meanings in different situations, such as *just*, which can mean *simply* or *recently*. Some job-specific vocabulary for the same occupation may differ from region to region. Identifying such vocabulary needs to be done in order to (1) determine what vocabulary students need to learn, (2) write appropriate ESL performance objectives and tests, and (3) plan effective learning activities and instructional materials.

STEP 1→ Observe at least one—and ideally more—successful employees performing a specific job task and note the essential communicative situations that occur. (Such observation will yield not only nonstandard terminology and slang expressions common to the occupation, but standard terms that acquire different meanings when used at the work site.)

STEP 2→ Identify the language functions accomplished in these situations and list the vocabulary used for each function.

STEP 3→ Compare the vocabulary items by:

- grouping together similar types of words (question words, modal and auxiliary verbs, action verbs, nouns, conjunctions, etc.);
- grouping the vocabulary items according to whether they must be understood orally, reproduced orally, understood in writing, or reproduced in writing; and
- noting the most frequent words.

STEP 4→ Discuss the job-specific vocabulary you have compiled with the vocational instructor.

NOTE: As with the identification of job-specific language, this process can be done manually or on a computer using TXTPRO software, which results in two types of reports: frequency and concordance.

CHAPTER 9: WRITING JOB-RELATED ESL PERFORMANCE OBJECTIVES

Just as the vocational instructor should describe clearly and precisely what the student must do to show mastery of a task, so the job-related ESL instructor must do the same to ensure that the student masters the **language** needed to perform the task. The result, the job-related ESL performance objective, identifies what the students are expected to learn and how well they must perform what they have learned to be competent and job-ready. Not only can ESL instructors base learning activities, materials and assessment directly on the objectives, they can use the objectives in coordinating their instruction with that of the vocational instructor and in determining program effectiveness.

Performance objectives, which are written before materials and learning activities are developed, contain three major components:

Conditions - situations under which the student is to perform the task and the materials, equipment, etc., needed to perform it.

Performance - an observable and measurable communicative task the student is to perform.

Criteria - how well the student is to perform the task, that is, how much is required and how precise the work quality needs to be.

Performance objectives should be stated in specific terms that will not be interpreted differently by students, instructors, and employers.

Writing Job-Related ESL Performance Objectives—Step by Step

STEP 1 → Review the vocational performance objectives.

STEP 2 → Based on the language functions you have identified for a specific job task, identify the communicative task to be mastered (e.g., following written directions for preparation of formula is a communicative task related to the job task of feeding an infant patient).

STEP 3 → Determine the conditions or setting (e.g., circumstances, limitations, information, materials, equipment) under which the student will perform the communicative task to show that he or she has mastered it (e.g., for preparing infant formula, the student will be given an assignment sheet for an infant patient and formula ingredients). The conditions stated should closely resemble the conditions under which the student will need to be able to perform the task on the job.

NOTE: If the job task is a communicative one (e.g., price parts by telephone), the conditions will be the same as for the vocational performance objective. If the exact job task conditions cannot be duplicated in the ESL classroom, pictures or props may be used.

STEP 4→ List only those conditions necessary for the student to show mastery of the communicative task.

STEP 5→ Identify the performance to be demonstrated by the student at the end of the learning activity and restate the communicative task as a description of the behavior (e.g., prepare the formula according to written directions on the assignment sheet.). Remember that the performance should represent how the task is typically performed on the job and should be an action which is precise, observable, and measurable.

STEP 6→ Determine the criteria or standards against which the student's performance of the task will be judged (e.g., "The formula must be prepared with 100% accuracy" or "The parts are priced with 100% accuracy and the student can make himself or herself understood"). Identify **process** (i.e., how the student is to perform the task) and **product** (i.e., how finished the product should turn out). When setting time limits, establish limits that are slower than the speed at which an experienced employee can work. Keep the criteria at a level high enough to ensure the placement of the students in entry-level jobs.

NOTE: Initially, it may be necessary to prepare the objectives in the students' native language(s), as well as in English, to ensure that they understand what will be expected of them.

CHAPTER 10: DEVELOPING JOB-RELATED ESL LEARNING ACTIVITIES

Since the job-related ESL component reinforces the vocational component, many learning activities will be similar for both components. The ESL activities, however, will focus on the communicative aspect of a task and, for practical reasons, hands-on experience may be replaced by simulations and role play, and pictures and diagrams may be used instead of actual materials and tools.

Developing Job-Related ESL Learning Activities—Step by Step

STEP 1→ Gather information on each student from intake and assessment records and from discussions with other staff members.

STEP 2→ Develop a profile for each student that includes:

- language and cultural background,
- educational background,
- level of English proficiency,
- employment background, and
- learning style.

Consider the differences among the students in these areas when designing the learning activities. For instance, role-play activities in which individuals are assigned parts that are contrary to their traditional roles could create difficulty. Or students with limited formal education may need more assistance at the beginning of the program than those students with experience in formal educational settings.

STEP 3→ Consider the three basic styles people have of acquiring knowledge:

Visual - The learner interprets the message by constructing or recalling images, is influenced by what is seen, and responds quickly and favorably to pictures, colors, charts and diagrams, and written information.

Auditory - The learner interprets the message by recalling past conversations and is influenced by what is heard, is most easily taught by repetition of dialogues, through written work that can be vocalized and performed, and through tape-recorded information.

Kinesthetic - The learner tends to accept or reject ideas on the basis of how he or she feels when exposed to the new ideas and responds favorably to role-play and description of processes in terms of feelings.

Although each learner has a preferred learning style, many learners acquire information by using a combination of methods.

STEP 4→ Develop learning activities related to functions and duties that the students will be required to perform on the job.

STEP 5→ Develop activities that correspond directly with the levels required to function on a specific job. For example, a student may need a higher level of English-speaking proficiency and greater reading and writing skills to perform in a clerical position than in a heating and air conditioning repair position.

Assessing Student Progress—Step by Step

The learning activities by which students master communicative tasks can also be used to assess their progress.

STEP 1→ Focus on the student's ability to communicate a message appropriately and successfully; pronunciation and grammatical accuracy are not as important unless the result is miscommunication.

STEP 2→ When necessary, develop specific test items for critical job-specific terms and grammatical structures.

STEP 3→ Develop checklists based on essential job-specific language: functions, terminology, and structures.

See the sample scoring sheet at the end of this chapter.

SAMPLE SCORING SHEET

Student's Name _____

Performance Objective _____

Date of Test _____

Criteria	5	4	3	2	1
Rhetoric					
Register/Style					
Syntax					
Vocabulary					
Pronunciation					

	<u>Score</u>	<u>Weight</u>	<u>Total</u>
Rhetoric	x	=	
Register/Style	x	=	
Syntax	x	=	
Vocabulary	x	=	
Pronunciation	x	=	
		Weighted Score	_____
Errors Noted:			

Recommendation for additional work:

Evaluated by: _____

CONCLUSION

This manual, directed to both the vocational and the ESL instructor, has been designed as a reference to be used when planning a coordinated, competency-based course of instruction in vocational education for limited English proficient individuals. Those of you with experience in planning such programs know that close coordination between the vocational and job-related ESL instructors is critical so that the two instructional components are integrated. Such integration is necessary to ensure that the program goals are met; that is, that the students acquire the vocational and English-language skills necessary for obtaining and keeping jobs in English-speaking work environments.

Why is it so important that the two instructors collaborate in planning such programs?

1. Different but complementary skills are involved in teaching occupational and English-language competencies.
2. The effectiveness of each type of instruction is increased.
3. Possible overlaps and gaps in instruction can be identified and avoided to ensure that all material is covered adequately.

For those of you already teaching in vocational programs, this manual enables you to take a fresh look at your present practices. If you take advantage of that opportunity, the benefits to your students may be seen immediately.

SELECTED RESOURCES

National Center for Research in Vocational Education (NCRVE)
Technical Assistance for Special Populations Program (TASPP)
University of California at Berkeley
1995 University Avenue, Suite 375
Berkeley, CA 94704
(800) 762-4093

Vocational Education Resource System (VERS)
California Institute on Human Services
Sonoma State University
Rohnert Park, CA 94928
(707) 664-2416

American Association of Vocational Instructional Materials (AAVIMS)
220 Smithonia Road
Winterville, GA 30683
(706) 792-5355

Center on Education and Training for Employment (CETE)
1900 Kerny Road
Columbus, OH 43210
(800) 848-4815

Curriculum Publications Clearinghouse
Western Illinois University
Horrabin Hall - 46
Macomb, IL 61455
(800) 322-3905

Western Curriculum Coordination Center
University of Hawaii
1776 University Ave., Wist 216
Honolulu, HI 96822
(808) 956-783

East Central Curriculum Coordination Center
Sangamon State University, F-2
Springfield, IL 62708
(217) 786-6375

Southeast Curriculum Coordination Center
Mississippi State University
Research and Curriculum Unit
Drawer DX
Mississippi State, MS 39762
(601) 325-2510

Northeast Curriculum Coordination Center
New Jersey State Department of Education
Division of Vocational Education
Crest Way
Aberdeen, NJ 07747
(908) 290-1900

Midwest Curriculum Coordination Center
State Department of Vocational and Technical Education
1500 West 7th Avenue
Stillwater, OK 74074
(405) 377-2000, ext. 252

Northwest Curriculum Coordination Center
St. Martin's College
Old Main
Lacey, WA 98503
(206) 438-4456