This document describes a project that provided vocational skills and job-specific English-as-a-second-language (ESL) training to Spanish-speaking adults in Lincoln, Rhode Island. Project BILLET (Bilingual Learning and Employment Training) offered training in five vocational skill areas: machine technology, welding technology, geriatric nursing assistant, dental/clerical assistant, and word processing/data entry. The Project BILLET curriculum package is composed of two major sections. The first section consists of an introduction to the structure and purpose of bilingual vocational training. This section describes the project's target population, goals, objectives, and methodologies, as well as staffing patterns and program components. The program components include recruitment, assessment and selection criteria, vocational skills instruction, ESL instruction, work readiness instruction, and job development and placement. The second section describes the courses, instructional methods, and techniques as well as the instructional materials and resources for both the vocational and language skills components.

(KC)
PROJECT BILLET
CURRICULUM PACKAGE

BILINGUAL VOCATIONAL SKILL TRAINING PROGRAM
1986 - 1987

Community College of Rhode Island
Office of Community Services
1762 Louisquisset Pike
Lincoln, RI 02865

U.S. DEPARTMENT OF EDUCATION
Office of Educational Research and Improvement
EDUCATIONAL RESOURCES INFORMATION
CENTER (ERIC)

This document has been reproduced as
received from the person or organization
original it
Minor changes have been made to improve
reproduction quality

Points of view or opinions stated in this docu-
ment do not necessarily represent official
ERIC position or policy

BEST COPY AVAILABLE
The Project BILLET Curriculum Package is composed of two major sections. The first section consists of an introduction to the structure and purpose of bilingual vocational training as proposed by Project BILLET. The goals, objectives and methodologies of Project BILLET are discussed, as well as, staffing patterns and program components.

The second section addresses the course descriptions, instructional methods and techniques, as well as the instructional materials and resources for both the vocational skill instruction and vocational English instruction of Project BILLET.

The curriculum information in section two was developed as the project materialized and functioned. Initial course outlines, based on established curricula and used by state vocational schools and adult vocational education programs, were provided to each of the skill instructors who were then required to modify the content of instruction based on the actual, current job requirements of the occupation. The instructors were also responsible to develop instructional strategies to teach those job requirements based upon the skills (including language), attitudes and knowledge which the students brought with them upon entering the program.

The instructors (skill and VESL) spent considerable time organizing the learning experiences in manners appropriate to the needs, interest and abilities of the students to accomplish the basic goals and objectives of the bilingual vocational skill training project.
I. INTRODUCTION
A. Target Population
B. Goals, Objectives, Timetable
C. Staffing Patterns
D. Program Components
   1) Recruitment, Assessment, Selection Criteria
   2) Skill/Vocational Instruction
   3) Vocational English-as-a-second Language (VESL) Instruction
   4) Work Readiness Instruction
   5) Job Development and Placement

II. CURRICULUM GUIDES FOR VOCATIONAL SKILLS
A. Purpose of Curriculum Guides for Vocational Skills
   1) Machine Technology
   2) Welding Technology
   3) Geriatric Nursing Assistant
   4) Dental/Clerical Assistant
   5) Word Processing/Data Entry

B. Purpose of Curriculum Guides for VESL Instruction
   1) Machine Technology
   2) Welding Technology
   3) Geriatric Nursing Assistant
   4) Dental/Clerical Assistant
   5) Work Processing/Data Entry
SECTION I

INTRODUCTION

A. Target Population
B. Goals, Objectives, Timetable
C. Staffing Patterns
D. Program Components
   1) Recruitment, Assessment, Selection Criteria
   2) Skill/Vocational Instruction
   3) Vocational English Instruction (VESL)
   4) Work Readiness Instruction
   5) Job Development and Placement
I. **INTRODUCTION**

Project BILLET is a bilingual vocational skill training program which was funded by the U.S. Department of Education and awarded to the Community College of Rhode Island in May of 1986. The program operated for nineteen months, beginning in May of 1986 and ending in November of 1987. The program provided vocational skill training and vocational English instruction to limited English proficient adults.

A) **Target Population**

Project BILLET provided services to the limited English proficient adults of Hispanic descent, characterized by the following:

1. Unemployed or underemployed
2. Lack of specific occupational/vocational skills
3. Minimal amount of formal education
4. Limited English language proficiency
5. Exhibited poor self-concept, compounded by social and cultural factors
6. Inability to recognize and cope with issues and concerns related to mainstream employment practices and requirements
7. Recent arrival to the United States

B) **Goals, Objectives, Timetable**

1. **Goals**

The goals of Project BILLET were to:

a) Provide entry-level skill training in selected occupational areas to ninety students preparing them for entry into the labor force.

b) Provide vocational specific English language instruction, thus improving their English language proficiency and success in acquiring and maintaining a job.

c) Provide supportive services, such as career/vocational assessment, employment counseling, and job development/placement assistance to facilitate the students' entry into the labor force, or to upgrade them from a low paying, limited opportunity occupation, to a high paying, high opportunity occupation.

2. **Objectives**

The objectives were to:

a) Schedule six classes for entry-level skill training in five different occupational/vocational areas: Welding Technology, Machine Trade, Data Entry/Word Processing, Geriatric Nursing Assistant, and Dental/Clerical Assistant (two classes in Data Entry/Word Processing).

b) Schedule vocational English-as-a-second language (VESL) instruction in conjunction with each skill area class.
c) Recruit, assess and enroll those eligible individuals in a skill and VESL class appropriate to their interest and abilities.

d) Provide career counseling and work readiness instruction to each student.

e) Provide job placement assistance and follow-up services as appropriate to each student.

3. Timetable

a) Full-time and part-time staff were recruited and hired during June, July and August of 1986.

b) Recruitment, assessment and enrollment of eligible students was conducted during September and October of 1986.

c) Skill training and VESL instruction occurred between the months of October 1986 and June 1987.

d) Career and job readiness instruction was provided in March, April, May and June 1987.

e) Supportive employment counseling was available from October 1986 to August 1987.

f) Job development and placement services were available during April, May, June, July and August of 1987.

g) Follow-up and additional counseling services were provided during August, September, October and November of 1987.

C) Staffing Patterns

Project BILLET was staffed by three full-time and twenty-one part-time employees. The breakdown of staff positions was as follows:

(1) Project Coordinator
(1) Academic Advisor/Job Developer
(1) Staff Assistant
(3) Vocational Counselors
(6) Skill (occupational) Instructors
(6) Skill (occupational) Instructor Aides
(6) Vocational English instructors

Full-time staff members worked a non-standard work week in order to supervise and coordinate the delivery of services with part-time staff who worked evening hours. Efforts were made to recruit and hire individuals who were bilingual and bicultural. Vocational counselors and skill instructor aides were bilingual and bicultural. The academic advisor/job developer was also bilingual/bicultural.
D) Program Components

1. Recruitment, Assessment, Selection Criteria

Recruitment was conducted by full-time staff, assisted by vocational counselors during September and October 1986. All recruitment materials (posters, flyers, ads, public service announcements) were produced in Spanish and English. Extensive use of the local media (radio and television) was implemented, as well as local community based service organizations and churches. In four weeks of extensive outreach and recruitment, two hundred individuals applied to Project BILLET. One-hundred and fifty individuals returned for assessment and screening. One-hundred and seventeen were selected and notified of being accepted into the program.

Assessment, conducted by full-time staff and vocational counselors, utilized different instruments and methodologies to measure the following:

- English language proficiency (reading, writing, speaking and comprehension)
- Native language proficiency (reading and writing)
- Basic math and computational skills
- Employment and work readiness skills

Students were selected for participation based on their occupational interest, English language proficiency level, commitment to training and general ability and aptitude. No specific prerequisites regarding past educational skills or levels were required. Nor were initial minimal standards established regarding students' English language proficiency. Students with various levels of limited English skills were enrolled and carefully monitored. If their lack of English proficiency became a major barrier to learning the skills of the occupation additional resources were provided to lessen the problem.

2. Skill/Vocational Instruction

Six classes were structured and provided. Two classes were scheduled in Data Entry/Word Processing, one each in Welding, Machine Trade, Dental/Clerical Assistant, and Geriatric Nursing Assistant. One Data Entry/Word Processing class was offered in the afternoon and the remaining five classes were offered in the evening, between 6:00 p.m. and 10:00 p.m. Each skill/vocational class was supplemented by a vocational English-as-a-second language (VESL) class, thus requiring collaboration between the VESL and skill instructors. The vocational/skill classes were scheduled two or three times a week, with the VESL class being offered twice a week. Students were, therefore, required to attend instructional classes five times a week. Classes were usually three or four hours in length.

Skill instructors were responsible to identify and teach those vocational skills required to obtain an entry level position in the specific occupational area. Instruction was provided primarily in English with the bilingual instructor aide supporting the process by translating difficult material, tutoring individual students and conducting certain lessons in the primary language. Bilingual material and teaching aids were also utilized. The following was provided:
1. Machine Trade - 250 hours of skill instruction to 13 students
2. Welding Technology - 220 hours of skill instruction to 20 students
3. Dental/Clerical - 235 hours of skill instruction to 14 students
4. Nursing Assistant - 240 hours of skill instruction to 12 students
5. Data Entry/Word Processing - 300 hours of skill instruction to 16 students
6. Data Entry/Word Processing - 300 hours of skill instruction to 16 students

3. Vocational English-as-a-Second Language (VESL) Instruction

Six VESL classes were provided, one for each skill class. Staffed by certified ESL instructors, the classes were scheduled twice a week and were on the days or evenings when no skill class was scheduled. The English instruction was job specific and provided in direct collaboration with the curriculum of the skill class. Skill and VESL instructors were required to exchange lesson plans, as well as to plan their teaching schedule to maximize students' ability to comprehend and learn the theories and skills of the occupation. The following was provided:

1. Machine Trade - 90 hours of VESL instruction to 13 students
2. Welding Technology - 100 hours of VESL instruction to 20 students
3. Dental/Clerical - 224 hours of VESL instruction to 14 students
4. Nursing Assistant - 205 hours of VESL instruction to 12 students
5. Data Entry/Word Processing - 175 hours of VESL instruction to 16 students
6. Data Entry/Word Processing - 160 hours of VESL instruction to 16 students

VESL instruction emphasized the English language skills required for the specific occupation stressing the four language skills of listening (comprehension), speaking, writing and reading. Instruction focused on the language skill most needed for the specific occupation. For example, more focus was directed towards reading and writing for the data entry/word processing student than for the welder who required more comprehension and speaking skills. The primary purpose of VESL instruction was to practice and learn the language of the occupational class at the job site. The VESL class also provided instruction regarding employment related terms and usage. The content and sequence of the job specific language instruction was situational and related to the occupational class. The instructional strategies varied from being very controlled and didactic to being semi-structured and communicative.

4. Work Readiness Instruction

Provided by the VESL instructor and vocational counselor, this instruction prepared students for participation in the labor force as entry level workers in their occupation of training. Topics, such as, job application procedures, resume writing, job interview skills, appropriate behaviors on the job, locating and using job sources were introduced and discussed within the context of the VESL class. The vocational counselors and VESL instructors collaborated by sharing the responsibility and by team teaching the material to the students. Counselors also addressed employment issues as they related to different cultural expectations in
order to alleviate and minimize any potential problems which might have been caused by the diversity of cultural backgrounds. Students were exposed to mainstream employment practices and procedures within a cultural context which compared their culture's views and expectations to those of the U.S. culture.

5. Job Development and Placement

The job development and placement activities were conducted during the months of April through October of 1987. The objectives of the job development and placement activities were to:

- Facilitate the students' acquisition of permanent positions in the occupation of their choice and for which they received training.

- Teach students the skills and techniques of successful job hunting.

- Publicize the goals, objectives and benefits of Project BILLET to as many prospective employers as possible.

Staff responsible to assist students with job placement were the academic advisor (primary role), project coordinator (secondary role), and the vocational counselors (support role). Skill instructors, aides, and VESL instructors also contributed to the effort by providing job leads developed through their contacts with private industry. Services provided by staff included the following:

- Contacting employers to explain Project BILLET and the benefits of hiring graduates from the training program.

- Arranging student interviews with prospective employers.

- Referring students to private and public job placement agencies or services.

- Monitoring area job fairs and encouraging students to attend such events.

- Screening want ads, job listings and job postings from different sources and supporting students' efforts to apply for positions appropriate to their skills.

- Assisting students in developing positive job search skills through practice and repetition.

- Encouraging students to develop an individualized job search technique and plan which ensured their ability to acquire employment in the occupation for which they trained.

- Establishing a job club activity where students met to discuss job openings and results of job interviews with staff members and with each other.
Students also sent out letters of application and resumes. They contacted prospective employers and scheduled interviews. Staff provided assistance and encouragement to students to continue their efforts to acquire positions in the occupation for they received training. A primary benefit of the job club was the peer group support and technical assistance it provided.
WORK READINESS SKILL CHART

NAME: ___________________________ DATE: ___________________________

PERIOD: FROM: ___________ TO: ___________

STUDENT HAS DEMONSTRATED THE LEVEL OF COMPETENCY INDICATED IN THE FOLLOWING (MARKED WITH X)

STUDENT COMPETENCY EVALUATION

4 = SKILLED: Can perform the task with no supervision; and effectively.

3 = MODERATELY SKILLED: Can perform the task with some success but requires limited assistance.

2 = LIMITED SKILLED: Can perform the task with some difficulty, and requires assistance.

1 = NOT SKILLED: Unable to perform the tasks.

<table>
<thead>
<tr>
<th>COMPETENCY AREAS</th>
<th>4</th>
<th>3</th>
<th>2</th>
<th>1</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Student is able to list the steps involved in the job-seeking process</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Student is able to list successful worker behaviors and attitudes</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Student is able to list his/her skills, abilities interests and work values as they relate to finding a job</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Student is able to identify sources of information to find job openings</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. Student is able to utilize those sources to identify job openings</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. Student is able to understand the abbreviations found in want ads</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7. Student is able to find a want ad which they feel they can respond to</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Competency Area</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>--------------------------------------------------------------------------------</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8. Student can successfully respond to a want ad</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9. Student is able to identify telephone techniques he/she uses to secure appointments for job interviews</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10. Student can successfully use the telephone to secure appointments for job interviews</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>11. Student is able to discuss the uses for a cover letter</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>12. Student is able to write a cover letter</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>13. Student is able to indicate what documents they must bring with him/her to a job interview</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>14. Student is able to complete a Personal Fact Sheet</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>15. Student is able to list the parts of a resume</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>16. Student is able to compose and write his/her own resume</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>17. Student is able to understand all the questions asked on a job application</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>18. Student is able to answer all the questions asked on a job application</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>19. Student understands the importance of a job interview</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>20. Student has the necessary skills to make a favorable impression during the job interview</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>21. Student is able to communicate effectively during a job interview</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>22. Student is able to relate work and educational experience to a job interview</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>COMPETENCY AREA</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>---------------------------------------------------------------------------------</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td>23. Student is able to relate work and educational experience to a job interview.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>24. Student is able to recognize an illegal question during an interview and how best to answer or refuse to answer the question.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>25. Student is able to indicate how we communicate through body language.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>26. Student is able to discuss how body language influences the interviewer's impression of the interviewee.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>27. Student is able to successfully complete a practice interview.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>28. Student is able to discuss what employers look for in a successful employee.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>29. Student is able to list successful job keeping skills.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
SECTION II/A

VOCATIONAL SKILLS

CURRICULUM GUIDES

Course Description

Instructional Methods and Techniques

Instructional Materials and Resources
A. PURPOSE OF CURRICULUM GUIDES FOR VOCATIONAL SKILLS

These curriculum guides have been designed, developed and validated by the instructors who were directly involved in teaching the vocational subjects to Project BILLET students. They identified the objectives, activities, resources and competency levels for each of their occupational/vocational areas. Materials utilized to develop these curriculum guides included other curriculums utilized by area vocational schools located in Rhode Island and other adult vocational programs providing instruction in similar vocational areas. These curriculum guides document the content, objectives, activities and competencies which were established in providing instruction to Project BILLET students. These guides can also serve to provide interested educational and professional groups and individuals with information regarding the scope, content, methods and techniques of trade preparatory instruction. These basic curriculum guides can be utilized to:

1) Assist instructors to prepare learners with basic job entry level skills.

2) Assist the instructor in selecting the occupational skills and related technical information and provide a basis upon which he/she can progressively build a functional course of study in accordance with the training needs of learners and the local community.

3) Assist the instructor in determining the time needed to teach each lesson and a basis for the portion of time in the total program.

4) Assist the instructor in the selection of appropriate methods, teaching aids, and references as well as supply the instructor with sources of information, references and other resources.

5) Assist the instructor in the development of, or selection of, appropriate instructional sheets or materials.

6) Assist in the improvement of communications between the instructor and learner through the use of stated behavioral objectives for each task and to corresponding technical information.

These guides include only the basic skills and technical information to be taught for entry-level positions in the occupational area and should be supplemented with other complimentary and necessary areas of related instruction depending on the entry-level occupational requirements of the local area. Experiences should also be provided for the development of desirable attitudes and appreciations and should be interwoven, by the instructor, within the skill content instruction of the occupational area.

These guides are designed with the intention of providing learners with the opportunity to develop skills, knowledge, attitudes, and leadership ability. After having the instruction provided by a competent instructor, the learners will be able to:

1) Perform the basic manipulative skills involved in the occupation.

2) Make application and use of the underlying theories, technical information and related occupational information to assure sound judgements, decisions and proper procedures involved in the occupation.
3) Appreciate, respect and understand the employer-employee relationship and have an awareness of the necessity of delivering worthy service for value received.

4) Develop a sense of personal integrity and confidence in his/her ability to earn his/her maximum level of proficiency in the community.

5) Practice those qualities of citizenship which will lead the way toward a happy and productive life.

6) Gain employment in the occupation for which training was provided.

The skill instructor is also responsible to adapt the instructional methods and material content to the needs, skills, knowledge and attitude of limited English proficient students. Cultural differences regarding attitude, knowledge, and expectations should also play an important role in the development of instructional methods and material. The skill instructor must adapt his/her style to accommodate those cultural differences and limited English language skills. An active collaborative effort between the VESL instructor and skill instructor must be maintained throughout the instructional phase. A more detailed discussion of this collaborative effort is provided in the VESL curriculum guide.
SECTION II
Curriculum Guides

A. Purpose of Curriculum Guides for Vocational Skills

1. Machine Technology
   a) Course Description
   b) Instructional Methods and Techniques
   c) Instructional Materials and Resources

2. Welding Technology
   a) Course Description
   b) Instructional Methods and Techniques
   c) Instructional Materials and Resources

3. Geriatric Nursing Assistant
   a) Course Description
   b) Instructional Methods and Techniques
   c) Instructional Materials and Resources

4. Dental/Clerical Assistant
   a) Course Description
   b) Instructional Methods and Techniques
   c) Instructional Materials and Resources

5. Word Processing/Data Entry
   a) Course Description
   b) Instructional Methods and Techniques
   c) Instructional Materials and Resources

B. Purpose of Curriculum Guides for VESL Instruction

1. Machine Technology
   a) Course Description
   b) Instructional Methods and Techniques
   c) Instructional Materials and Resources

2. Welding Technology
   a) Course Description
   b) Instructional Methods and Techniques
   c) Instructional Materials and Resources

3. Geriatric Nursing Assistant
   a) Course Description
   b) Instructional Methods and Techniques
   c) Instructional Materials and Resources
4. Dental/Clerical Assistant
   a) Course Description
   b) Instructional Methods and Techniques
   c) Instructional Materials and Resources

5. Word Processing/Data Entry
   a) Course Description
   b) Instructional Methods and Techniques
   c) Instructional Materials and Resources
UNIT 1: Machine Trades Orientation

Learning Objective: To acquire the ability to identify certain facts about the machine trades.

Learner Competency: Describe the types of jobs in which machine workers are employed. Describe the types of organizations employing machine workers. Describe differences between open and closed shops. Describe machine shop working conditions.

UNIT 2: Materials and Alloys

Learning Objective: To acquire basic knowledge and facts about ferrous and non-ferrous materials and alloys.

Learner Competency: Describe and discuss the terms ferrous and non-ferrous. Describe the sources of iron ore and the ways in which it is mined. Describe five basic types of steel producing furnaces. Describe the role of materials and alloys in machine trade processes.

UNIT 3: Occupational Safety

Learning Objective: The learner will demonstrate an ability to recognize unsafe shop conditions.

Learner Competency: The learner will have acquired the knowledge of those conditions constituting unsafe shop situations. He/she will demonstrate such knowledge and ability to recognize unsafe shop conditions, either by oral or written testing. Demonstrate ability to work safely and the ability to keep a clean, orderly work area.

UNIT 4: Basic Math Concepts

Learning Objective: The learner will demonstrate the ability to master related math pertaining to machine shop practices.

Learner Competency: The learner will be knowledgeable of whole numbers, fractions, decimals, addition, subtraction, multiplication and division. The learner will be able to solve problems using common fractions and decimals, solve problems involving tapers and calculate speeds and feeds for drilling, turning and milling operations.
UNIT 5: Blueprint Reading and Sketching

Learning Objective: The learner will acquire the ability to read and sketch blueprints related to machine trade applications.

Learner Competency: The learner will be able to read and sketch machine industry parts, identify basic views used on blueprints, identify symbols and abbreviations, identify lines, read and interpret blueprints, make a working sketch from a workpiece, and construct projects using basic blueprints.

UNIT 6: Hand Tools and Bench Work

Learning Objective: The learner will acquire the ability and knowledge to properly use hand tools and bench work equipment.

Learner Competency: The learner will demonstrate the ability to identify basic hand tools; to use tools safely and carefully; cut material using a hacksaw; draw file a flat surface; cut external threads; use punch and chisel. He/she will also be able to demonstrate the ability to set up and perform operations relative to layout tools, workholding devices and to the following operations: threading, reaming, deburring, grinding, polishing, heating, soldering.

UNIT 7: Cutting Fluids and Layout

Learning Objective: The learner will acquire the ability and knowledge to identify the purposes and uses of cutting fluids and to perform appropriate layout procedures.

Learner Competency: The learner will demonstrate the ability to apply proper cutting fluids and to prepare work surfaces, and make a precision layout.

UNIT 8: Measuring Tools

Learning Objective: The learner will acquire the ability to describe the care and maintenance of measuring tools such as: rules, outside micrometer, inside micrometer, screw thread micrometer, depth micrometer, vernier calipers, vernier depth gauge, and protractor and bevel protractor. The learner will also acquire the ability to read the measuring tools and measure objects.

Learner Competency: The learner will be able to describe each measuring tool, its care and maintenance and be able to measure stock utilizing each tool.

UNIT 9: Horizontal Band Saw

Learning Objective: The learner will acquire the ability and knowledge necessary to safely set up, operate and care for a horizontal band saw.
Learner Competency: The learner will be able to explain, discuss and demonstrate the operations of the horizontal band saw. The learner will be able to set, guide and stock stops, cut material to length, select proper blade speed and perform all operations safely and cleanly.

UNIT 10: Vertical Band Saw

Learning Objective: The learner will acquire the ability and knowledge necessary to safely set up, operate and care for a vertical band saw.

Learner Competency: The learner will be able to explain, discuss and demonstrate the operations of the vertical band saw. The learner will weld blade; contour saw to layout line; remove blade and coil for storage; operate safely; care and clean blade saw.

UNIT 11: Drill Press Operation and Safety

Learning Objective: The learner will acquire the ability to describe the major characteristics of the drill press, drill press safety, drill press tools and accessories and the ability to calculate correct drill speed for certain types of drilling operations.

Learner Competency: The learner will demonstrate a knowledge and understanding of the basic functions of a drill press, the ability to identify the major parts and operating controls on the drill press and the ability to explain the six basic functions of the drill press to include: drilling, reaming, countersinking, boring, counterboring and tapping.

UNIT 12: Operating the Drill Press

Learning Objective: The learner will acquire the ability to sharpen a twist drill bit; perform a drilling operation; perform a countersinking operation; perform a counterboring operation; a reaming operation; and a tapping operation.

Learner Competency: The learner will be able to demonstrate the ability to operate a drill press properly and safely, utilizing all six operations.

UNIT 13: Characteristics of the Engine Lathe

Learning Objective: The learner will acquire the ability to describe and discuss the general operating characteristics of the engine lathe; lathe safety; the basic parts and controls of an engine lathe headstock; the basic parts and controls of an engine lathe tailstock and the functions of lathe accessories.
Project Billet
Machine Technology Curriculum/Skill
Page 4.

Learner Competency: The learner will be able to describe and discuss how the engine lathe operates.

UNIT 14: Engine Lathe Computations

Learning Objective: The learner will acquire the ability to calculate revolutions per minute (RPM) for certain types of material; to calculate the depth of cut for a required diameter; to calculate the paper per foot by the offset method, the compound rest method, the taper attachment method; and to calculate the infeed for a given thread dimension.

Learner Competency: The learner will demonstrate mastery of lathe computations by solving problems with the instructor and by themselves.

UNIT 15: Engine Lathe Operations

Learning Objective: The learner will acquire the ability to install and remove a lathe chuck; perform a facing center drilling and straight turning operation; perform shoulder turning operations; perform taper turning operations; perform relieving, chamfering and cut-off operations; perform threading, boring and knurling operations; install and remove collet handwheel and collet.

Learner Competency: The learner will be able to demonstrate the ability to identify lathe parts, attachments and accessories; mount chuck and collet holder; select tool holder; select and set feed; calculate cutting speed and set RPM's; use 3-jaw chuck; perform facing, knurling and taper turning operations; center drills and perform relieving, chamfering and cut-off operations. Learner will operate the lathe safely and demonstrate proper care and cleaning of lathe.

UNIT 16: Milling Machines

Learning Objective: The learner will acquire the ability to: describe the safe working conditions for a milling machine; describe the necessary lubrication and care of the vertical and plain milling machine; identify and operate the controls; remove and replace arbors and milling cutters; align milling vises and fixtures with the table; clamp work in the vise with and without parallels; clamp work to the milling machine by use of T-bolts and clamps; calculate the required RPM's for a specific material and cutter; calculate the required amount of feed for a specific cutter and material; set and calibrate micrometer dials controlling longitudinal cross and vertical movements of the milling machine table.
Learner Competency: The learner will be able to demonstrate and perform the following: align work holding devices; calculate proper feed and speed; select proper feed and speed; mount work holding devices; mount cutter in collet or end mill holder; mill slots and grooves; machine a dovetail; drills, reams and bores; performs end-milling and side-milling operations.

UNIT 17: Surface Grinder

Learning Objective: The learner will acquire the ability and knowledge to describe, discuss and demonstrate the major operating characteristics of the surface grinder; the dressing grinding wheels; the selection and setting of work holding devices; plain surface grinding; step grinding and angular grinding.

Learner Competency: The learner will be able to mount and true grinding wheels; set up a grinder; use a magnetic chuck; grind work flat; grind to print specifications; operate a grinder safely and demonstrate proper care and cleanliness.
The emphasis will be on individualized instruction with some group instruction being provided through lecture and demonstration. The following methods and techniques will be utilized, depending on lesson content and level of difficulty.

- Lecture
- Demonstration by instructor, aide and students
- Small group discussion
- Oral questioning by the instructor and students
- Individualized self instructional kits
- Programmed instructional packets

- Laboratory experience, utilizing the physical facilities wherein students develop psychomotor skills and make practical applications of principles and concepts learned in the classroom. More than fifty percent of skill training will be scheduled for hands-on application in the laboratory.

- Small group instruction and student pairing during laboratory experiences will also be utilized and scheduled. Work projects will be assigned to each student for purposes of skill acquisition and evaluation.
MATERIALS

Films, filmstrips, overhead transparencies, textbook, workbook, instruction sheets, actual models, actual objects, tools and machinery found in a machine shop (machine shop lab)

1. Instruction sheets such as information sheets, job sheets, problem sheets and experiment sheets

2. Textbook, workbook and lexicon

Machine Tool Technology (textbook)
Repp/McCarthy. 5th Edition 1984
Bennett and McKnight-division of Glencoe Publishing Company

Machine Tool Technology Study Guides 1 & 2
same as above

Technical Terms, Spanish/English Lexicon
Career Development Center
School of Technical Careers
Southern Illinois University
Carbondale, ILL
June 1981

Elementary Blueprint Reading for Machinist (text/work books)
David L. Taylor 1981
Delmar Publishing Inc.
Albany, NY
## Trainee Competency Evaluation

**Directions:** Evaluate the trainee's competencies using the following rating scale of 4, 3, 2, 1. This is not to be confused with the traditional school grading system of A, B, C, and D.

- **4 = Skilled** -- can work independently with no supervision
- **3 = Moderately Skilled** -- can perform task with limited supervision
- **2 = Limited Skill** -- requires instructions and supervision to perform task
- **1 = Not Skilled** -- unable to perform task

### Safety
1. Demonstrates ability to work safely
2. Demonstrates ability to keep a clean, orderly work area

### Math
1. Solves problems using common fractions and decimals
2. Solves problems involving tapers
3. Calculates speeds & feeds for drilling, turning, & milling operations

### Cutting Fluids
1. Applies cutting fluids
2. Applies proper cutting fluids

### Blueprint Reading
1. Identifies basic views used on blueprints
2. Identifies symbols and abbreviations
3. Identifies lines
4. Reads and interprets blueprints
5. Makes a working sketch from a workpiece
6. Constructs projects using basic blueprints

### Hand Tools & Bench Work
1. Identifies basic hand tools
2. Uses tools safely & carefully
3. Cuts materials using hack saw
4. Draws file a flat surface
5. Cuts external threads
6. Uses punch and chisel

### Layout
1. Prepares work surface
2. Applies layout fluid
3. Makes a precision layout

### Materials
1. Distinguishes between ferrous and non-ferrous metals

### Measuring Tools
1. Uses/reads micrometers to + .001
2. Uses/reads inside micrometers to + .001
3. Uses/reads depth micrometers to + .001
4. Uses/reads vernier micrometers to + .001
5. Uses/reads vernier calipers to + .001
6. Uses/reads height gage to + .001
7. Uses/reads bevel protractor to + .001
8. Uses gage blocks to measure gap to within + .001
9. Demonstrates proper care of precision measuring tools

### Horizontal Band Saw
1. Sets guides and stock stop
2. Cuts material to length
3. Selects proper blade speed
4. Operates safely, cares & cleans
VERTICAL BAND SAW
1. WELDS BLADE
2. CONTOUR SAW TO LAYOUT LINE
3. REMOVES BLADE AND COIL FOR STORAGE
4. OPERATES SAFELY, CARES & CLEANS BAND SAW

DRILLING MACHINE
1. IDENTIFIES TYPES OF DRILLING MACHINES
2. SETS UP JOB FOR DRILLING USING HOLDING DEVICES
3. SELECTS SPEEDS AND FEEDS FOR JOB
4. CENTER DRILLS TO PROPER DEPTH
5. DRILLS HOLES
6. REAMS HOLES
7. OPERATES SAFELY, CARES FOR AND CLEANS DRILLING MACH.

MILLING MACHINE--VERTICAL
1. ALIGNS WORK-HOLDING DEVICES
2. CALCULATES PROPER FEED & SPEED
3. SELECTS PROPER FEED & SPEED
4. MOUNTS WORK-HOLDING DEVICES
5. MOUNTS CUTTER IN COLLET OR END MILL HOLDER
6. MILLS SLOTS, GROOVES & KEYWAYS
7. MACHINES A DOVETAIL
8. DRILLS, REAMS & BORES
9. PERFORMS END-MILLING WORK
10. PERFORMS SIDE-MILLING WORK

ENGINE LATHE
1. IDENTIFIES LATHE PARTS
2. IDENTIFIES ATTACHMENTS & ACCESSORIES
3. MOUNTS CHUCK & COLLET HOLDER
4. SELECTS TOOL HOLDER
5. SELECTS AND SETS FEED
6. CALCULATES CUTTING SPEED & SETS RPM'S
7. USES 3-JAW CHUCK
8. PERFORMS FACING OPERATIONS
9. PERFORMS KNURLING OPERATIONS
10. TURNS TAPERS WITH COMPOUND
11. CENTER DRILLS, DRILLS AND REAMS
12. OPERATES SAFELY, CARES FOR AND CLEANS LATHE

SURFACE GRINDER
1. MOUNTS AND TRUES GRINDING WHEEL
2. SETS UP GRINDER
3. USES MAGNETIC CHUCK
4. GRINDS WORK FLAT
5. GRINDS TO PRINT SPECIFICATIONS
6. OPERATES SAFELY, CARES FOR AND CLEANS GRINDER

SUPPLEMENTAL COMMENTS:__________________________
UNIT 1:  Welding Technology Orientation

Learning Objective: Students will acquire the ability to identify certain facts about the welding trade.

Learner Competency: Students will be able to describe different types of welding jobs, the organizations which hire welders, the difference between open and closed shops, the duties and responsibilities of welders, and the working conditions found in a welding shop.

UNIT 2:  Welding Processes

Learning Objective: Students will learn and identify the differences and similarities among the five major welding processes: gas welding, arc welding, mig welding, tig welding and cutting welding.

Learner Competency: Students will be able to describe the processes associated with five major welding processes, noting their differences and similarities.

UNIT 3:  Protective Clothing

Learning Objective: Students will become familiar with the kinds of protective clothing used in welding and the reasons for the need of such clothing.

Learner Competency: Students will demonstrate knowledge regarding the type of protective clothing used for different processes, its use and reasons for use. Students will demonstrate how the clothing is to be used.

UNIT 4:  Gas Welding and Arc Welding Tools

Learning Objective: Students will learn to identify and recognize the tools of gas welding and arc welding. Students will become familiar with their usage.

Learner Competency: Students will be able to identify, describe and explain the function of gas welding and arc welding tools.

UNIT 5:  Welding Shop Tools

Learning Objective: Students will learn to identify and recognize the tools found in a welding shop as well as become familiar with their usage.
Learner Competency: Students will demonstrate the ability to identify, describe and explain the function of tools found in a welding shop.

UNIT 6: Welding Shop Safety

Learning Objective: Students will learn to follow the safety rules of a welding shop. They will learn to recognize safe versus unsafe working conditions and procedures pertaining to welding processes.

Learner Competency: Students will demonstrate the ability to recognize safe and unsafe working conditions and procedures either by oral or written tests. Students will demonstrate ability to follow safety directions and set-up a safe work environment.

UNIT 7: Measurement in Welding

Learning Objective: Students will learn fractions and how to measure stock and employ numerous measurement applications to different welding processes.

Learner Competency: Students will demonstrate knowledge and ability to employ numerous measurement applications to different welding processes through testing and/or physical demonstration.

UNIT 8: Measuring Tools

Learning Objective: Student will recognize, identify and utilize the numerous measuring tools of welding.

Learner Competency: Student will demonstrate knowledge and ability to utilize measuring tools effectively and correctly.

UNIT 9: Degrees and Angles

Learning Objective: Student will become familiar with degrees and angles as it relates to different welding processes.

Learner Competency: Student will demonstrate ability to apply concepts of degrees and angles to various welding processes.

UNIT 10: Lines and Shapes

Learning Objective: Student will become familiar with mathematical concepts related to lines and shapes as they pertain to different welding processes.
Project Billet
Welding Technology Curriculum/Skill
Page 3.

Learner Competency: Student will demonstrate ability to interpret mathematical theories and formulate practical applications of such concepts as they pertain to different welding processes.

UNIT 11: Blueprint Reading and Sketching

Learning Objective: The student will acquire the ability to read and sketch blueprints related to welding applications.

Learner Competency: Student will demonstrate the ability to sketch welding stock, identify basic views used on blueprints, identify symbols and abbreviations, identify lines, read and interpret blueprint directions, and construct projects using basic blueprints.

UNIT 12: Standard Stock

Learning Objective: Student will recognize, identify and be knowledgeable of the different properties and functions of welding stock.

Learner Competency: Student will demonstrate ability to utilize proper stock in different welding processes.

UNIT 13: Welding Rods

Learning Objective: Students will identify, recognize and be knowledgeable of the different properties and functions of gas filler rods and tig filler rods.

Learner Competency: Student will demonstrate ability to properly utilize welding rods in different welding processes.

UNIT 14: Positions, Joints, Grooves and Welds

Learning Objective: Student will learn the underlying theories and concepts concerning welding positions, joints, grooves and welds as they relate to different welding processes.

Learner Competency: Student will demonstrate knowledge and understanding of flat, overhead, vertical and horizontal positions; butt, lap, corner, tee and edge joints; as well as the numerous grooves and welds.

UNIT 15: Welding Beads

Learning Objective: Student will recognize and learn the different kinds of welding beads to be used in different applications as well as their purposes and functions.
Learner Competency: Student will demonstrate the ability to properly select bead for a particular job utilizing a particular welding process.

UNIT 16: Gas Welding

Learning Objective: Student will become familiar with the procedures of gas welding; student will be able to describe and perform the necessary steps to safety weld using the processes of gas welding.

Learner Competency: Student will demonstrate the ability to safely perform the processes of gas welding.

UNIT 17: Arc Welding

Learning Objective: Student will become familiar with the operations and procedures of an arc welding machine and its processes.

Learner Competency: Student will demonstrate the ability to safely perform and complete a welding task utilizing the arc welding machine and its processes.

UNIT 18: Tig Welding

Learning Objective: Student will become familiar with the operations and procedures of a tig welding machine and tig welding processes.

Learner Competency: Student will demonstrate the ability to safely perform and complete a welding job or task utilizing the tig welding machine and torch and its corresponding processes.

UNIT 19: Weld Defects and Corrections

Learning Objective: Student will learn to recognize, describe and analyze the cause of different weld defects as well as present ways and methods utilizing different welding processes to correct those defects.

Learner Competency: Student will be able to identify weld defects and correct those defects utilizing methods and procedures from different welding processes.
The emphasis will be on individualized instruction with some group instruction being provided through lecture and demonstration. The following methods and techniques will be utilized throughout the curriculum depending on lesson content and level of difficulty.

- Lecture - small group discussion
- Oral questioning by instructor and students
- Individualized self instructional packets
- Topic and skill oriented instructional packets
- Laboratory experience (welding shop) utilizing the physical facilities containing welding equipment and stations wherein students develop psychomotor skills and make practical applications of principles and concepts learned in an academic classroom. More than fifty percent of skill training/instruction will be scheduled for practical hands-on application in the laboratory.

Small group instruction and student pairing during laboratory experience will be encouraged and utilized. Work projects will be assigned to each student for purposes of skill acquisition, development and evaluation.
WELDING TECHNOLOGY

SKILL INSTRUCTION

INSTRUCTIONAL MATERIALS AND RESOURCES

MATERIALS: Films; filmstrips; transparencies; textbook; workbook; instruction sheets (eg. information sheets, assignment sheets, job tasks or plan sheets, problem sheets, operation sheets and experiment sheets prepared by the instructor); actual objects, supplies, items and tools used in a welding shop.

TEXTBOOKS, WORKBOOKS:

- **Elementary Blueprint Reading for Welders**
  Delmar Publishing Inc. 1981, Albany NY

- **Welding Technical Terms: Spanish/English Lexicon**
  Career Development Center, School of Technical Careers
  Southern Illinois University, Cabondale ILL

- **Student Manual for Welding**
  West Bay Vocational Technical School
  Vocational Training for Adults, Coventry RI

RESOURCES: - Academic classroom CCRI, Flanagan Campus

- Welding lab with work stations and equipment

- Audio-visual equipment and supplies
<table>
<thead>
<tr>
<th>LEVEL</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>WELDING THEORY</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>GRINDING</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>FLAME CUTTING (HAND)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>FLAME CUTTING (MACHINE)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>WELDING SYMBOLS</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CARBON ARC (GOUGING)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SMAW LOW HYDROGEN</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>A. FILLET WELDS All Positions</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>B. BEVEL WELDS All Positions</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SMAW MILD STEEL</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>A. FILLET WELDS All Positions</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>B. BEVEL WELDS All Positions</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>OXYGEN-ACETYLENE SET UP</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>METAL FABRICATION</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>CHARACTERISTICS</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>PERSONAL APPEARANCE</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>WILLINGNESS TO WORK &amp; LEARN</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>COOPERATION</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>RELATIONSHIP WITH OTHERS</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>INITIATIVE</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>USE OF TIME</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>QUALITY OF WORK</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>QUANTITY OF WORK</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ABILITY TO COMMUNICATE WITH OTHERS</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CARE OF EQUIPMENT</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>OTHERS</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

PROFICIENCY LEVEL:
1. NONE
2. POOR
3. FAIR
4. GOOD
5. EXCELLENT

COMMENTS: ____________________________  
|          |          |          |          |          |
|          |          |          |          |          |
|          |          |          |          |          |
STUDENT-TRAINEE: __________________________

TRAINING PROGRAM: __________________________

STUDENT PROGRESS REPORT

<table>
<thead>
<tr>
<th>PERFORMANCE CHARACTERISTICS</th>
<th>PERIOD ENDING</th>
</tr>
</thead>
<tbody>
<tr>
<td>SAFETY</td>
<td></td>
</tr>
<tr>
<td>CARE OF TOOLS &amp; EQUIPMENT</td>
<td></td>
</tr>
<tr>
<td>ATTITUDE TOWARD JOB</td>
<td></td>
</tr>
<tr>
<td>RELATIONSHIP WITH OTHER WORKERS</td>
<td></td>
</tr>
<tr>
<td>WILLINGNESS TO LEARN</td>
<td></td>
</tr>
<tr>
<td>COOPERATIVE</td>
<td></td>
</tr>
<tr>
<td>QUALITY OF WORK</td>
<td></td>
</tr>
<tr>
<td>QUANTITY OF WORK</td>
<td></td>
</tr>
<tr>
<td>USE OF TIME</td>
<td></td>
</tr>
<tr>
<td>GROWTH &amp; IMPROVEMENT</td>
<td></td>
</tr>
<tr>
<td>TECHNICAL SKILLS:</td>
<td></td>
</tr>
<tr>
<td># DAYS ABSENT</td>
<td></td>
</tr>
<tr>
<td># DAYS LATE</td>
<td></td>
</tr>
<tr>
<td>OVERALL PERFORMANCE</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>PERIOD 1</th>
<th>PERIOD 2</th>
<th>PERIOD 3</th>
<th>PERIOD 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>TEACHER'S SIGNATURE</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>STUDENT'S SIGNATURE</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
UNIT 1: Being a Nursing Assistant

Learning Objective: Students will learn the duties and responsibilities of a nursing assistant. Students will be aware of the health care institution and its career ladder as well as the medical ethics involved in patient care and the rights of patients.

Learner Competency: Students will be able to list the duties and responsibilities of a nursing assistant; list possible career choices within the health care institution; describe and discuss the legal and moral aspects of patient care; and be able to explain the policies and procedures of the Patient's Bill of Rights.

UNIT 2: Communication in the Health Care Setting

Learning Objective: Students will develop the ability to understand appropriate and professional communication with other workers and with patients. Students will understand the methods of proper observation and reporting of patient concerns and requests.

Learner Competency: Students will demonstrate the ability to maintain a courteous and professional manner toward patients, visitors and co-workers; deal with patients and visitors appropriately and use communication skills effectively. Students will also demonstrate ability to describe differences between objective and subjective observations and report those observations promptly, accurately and effectively.

UNIT 3: Introduction to Medical Terminology

Learning Objective: Students will become familiar with medical abbreviations, medical specialties, common medical roots, prefixes and suffixes.

Learner Competency: Students will be able to recognize medical abbreviations; spell and pronounce various medical terms correctly; define the terms prefix, suffix and root; define terms and elements relating to anatomy and physiology, diseases and diagnosis, and surgical procedures.

UNIT 4: Safety and Fire Prevention

Learning Objective: Students will become familiar with the general rules of institutional safety, procedures to prevent fires, procedures to evacuate in case of emergency and safety precautions with oxygen.
Learner Competency: Students will demonstrate knowledge of general rules of institutional safety, students will be able to describe safety precautions necessary when oxygen is being used, ways and procedures to prevent fires, methods to evacuate ambulatory patients safely and efficiently.

UNIT 5: Infection Control

Learning Objective: Students will understand the meanings and concepts associated with the terms 'microbes' and 'medical asepsis'. They will also learn the theory and methods associated with sterilization, disinfection, handwashing and isolation techniques.

Learner Competency: Students will demonstrate the knowledge and ability to list five direct and five indirect causes of disease; identify and describe five types of microorganisms and their conditions for growth; distinguish among clean, sterile, contaminated; differentiate between disinfection and sterilization; list correct procedures for handwashing and demonstrate appropriate techniques; identify the five techniques of isolation; describe proper procedures and techniques for dressing and patient care associated with each technique of isolation.

UNIT 6: The Patient's Environment

Learning Objective: Students will become familiar with the equipment in a patient's environment; learn to operate the equipment in a patient's unit; to describe and discuss the purpose of bed making and to make open, closed, surgical, occupied and orthopedic beds.

Learner Competency: Students will be able to identify and discuss the purpose and function of the equipment in a patient's unit. Students will also demonstrate the ability to properly make the different kinds of beds.

UNIT 7: Human Anatomy and Physiology

Learning Objective: Students will understand the basic concepts related to anatomy and physiology.

Learner Competency: Students will be able to describe the difference between anatomy and physiology; describe the structure and function of cells, tissues, organs and body systems; explain how the body systems work together; carry out instructions accurately, as specified, for particular parts of the anatomy; and explain the difference between benign and malignant tumors.
UNIT 8: The Musculoskeletal System

Learning Objective: Students will understand the basic concepts and functions of the musculoskeletal system.

Learner Competency: Students will demonstrate the knowledge and ability to be able to list the functions of the skeletal system; list general types of bones with examples; name three major types of joints and give examples; explain how groups of muscles work together to form a body motion; and label a diagram of the skeleton and surface muscles.

UNIT 9: Lifting, Moving and Transporting Patients

Learning Objective: Students will understand the principles of body mechanics; the techniques for moving patients; the proper use of a walker, cane and crutches; the use of restraints; and the various positioning techniques.

Learner Competency: Students will demonstrate the ability to apply the principles of body mechanics in moving patients, using a walker, cane or crutches and the various positioning techniques. Students will also demonstrate proper use of restraints.

UNIT 10: The Integumentary System (Skin)

Learning Objective: Students will learn and understand the anatomy and physiology of the integumentary system.

Learner Competency: Students will demonstrate knowledge of the system by labeling a diagram of a cross section of the skin; listing the five primary functions of the skin; explaining the role of skin in regulating body temperature.

UNIT 11: Personal Care of Patients

Learning Objective: Students will learn and understand the theories, methodology, and procedures associated with patient care as it relates to: bed, bath and backrub; tub and shower; oral hygiene; bed shampoo; nail and foot care (diabetic); special skin care (prevention of decubiti); foley and peri care; and care of patients with I.V. and N.G. tubes.

Learner Competency: Students will demonstrate knowledge and skill by correctly performing the procedures of daily care and special skin care.

UNIT 12: The Circulatory and Respiratory Systems

Learning Objective: Students will learn and understand the basic anatomical and physiological concepts of the circulatory and respiratory systems.
Learner Competency: Students will demonstrate knowledge by describing the functions of blood; comparing and contrasting pulmonary circulation, systematic circulation and coronary circulation; labeling a diagram with the organs of the circulatory and respiratory systems; describing the functions of the respiratory system.

UNIT 13: Measuring and Recording

Learning Objective: Students will learn and understand the procedures associated with measuring and recording vital signs, body temperature, pulse, respirations and blood pressure.

Learner Competency: Students will demonstrate competency by correctly performing the steps and procedures for measuring and recording vital signs, body temperature, pulse, respirations and blood pressure.

UNIT 14: The Gastrointestinal System and Nutrition

Learning Objective: Students will understand the anatomy and physiology of the gastrointestinal system, the importance of proper nutrition and serving a meal.

Learner Competency: Students will be able to label a diagram showing the organs of the digestive system and describe the function of each organ: The student will also be able to define a well balanced diet, name the four basic food groups and explain what is meant by a therapeutic diet and its function in patient care. The student will also demonstrate the ability to properly prepare a patient for feeding and feed the helpless patient.

UNIT 15: The Excretory System

Learning Objective: Students will understand the anatomy and physiology of the excretory system, the practical theory and application of procedures concerning fluid balance, intake, output and specimen collection.

Learner Competency: Students will be able to label a diagram with the organs of the excretory system; list common diseases and conditions of the excretory system; explain fluid balance and imbalance; explain the meaning of fluid intake and its charting requirements; explain the meaning of fluid output and its charting requirements; explain what specimens are and the procedures to collect specimens. Students will demonstrate the correct steps and procedures of all of the above.
UNIT 16: The Endocrine System

Learning Objective: Students will learn and understand the anatomy and physiology of the endocrine system and the procedures in the care of the diabetic patient.

Learner Competency: Students will label a diagram of the body with the endocrine glands; describe the function of each gland; list the common disorders of the endocrine system. The students will also recognize the signs and symptoms of diabetes mellitus, insulin shock and diabetes coma; test urine for sugar, acetone and ketones; and collect a fresh fractional urine specimen.

UNIT 17: The Reproductive System

Learning Objective: Students will learn and understand the anatomy and physiology of the reproductive system and the methods and procedures for the care of the gynecological patient.

Learner Competency: Students will be able to label a diagram of the male and female reproductive system and the function of those organs. Students will also demonstrate the ability to provide perineal care and the vaginal douche.

UNIT 18: Warm and Cold Applications

Learning Objective: Students will learn and understand the principles, reasons and procedures regarding warm and cold applications.

Learner Competency: Students will demonstrate knowledge of warm and cold applications by explaining the principles and reasons for warm and cold applications; explain the difference between moist and dry applications; as well as generalized and localized applications. Students will also demonstrate the correct procedures for warm and cold applications.

UNIT 19: Physical Examinations

Learning Objective: Students will learn to identify their role in a physical examination and the methods of draping and positioning a patient.

Learner Competency: Students will demonstrate their ability to assemble the equipment necessary for a routine examination; prepare the patient; describe the positions used for physical examinations; help the patient into those positions and arrange the patient's drape for privacy.
UNIT 20: Pre-operative and Post-operative Care

Learning Objective: Students will learn and understand the principles and procedures related to pre and post operative care, intravenous infusion equipment, the care of the ostomy patient, and the use of binders and elastic bandages.

Learner Competency: Students will be able to define pre and post operative care; complete a pre-operative check list; shave a patient in preparation for surgery; observe a patient for signs of post-operative problems; care for a patient who is vomiting; turn the post-operative patient; assist the patient with deep breathing exercises; define stoma and ostomy; provide ostomy care; apply the five types of binders.

UNIT 21: Geriatric Care

Learning Objective: Students will learn and understand how to deal with the special needs and care of a geriatric patient. Students will become familiar with physical changes experienced by a geriatric patient, the psychological and psychosocial needs of the patient and the nursing care required by geriatric patients.

Learner Competency: Students will be able to describe the geriatric patient physically and emotionally; assist with reality orientation; assist the patient to walk with or without the use of a walker; and list and define common chronic conditions of the geriatric patient.

UNIT 22: C.P.R. Orientation and Certification

Learning Objective: Students will learn and understand the principles and procedures of C.P.R.

Learner Competency: Students will demonstrate an understanding of the principles of C.P.R.; demonstrate the ability to perform C.P.R. when appropriate; demonstrate proficiency in C.P.R. in order to be certified.
A.3.b. NURSING ASSISTANT
SKILL INSTRUCTION

INSTRUCTIONAL METHODS AND TECHNIQUES

Instruction will emphasize individualized development and growth. Group instruction will occur through lecture and demonstration, but the majority of methods and techniques will involve small group activities and individualized tasks orientation. The following methods and techniques, depending on specific lesson content and level of task difficulty, will be employed.

- Lecture utilizing films, filmstrips and overheads
- Small group discussions regarding specific tasks
- Oral questioning by instructor and students
- Individualized self instructional learning packets
- Specific topic and task oriented instructional packets
- Laboratory experience and practice: CCRI nursing lab and satellite nursing home or hospital setting

The physical facilities of the College and the nursing center or hospital will provide those stations wherein the students develop the psychomotor skills and make practical applications of those principles and concepts learned in the academic classroom setting. More than fifty percent of skill training/instruction will be scheduled for practical hands-on application in the laboratory, nursing home or hospital. Small group instruction with two or three staff members will be utilized. Student pairing during hands-on activities will occur. Work projects involving specific job tasks will be assigned to each student for purposes of skill acquisition, development and evaluation.
MATERIALS: Films; filmstrips; transparencies; textbooks; workbooks; instruction sheets (e.g. information sheets, assignment sheets, job tasks or plan sheets, problem sheets, operation or procedure sheets, and experiment sheets prepared by the instructor); actual objects such as supplies, instruments, and equipment used in the nursing care of patients.

TEXTBOOKS, WORKBOOKS:

Being a Nursing Assistant by Schniedman and Lambert
4th Edition 1986, Hospital Research and Educational Trust
The Brady Company, Prentice-Hall, Englewood Cliffs, NJ 07632

Workbook for Being a Nursing Assistant 4th Edition 1986
Same as above

PHYSICAL RESOURCES:

- Academic classroom, CCRI-Flanagan Campus
- Nursing laboratory, CCRI-Flanagan Campus
- Local nursing care center
- Local hospital
- Audio visual equipment and supplies; video camera, recorder, etc.
DIRECTIONS: Evaluate the Trainee using the rating scale and check the appropriate number to indicate the degree of competency. The numerical ratings of 4, 3, 2 and 1 are not intended to represent the traditional school grading system of A, B, C and D. The descriptions associated with each of the numbers focus on level of student performance for each of the tasks listed below.

RATING SCALE: 4 - Skilled--can work independently with no supervision.
3 - Moderately Skilled--can perform job completely with limited supervision.
2 - Limited Skill--requires instruction and close supervision.
1 - No Exposure--no experience or knowledge in this area.

### ORIENTATION

<table>
<thead>
<tr>
<th>4</th>
<th>3</th>
<th>2</th>
<th>1</th>
</tr>
</thead>
<tbody>
<tr>
<td>A. Available Career Opportunities</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>B. Medical Ethics</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>C. Patient's Rights</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>D. Philosophy of Individual Worth</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>E. Striving for Self Understanding</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>F. Need for Self Approval</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>G. Need for Acceptance</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### MEDICAL TERMINOLOGY

<table>
<thead>
<tr>
<th>4</th>
<th>3</th>
<th>2</th>
<th>1</th>
</tr>
</thead>
<tbody>
<tr>
<td>A. Medical Abbreviations</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>B. Medical Specialties</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>C. Common Medical Roots, Prefixes and Suffixes</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### BODY STRUCTURE & FUNCTIONS

<table>
<thead>
<tr>
<th>4</th>
<th>3</th>
<th>2</th>
<th>1</th>
</tr>
</thead>
<tbody>
<tr>
<td>A. Science and the Health Care Worker</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>B. Basics of Living System</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>C. The Cell</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>D. Chemistry of Life</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>E. Health &amp; Disease</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>F. Microorganisms &amp; Humans</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>G. The Skin</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>H. Skeletal System: Osteology</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I. Skeletal Anatomy</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>J. Muscular System</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### K. RESPIRATORY SYSTEM

<table>
<thead>
<tr>
<th>4</th>
<th>3</th>
<th>2</th>
<th>1</th>
</tr>
</thead>
<tbody>
<tr>
<td>L. Cardio-Vascular System</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>M. Urinary System</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>N. Digestive System</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>O. Reproductive System</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>P. Genetics</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Q. Embryology &amp; Pre-Natal Development</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>R. Postnatal Growth &amp; Development</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>S. The Endocrine System</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>T. The Nervous System</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>U. The Senses</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### NUTRITION

<table>
<thead>
<tr>
<th>4</th>
<th>3</th>
<th>2</th>
<th>1</th>
</tr>
</thead>
<tbody>
<tr>
<td>A. Basic Food Groups</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>B. Hospital Diets</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### PATIENT UNIT

<table>
<thead>
<tr>
<th>4</th>
<th>3</th>
<th>2</th>
<th>1</th>
</tr>
</thead>
<tbody>
<tr>
<td>A. Hospital Beds</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>B. Environmental Safety</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>C. Body Mechanics</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>L. Techniques for Moving Patient</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>E. Use of Walker, Cane &amp; Crutches</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>F. Use of Restraints</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>G. Positioning Patient</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
### SPECIAL CARE TECHNIQUES

A. **Microbes & Medical Asepsis**  
B. **Method of Sterilization**  
C. **Handwashing**  
D. **Isolation Techniques**  
E. **Special Skin Care**  
F. **Foley and Peri Care**  
G. **Care of Patient with Tubes**  
H. **Bed, Bath & Back Rub**  
I. **Tub & Shower**  
J. **Oral Hygiene**  
K. **Bed Shampoo**  
L. **Nail & Foot Care**  

### RECORD KEEPING

A. **Temperature**  
B. **Pulse**  
C. **Respirations**  
D. **Blood Pressure**  
E. **Intake & Output**  
F. **Testing Urine**  
G. **Stool Specimens**  
H. **Charting**  
I. **Observing & Reporting**  
J. **Height & Weight**  
K. **Admission, Transfer & Discharge**  

### SPECIAL TECHNIQUES & CARE

A. **Hot & Cold Applications**  
B. **Dry & Sterile Dressings**  
C. **Enemas**  
D. **Douches**  
E. **Ostomy Care**  
F. **Post Mortem Care**  
G. **Diabetic Patient**  
H. **Geriatric Patient**  
I. **Obstetric Patient**  
J. **Pediatric Patient**  
K. **Orthopedic Patient**  
L. **First Aid**  
M. **Introduction to Basic Life Support**  
N. **Participation, Instruction, and Performance of CPR**  

### SIGNATURES:

**INSTRUCTOR:** ___________________________ **DATE:** __________  
**STUDENT:** ___________________________ **DATE:** __________
UNIT 1: Introduction to the Dental-Clerical Occupation

Learning Objective: Students will become familiar with the duties and responsibilities of the dental-clerical assistant. Students will learn certain facts concerning the dental office team and the roles of other team members. Students will also learn where to find dental-clerical jobs and what opportunities exist for career advancement within the dental-clerical assistant occupational area.

Learner Competency: Students will be able to list and explain the job duties and responsibilities of the dental-clerical assistant in relation to the dental office team. Students will also be able to identify job sources for the dental-clerical assistant and discuss alternative career options associated with the occupation.

UNIT 2: Personal Appearance and Oral Hygiene/Patient Oral Hygiene

Learning Objective: Students will learn proper grooming and dressing for work in a dental office or clinic. Students will also learn proper procedures and use of dental instruments for personal and patient oral hygiene.

Learner Competency: Students will demonstrate proper attire and grooming and will demonstrate proper techniques and procedures for maintenance of personal oral hygiene. Students will also demonstrate proper behavior involving personal actions and attitudes for the dental office or clinic.

UNIT 3: Understanding the Dental Patient

Learning Objective: Students will become familiar with the variety of patients and their behaviors. Students will learn to understand and accept patient behavior, in regards to pain, fear, anxiety and stress.

Learner Competency: Students will demonstrate the ability and confidence to deal with patients with different behaviors and recognize which approach to use.

UNIT 4: Helping the Dental Patient

Learning Objective: Students will learn to apply their understanding of patients in helping them overcome their fears and anxieties about dentistry. Students will learn facts concerning trust building, responsive listening, speaking with patients and special patients and situations.
Learner Competency: Students will demonstrate the ability to deal with patient fears, anxieties and concerns by role playing situations and using appropriate techniques to resolve those situations.

UNIT 5: Working Well Together: The Dental Health Team

Learning Objective: Students will learn how to deal and cope with the problems facing the dental health team members in their relationships with each other. Students will learn how to reduce or avoid stress among team members, build team support and develop problem solving skills.

Learner Competency: Students will demonstrate the ability to deal and cope with problems faced by the dental team members by role-playing situations and resolving those issues with appropriate techniques.

UNIT 6: Patient Reception

Learning Objective: Students will learn the procedures relating to greeting patients, completing a medical history and a registration form as well as the preparation of a patient treatment record.

Learner Competency: Students will demonstrate the ability to properly greet patients, complete a medical history, a registration form and prepare a patient treatment record.

UNIT 7: Telephone Procedures

Learning Objective: Students will learn proper telephone techniques regarding incoming and outgoing calls. Students will also learn procedures pertaining to proper disposition of calls and dealing with telephone answering services.

Learner Competency: Students will demonstrate the ability and skills to utilize proper telephone techniques by describing proper procedures and successfully completing telephone role-playing situations.

UNIT 8: Appointment Scheduling

Learning Objective: Students will become familiar with the types of appointment books and the procedures associated with appointment scheduling. Students will learn the use of units of time. They will also learn the procedures associated with appointment book entries; appointment planning; confirming appointments; coping with broken or canceled appointments and late patients; short notice appointments; and daily preparation for appointments.
UNIT 9: Recall Program

Learning Objective: Students will learn the basic concepts and procedures associated with recall systems and notification methods. Students will learn to utilize the continuing appointment system, the alphabetical file, instant recall, list by month and the chronological file. Students will also learn to utilize patient notification methods such as telephone recalls, written recall notices and the combination of telephone and written recall.

Learner Competency: Students will demonstrate proper use of those systems by describing such systems and explaining proper time for usage.

UNIT 10: Records Management

Learning Objective: Students will learn the basic procedures regarding the implementation and maintenance of basic filing systems which are either alphabetical or numerical; dental filing systems which include patient record files, recall file and short notice appointments. Students will also become knowledgeable concerning active/inactive files; rules for alphabetical filing; record storage; and the transfer of dental records.

Learner Competency: Students will demonstrate the ability to select, establish and maintain appropriate filing systems for the dental office or clinic. Students will be able to describe the procedures for establishing and maintaining an appropriate efficient records management policy and procedure for the dental office or clinic.

UNIT 11: Basic Typing

Learning Objective: Students will become familiar with the basic techniques of typing. Students will acquire a basic understanding of the typewriter's function and the skills needed to perform basic typing tasks. Students will learn the parts of a letter, different styles of letter writing and the skill to type labels, envelopes, statements and letters.
Learner Competency: Students will demonstrate the ability to identify the parts of a typewriter and the function of each part. Students will type labels, envelopes, statements and letters correctly and accurately. Students will also identify different form letters and the basic parts of a letter.

UNIT 12: Dental Hand Instruments/Lab Equipment

Learning Objective: Students will learn to identify, label and explain the function of dental hand instruments and lab equipment. Students will also learn their role and responsibility as it relates to the care, preparation and operation of dental hand tools and lab equipment.

Learner Competency: Students will demonstrate the ability and knowledge necessary to identify, label and explain the function of dental hand instruments and lab equipment. Students will also be able to explain and describe their roles in preparation, care and operation of the dental instruments and equipment.

UNIT 13: Sterilization-Disinfection-Sanitation

Learning Objective: Students will learn the theories and procedures associated with the concepts of sterilization, disinfection and sanitation as it pertains to the dental office or clinic. Students will learn the procedures for surface disinfection, chemical sterilization, physical sterilization, instrument preparation for disinfection, hand scrubbing, ultrasonic cleaning and autoclaving.

Learner Competency: Students will demonstrate the ability to define sterilization, disinfection and sanitation. Students will also demonstrate the ability to follow the directions and procedures for surface disinfection, chemical sterilization, physical sterilization, instrument preparation for disinfection, hand scrubbing, ultrasonic cleaning and autoclaving.

UNIT 14: Disease Transmission and Prevention

Learning Objective: Students will understand the theory and facts concerning disease transmission and prevention as it pertains to the dental patient and dental staff. Students will learn theory and facts concerning droplet infection; indirect transmission; self-infection; operator infection; personal contact; and carrier.

Learner Competency: Students will demonstrate the ability and knowledge to identify sources of disease transmission and provide methods and procedures to prevent disease transmission within the dental setting.
UNIT 15: Charting

Learning Objective: Students will learn the procedures pertaining to establishing and maintaining an accurate chart of a patient's visits to the dental office or clinic. Students will learn to establish a patient's personal history file; utilize the universal numbering system; recognize different styles of dental charts; recognize tooth surface terminology; chart existing restorations and needed restorations; and recognize different cavity classifications.

Learner Competency: Students will demonstrate the knowledge and skill to successfully perform procedures for establishing and maintaining an accurate patient chart by establishing a fictitious patient chart from beginning to end. Students will complete this chart and demonstrate the ability to explain the process.

UNIT 16: Radiology

Learning Objective: Students will understand the hazards of radiation and learn safe procedures for the developing and mounting of radiographs.

Learner Competency: Students will demonstrate the ability to safely and correctly follow the procedures involved in developing and mounting radiographs.

UNIT 17: Dental Health Insurance

Learning Objective: Students will learn to identify and recognize different types of dental health insurances, e.g. Dental Services Corporation, Blue Cross/Blue Shield, Commercial Insurance Company, Health Maintenance Organization. Students will also learn to identify and resolve those factors affecting dental insurance coverage; e.g. schedule of allowances, coinsurance, deductibles, exclusions, annual maximums. Students will also learn how to correctly complete a dental claim form regarding patient information, plan information, procedure codes and keeping track of claims.

Learner Competency: Students will demonstrate knowledge and skill by identifying and describing types of dental health insurance, factors affecting insurance coverage and the elements of a dental claim form. Students will be able to correctly complete a dental claim form.
UNIT 18: Charges and Payments

Learning Objective: Students will understand the purpose, use and procedures associated with patient ledger cards; daily journal page; receipts; bank deposits; methods of payment; collections; and preventative account control. Students will learn basic bookkeeping skills as it relates to the role and function of the dental-clerical assistant.

Learner Competency: Students will be able to perform the procedures and tasks related to basic bookkeeping functions pertaining to the patient ledger card, daily journal page, receipts, bank deposits, methods of payment, collections and preventive account control.

UNIT 19: Medical Emergencies in the Dental Office

Learning Objective: Students will learn to identify the medical signs for shock, pulmonary arrest, cardiac arrest, diabetes mellitus, hypoglycemia, epilepsy, drug addiction, carcinogenic shock, angina pectoris, heart failure, heart attack and cerebrovascular accident. Students will also learn to respond appropriately, quickly and effectively to any of the above medical emergencies.

Learner Competency: Students will demonstrate proper behavior in following procedures for medical emergencies. Students will demonstrate this skill by role-playing through structured activities approximating medical emergencies.

UNIT 20: Post Operative Instructions

Learning Objective: Students will learn to provide post operative instructions to patients regarding amalgam and composite care; oral surgery care; periodontal procedures; root canal therapy and care; the care of removable prosthodontics.

Learner Competency: Students will demonstrate through structured role playing activities the ability to provide post-operative instructions to patients receiving a variety of dental services.

UNIT 21: Patient Management

Learning Objective: Students will review correct procedures for the seating and greeting of patients; establishing patient medical history; registration of patient; recording of patient treatment; scheduling patient appointments; and interpreting and translating patient's needs to the doctor and directions from the doctor to the patient.

Learner Competency: Students will demonstrate skills and abilities to manage a patient's needs effectively and efficiently through structured demonstration activities and tests.
DENTAL-CLERICAL ASSISTANT/INTERPRETER

SKILL INSTRUCTION

INSTRUCTIONAL METHODS AND TECHNIQUES

Instruction will emphasize individualized development and growth. Group instruction will occur with lecture and demonstration but will involve small group activity and individualized tasks orientation and assignment. The following methods and techniques will be utilized depending on specific lesson content and level of difficulty.

- Lecture utilizing films, filmstrips, overheads, diagrams, pictures, charts, etc.
- Small group discussions and task activities
- Individualized task activities
- Oral questioning by instructor and students
- Individualized self instructional learning packets
- Specific topic and/or task oriented instructional packets
- Laboratory experience and practice
- Actual worksite exploration and experience

A greater percentage of the instruction (90%) will occur in the academic classroom. Since the primary function of the dental clerical assistant involves documentation and record keeping, the lab activity will be limited to students familiarizing themselves with the equipment and instrumentation of a dental office or clinic. The worksite exploration and experience will be provided after training and is limited to four weeks of duration where the students can, with supervision, practice the skills they've learned.
DENTAL-CLERICAL ASSISTANT/INTERPRETER

SKILL INSTRUCTION

INSTRUCTIONAL MATERIALS AND RESOURCES

MATERIAL: Films, filmstrips, transparencies, textbooks, workbooks, instruction sheets, learning activity packets, pictures and diagrams of instruments, actual instruments and equipment used in a dental office or clinic.

TEXTBOOKS/WORKBOOKS:

Dental Management Encyclopedia
Semantodontics Inc., P.O. Box 15668, Phoenix, AZ

Psychology in the Dental Office, 1982
Colwell Systems Inc., 201 Kenyon Rd., Champaign, IL 61820

Managing Insurance Claims in the Dental Office, 1982
Colwell Systems Inc., 201 Kenyon Rd., Champaign, IL 61820

Dental Hand Instruments Study Cards, 1982
Colwell Systems Inc., 201 Kenyon Rd., Champaign, IL 61820

Business Administration for the Dental Assistant, 1982
Colwell Systems Inc., 201 Kenyon Rd., Champaign, IL 61820

PHYSICAL RESOURCES:

- Academic Classroom, CCRI-Flanagan Campus
- Dental Lab, CCRI-Flanagan Campus
- Local Dental Clinics and Offices (Work Experience)
- Audio/Visual Equipment (Overhead Projector, film projector, filmstrip projector, video camera, recorder and player)
SKILL PROCESS REPORT

STUDENT'S NAME: ___________________________ DATE: ___________

E=Excellent    G=Good    F=Fair    P=Poor

CHARTING:

Universal Numbering System
Tooth Surfaces
Charting Existing Restorations
Charting Needed Restorations

PATIENT RECEPTION:

Greeting Patient
Medical History
Registration Form
Preparation of Treatment Record

RECORDS MANAGEMENT:

Basic Filing Systems
- alphabetical
- numerical
Dental Filing Systems
- patient record files
- ledger cards
- business record files
- recall file
- short notice appointments
Active/Inactive Files
Rules for Alphabetical Filing
Record Protection
Record Storage
Transfer of Dental Records

CHARGES AND PAYMENTS:

Patient Ledger Card
Daily Journal Page
Pegboard System
Receipts
Bank Deposits
Methods of Payment

60
DENTAL HEALTH INSURANCE:

UCR Fees
Deductibles
Exclusions
Annual Maximums
Patient Information
Plan Information
Procedure Codes
Keeping Track of Claims
Delta Dental of Rhode Island
Medical Assistance Form
Universal Form
Pre-Determination of Benefits

TELEPHONE:

Incoming Calls
Outgoing Calls
Disposition of Calls
Telephone Answering Techniques

APPOINTMENT SCHEDULING:

Time Units
Appointment Book Entries
Appointment Planning
Confirming Appointments
Late Patients
Short Notice Appointments
Daily Preparation for Appointments

RECALL PROGRAMS:

Recall Systems
- continuing appointment system
- alphabetical file
- instant recall
- list by month
- chronological file
Notification Methods
- telephone recall
- written recall notices
- combination of telephone and written notices
TYPEWRITING:

Basic Understanding of the Typewriter
The Parts of a Letter
Different Styles of Letters
Typing:
- labels
- envelopes
- statements
- letters

POST OPERATIVE INSTRUCTIONS:

Amalgam and Composites
Oral Surgery
Periodontal Procedures
Root Canal Therapy
Removal Prosthodontics

PATIENT MANAGEMENT:

Seating and Greeting Patients
Establishing Patient Medical History
Registration of Patient
Recording Treatment
Scheduling Appointments
Interpreting and Translating Patient's Needs to Doctor and Directions from Doctor to Patient

UNDERSTANDING DISEASE TRANSMISSION AND PREVENTION:

Droplet Infection
Indirect Transmission
Self-Infection
Operator Infection
Personal Contact
Carrier

STERILIZATION - DESINFECTION - SANITATION:

Definitions
Hand Scrubbing
UNIT 1: Word Processing/Data Entry Orientation

Learning Objective: Students will demonstrate an ability to list and describe the historical development of computers in word processing and data entry. Students will demonstrate the ability to recognize and describe the differences between dedicated word processors and word processing in a personal computer.

Learner Competency: Students will describe and list the origin and development of computers and its relationship to word processing and data entry. Students will recognize and differentiate between the functions and used of a dedicated word processor and word processing on a personal computer.

UNIT 2: Career Options in Word Processing and Data Entry

Learning Objective: Students will demonstrate the ability to list the duties and responsibilities of word processors and data entry clerks. Students will demonstrate the ability to list the various occupational and career options for word processors and data entry clerks.

Learner Competency: Students will be able to identify various occupational and career options for word processors and data entry clerks as well as list career opportunities for promotion and personal growth in the occupational area.

UNIT 3: Introduction to Computer Terminology

Learning Objective: Students will demonstrate the ability to recognize, read, and understand the basic terminology associated with computer technology, word processing and data entry.

Learner Competency: Students will be able to read and understand introductory text describing basic elements and components of computers and word processing systems.

UNIT 4: Organization and Structure of a Word Processing Installation

Learning Objective: Students will demonstrate the ability to recognize and understand the organizational structure of an integrated electronic office which utilizes word processing and data entry equipment and procedures.

Learner Competency: Students will list and describe the components of the organizational structure of an integrated office which utilizes word processing and data entry equipment and procedures.
UNIT 5: **Personal Computers: Hardware**

**Learning Objective:** Students will demonstrate the ability to recognize, identify and discuss the functions and hardware elements of the personal computer system. Students will acquire an in-depth understanding of the functions assigned to the CRT (monitor), the CPU (central processing unit), the keyboard and the disk drives of a personal computer system.

**Learner Competency:** Students will be able to identify the different hardware elements of a personal computer system and list the functions of each element as they relate to each other.

UNIT 6: **Personal Computers: Hardware Functions**

**Learning Objective:** Students will demonstrate the ability to operate a personal computer system by acquiring an in-depth understanding of the procedures associated with operating the CRT and CPU. Students will also learn the procedures of disk management, the disk operating system (DOS) and the numerous keyboard functions.

**Learner Competency:** Students will be able to explain and list the functions and operating procedures for the CRT (monitor), CPU (central processing unit) and the various kinds of disk drives. Students will be able to utilize the keyboard to engage the system and make it operational. Students will explain basic concepts of how material is stored on a diskette and the proper care of diskettes. Students will also explain the functions of a keyboard as it pertains to its function keys, its alphanumeric section and its cursor key pad. Students will be able to turn on a system, boot it up and make it operational.

UNIT 7: **Basic Features of Word Processing Hardware and Software**

**Learning Objective:** Students will demonstrate the ability to understand the basic differences between the functions of computer hardware and computer software and how they interact with each other to establish a complete personal computer word processing system. Students will demonstrate a basic understanding of the numerous functions of a software package.

**Learner Competency:** Students will be able to explain the differences between hardware and software as well as demonstrate the ability to engage the system using the hardware and then introducing the software. Students will also be able to list and describe the numerous functions of word processing software packages.
UNIT 8: Basic Typing

Learning Objective: Students will demonstrate the ability and knowledge to perform basic typing tasks. Students will learn the basic functions of a typewriter and the manual skills needed to perform basic typing tasks. Students will learn to calculate margins, center data, type personal correspondence, address envelopes, and format different styles of business letters, manuscripts, memorandums and reports.

Learner Competency: Students will be able to identify the different parts of a typewriter and their functions. Students will demonstrate the skill required to perform basic typing tasks. Students will demonstrate proper techniques for key reaches, knowledge of typewriter parts and basic manual skill for typing. Students will be able to demonstrate typing skills to correctly calculate margins, center data, type personal correspondence, address envelopes, and format different styles of business letters, manuscripts, memorandums and reports.

UNIT 9: Diskette Handling Procedures

Learning Objective: Students will demonstrate the ability to utilize proper procedures regarding the physical handling and care of diskettes. Students will also demonstrate the knowledge of procedures to format and copy diskettes using the DOS of the personal computer hardware.

Learner Competency: Students will demonstrate proper care and usage of diskettes. Students utilize the DOS system to format and copy diskettes.

UNIT 10: Computer Printer

Learning Objective: Students will demonstrate an indepth knowledge of the printer's role and function in a personal computer word processing system. Students will learn how to utilize the DOS system to engage the printer and produce written copy.

Learner Competency: Students will engage the printer and produce written copy as well as explain the function and purpose of the printer in relation to the personal computer word processing system. Students demonstrate the ability to perform tasks associated with on-line, form feed, line feed, top of form and form alignment procedures.
UNIT 11: Introduction to Specific Word Processing Packages

Learning Objective: Students will be introduced to two specific software word processing systems; "Multimate and Displaywrite 3". Students will demonstrate a basic understanding of the functions of word processing software systems, their basic features and advanced functions.

Learner Competency: Students will demonstrate the ability to understand and explain the purpose and functions of word processing software. Students will be able to distinguish between software packages and explain such basic features as indent, column manipulation, mathematical functions, spell checking, help features, outlining, directories, etc.

UNIT 12: Documentation for Software Packages

Learning Objective: Students will demonstrate the ability to utilize the manuals of specific software packages to learn to understand and implement to procedures of a word processing software package. Students will also learn the appropriate terminology associated with word processing systems such as word wrap, scrolling, format, etc.

Learner Competency: Students will demonstrate the ability to locate and utilize specific information regarding word processing procedures in the manual and demonstrate an understanding of key terminology and vocabulary.

UNIT 13: Computer Software/Operating System

Learning Objective: Students will demonstrate the ability to understand and utilize the procedures to perform tasks associated with the disk operating system (DOS) to format disk, copy disk, and engage the disk directory.

Learner Competency: Students will demonstrate the ability to perform tasks associated with the disk operating system (DOS) to format disk, copy disk and engage the disk directory.

UNIT 14: Computer Software Operating System

Learning Objective: Students will demonstrate the understanding of the procedures to perform functions associated with establishing files, copying files, deleting files, date and time, CHKDSK, erase and rename.

Learner Competency: Students will demonstrate the ability and knowledge to properly perform the procedures associated with the following tasks: copy files, establish files, delete files, date and time, CHKDSK, erase and rename.
UNIT 15: Computer Software/Application Software

**Learning Objective:** Students will demonstrate the ability to understand and utilize the application software (multimate, displaywrite III) to perform main menu procedures, to create a document, to edit print and merge a document, to control printing of a document, to spell check a document and to utilize document archiving and naming conventions.

**Learner Competency:** Students will demonstrate the ability to perform main menu procedures, create a document, edit print and merge a document, spell check a document and utilize document archiving and naming conventions by properly performing those procedures utilizing a personal computer and appropriate software package to produce and manipulate a specific document.

UNIT 16: Application Software/Multimate Word Processing

**Learning Objective:** Students will demonstrate the understanding and ability to implement procedures to perform the following functions of the multimate word processing software package: Help; Format; Delete; Copy; Move; Center; Indent; Search/replace; Paginate/repaginate; Merge creation; Library; Header/footer; Highlight; Cursor movement; Vertical/horizontal math; Column manipulation; Escape function; and Save/resume/exit functions.

**Learner Competency:** Students will demonstrate the ability and knowledge to properly perform the functions of the multimate word processing package accurately and correctly utilizing a personal computer system and the multimate software package.

UNIT 17: Displaywrite III Word Processing

**Learning Objective:** Same as Unit 16 but focusing on Displaywrite III procedures.

**Learner Competency:** Same as Unit 16 but focusing on Displaywrite III procedures.

UNIT 18: Keyboarding/Typing Text or Document Formats

**Learning Objective:** Students will demonstrate the ability and knowledge to perform those procedures associated with keyboarding or typing documents according to specified formats. Students will demonstrate the ability to: calculate correct margins using PICA and ELITE; Center data correctly both horizontally and vertically; read and interpret proofreader's marks; type and keyboard personal notes/letters; type and keyboard envelopes of all sizes;
type and keyboard business letters in block, modified block, modified block with indented paragraphs and AMS style; type and keyboard letters correctly utilizing special features such as: open/mixed punctuation, attention line, subject line, reply reference, mailing notation, company name in closing, postscript, reference, initials, copy, second page headings, and letter chart; type and keyboard tables with column centering, interoffice memos and memorandums, topic outlines, unbounded reports, formal reports, report outlines, footnotes and spread headings.

Learner Competency: Students will demonstrate the ability and knowledge to properly produce documents according to specific formats by producing such documents utilizing a typewriter and/or personal computer with appropriate word processing software.
Instruction will emphasize individual development and growth. Group instruction will occur with lecture and demonstration but the majority of time will focus on individual instructional activities. Students will be given individualized learning activity packages which will require that they accomplish specific tasks and assignments for each lesson within the unit.

The following methods and techniques will be utilized depending on specific lesson content and level of task difficulty.

- Lecture, utilizing films, filmstrips, overheads, diagrams, pictures, charts, etc.

- Small group discussions and task activities

- Individualized teacher prepared self instructional learning modules

- Specific topic and/or task oriented student assignments

- Laboratory experience (computer lab) and practice

The instruction will be scheduled for an academic classroom experience as well as hands on experience with computer hardware and software in the computer lab. Students will be required to spend a large percentage of classroom instruction in the computer lab completing teacher assigned tasks under the direct supervision of the instructor and the instructor aide who will provide individual assistance and instruction.
WORD PROCESSING/DATA ENTRY

SKILL INSTRUCTION

INSTRUCTIONAL MATERIALS AND RESOURCES

MATERIALS: Films, filmstrips, transparencies, textbooks, teacher prepared instruction sheets, job sheets, task sheets, learning activity packets, personal computer hardware and software, word processing software programs, typewriters, calculators.

TEXTBOOKS/WORKBOOKS:


PHYSICAL RESOURCES:

- Computer Laboratory
- IBM personal computer, Apple personal computer
- Word processing software: Displaywrite III, Multimate
- Typing Lab: electronic typewriters
- Audio-visual equipment
### BILINGUAL WORD PROCESSING SKILL CHART

<table>
<thead>
<tr>
<th>Topic</th>
<th>Comprehension</th>
<th>Execution</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>HARDWARE</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Components of Personal Computer</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CRT (Cathode Ray Tube)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CPU (Central Processing Unit)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Keyboard</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Diskette Drive</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hard File</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Printer</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Keyboard Layout</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Function Keys F1 - F10</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Alphanumeric Keys</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cursor Keys</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Control Keys</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Diskette Handling Procedures</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Physical Handling</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Formatting Procedures</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Copy Procedures</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Printer Capabilities</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Online</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Form Feed</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Line Feed</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Top of Form</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Forms Alignment</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>SOFTWARE</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Operating System</td>
<td></td>
<td></td>
</tr>
<tr>
<td>DOS (Disk Operating System)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Format Disk</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Diskcopy</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Disk Directory</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Copy Files</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Deleting Files</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Date and Time</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CHKDSK</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Erase</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rename</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Application Software</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MultiMate Word Processing</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Main Menu Procedures</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Creating a Document</td>
<td></td>
<td></td>
</tr>
<tr>
<td>TOPIC</td>
<td>COMPREHENSION</td>
<td>EXECUTION</td>
</tr>
<tr>
<td>--------------------------------------------</td>
<td>---------------</td>
<td>-----------</td>
</tr>
<tr>
<td>Editing a Document</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Printing a Document</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Merging of Documents</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Control Printing Document</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Spell Checking Document</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Document Archiving and Naming Conventions</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Multimate Functions</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Help</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Format</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Delete</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Copy</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Move</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Center</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Indent</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Search/Replace</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Repaqaate</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Merge Creation</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Library</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Header/Footer</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Highlight Functions</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Page Functions</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cursor Movement</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Vertical/Horizontal Math</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Column Manipulation</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ESC</td>
<td></td>
<td></td>
</tr>
<tr>
<td>SAVE/RESUME/EXIT</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Document Formats</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Margins Pica/Elite</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Horizontal Centering</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Vertical Centering</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Proofreader’s Marks</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Personal Note/Personal Letter</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Envelopes (all sizes)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Business Letters</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Block</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Modified Block</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Open/ Mixed Punctuation</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Letter Chart</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Special Features</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Second Page Headings</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Column Centering</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Interoffice Memo</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Topic Outline</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Unbound Report</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Formal Reports</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Report Outline</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Footnotes</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Spread Headings</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Word Processing Terminology</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Understanding of Terms</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Utilization of Terms</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
PROJECT BILLET

VESL CURRICULUM
I. **Purpose**

This curriculum will provide limited English proficient adult students the opportunity to practice the language of a vocational training class and job site. The curriculum will facilitate the students' ability to:

- understand the terminology (words, phrases, statements) that is specific to the vocational/occupational area.
- utilize the terminology to discuss or explain the procedures and processes of the vocational/occupational area.
- read and write simple statements, requests, and descriptions utilizing the terminology of the vocational/occupational area.
- understand the language used at a job site for the specific vocational/occupational area.
- converse and communicate effectively in the classroom and at the job site.
- understand and communicate effectively when applying for a job.
- make statements, ask questions, give directions and provide descriptions regarding the functions and duties of the specific vocational/occupational area.

II. **Target Population**

This curriculum will serve a limited English proficient adult population group that is characterized by the following:

1) Hispanic origins whose primary or first language is Spanish.

2) Are familiar with some of the cultural differences between their culture and the American culture.

3) Are considered to be intermediate English language users with some basic grammar skills, ability to write, (limited) ability to read, and ability to communicate orally with limited success.

4) Have limited educational backgrounds but can read and write in their primary language.
III. Introduction

This curriculum is being developed in response to the local need to provide relevant ESL instruction to limited-English-proficient (LEP) vocational adult students. Although vocational ESL or VESL is technically job specific, most VESL programs carry the dual responsibility of providing prevocational ESL along with vocational ESL instruction. Thus, this curriculum will include materials related to prevocational (eg. survival and employability skill) instruction. One good argument for including such material is that an effective vocational program will provide instruction that addresses all of the needs of the students which for limited English adults includes prevocational instruction. This curriculum will require the ESL instructor to teach material that is different and perhaps very difficult for the adult learner to understand and retain.

The specific purpose of this curriculum will be to provide the learners with the English language components and skills necessary to survive in a vocational education classroom and a job. The content and sequence of this job-specific language instruction will be situational and related specifically to the vocation or occupation. The instructional strategies will vary from highly controlled to communicative, however, experience has demonstrated that the most effective and efficient VESL programs contain three essential elements which will be incorporated into this curriculum.

The instructional strategies will be:

1. based exclusively on job specific language related to the occupation with minor concern for unrelated grammar and vocabulary.

2. actively involve the students in communicative learning activities which approximate the language situations found in the job and in the vocational classroom.

3. provided simultaneously with bilingual job skills training.
It is important to note that it will sometimes be difficult to distinguish between prevocational ESL and VESL. This will occur with topics related to employment where job-seeking and job-survival skills are presented as both prevocational and vocational skills.

The VESL instructional format will adhere to the following guidelines:

- Pronunciation will be deemphasized; recognizing that adults rarely completely master pronunciation of a second language.

- Grammar will be deemphasized, especially in the early stages. When presented, it will be done cognitively. The instructor must recognize that adult learners usually simplify grammar at first. The curriculum will be based on functional needs and occupational content.

- Vocabulary will be emphasized and will be closely related to the vocational content and learner needs.

- Memorization will be eliminated, or minimized, except for formulas which will be drill based on meaningful communicative exchanges.

- Native language will be used judiciously as an instructional tool, as well as, English-Spanish lexicons to emphasize comprehension and importance of meaning.

- Reading and writing will be introduced within the context of the occupational field and the prevocational employment skills (job applications, job want ads, application letters, payroll forms, etc.)

- Learning activities and objectives will be closely articulated with the content and activities of the vocational skill component.

IV. Role of Instructors

This curriculum will require close and regular collaboration between the VESL instructor and skill instructor.

The skill instructor will establish his/her curriculum based on the following sound principles derived from successful vocational education practices and successful bilingual education practices.

1. Occupational analysis is used to determine job requirements, duties and functions.

2. Training is adapted to the actual needs of industry.
3. Hands-on learning experiences are essential.

4. Communication skills are considered occupational skills.

5. The student should know at all times what is being taught and be able to respond to that instruction.

6. Instructional strategies and materials must be appropriate to the students' needs and abilities.

7. The instructional program is based on the strengths of both cultures.

8. The student's native language (Spanish) is used until the student is able to learn through the use of the English language. With these principles in mind, the ESL instructor will operate with the following assumptions:

1) A bilingual vocational education program, with a VESL component, enables students with minimal English to begin vocational training that will make them employable.

2) Student motivation to learn English is strong because it is directly related to success in the class and ultimately to success in the job market.

3) The objective of the VESL class is to enable the student to learn sufficient English to successfully complete the vocational education program and to be able to function in the job.

4) Learning sufficient English implies more than just a knowledge of certain vocabulary and grammatical structures. It means being able to use the language items to communicate effectively.

5) VESL must be primarily job-specific, not prevocational.

6) Teaching English is the responsibility of the VESL instructor, not the skill instructor. However, because of the collaborative effort, the vocational (skill) instructor can provide the "laboratory" for practicing English.

It will be the role of the ESL instructor to expand upon this curriculum and identify the communication needs and the corresponding language that the students must have to effectively communicate. The ESL instructor will schedule VESL instruction according to this curriculum, but also based on the sequence in which the communicative messages will be needed in the vocational education class. Therefore, collaboration with the vocational (skill) instructor is essential. The steps are as follows:
1. Meet with the vocational instructor weekly to:
   a) Review and discuss past and future lessons
   b) Share outlines and lessons for future VESL classes.
   c) Discuss ways to mutually reinforce the vocational materials.
   d) Discuss student issues, needs and problems.
   e) Obtain needs resource materials including:
      - Inventories
      - Manuals
      - Safety regulations
      - Task-detailing lists
      - Task listings
      - Actual objects
      - Instruction sheets
      - Manufacturer's literature
      - Texts
      - Audiovisual aids
      Also identify key vocabulary and grammatical structures used in
      each resource listed above.

2. Audit the vocational class for content, equipment, material, tools,
   and the vocabulary used in performing the tasks.

3. Read the text, paying special attention to key terms, headings, out-
   lines, summaries and comprehensive exercises. Become familiar with
   the language of the text.

4. Become familiar with the training competencies and language which the
   students will need on the job.

V. Language Learning Approach

This curriculum will be based on the "Natural Approach" of language
learning which follows a functional/communicative theory of language learning.
The emphasis will be on exposure or input rather than on practice. It will
optimize emotional preparedness for learning; on a prolonged period of at-
tention to what students hear before they try to speak; and on a willingness
to use written and other material as a source of comprehensible input.

Since the "Natural Approach" recognizes the student's emotional state
and attitudes as being crucial to the successful acquisition of language,
efforts will be made to present material and content in ways that enhance student motivation and self-confidence, as well as, reduces any feelings of personal anxiety. The curriculum will include lesson plans which are structured to allow for large amounts of comprehensible input. The lesson plans will also utilize visual aids, realia, textbooks, English-Spanish lexicons, job sheets, task detailed sheets, actual tools and products. The students will be exposed to a wide range of vocabulary that is occupation specific and relevant. The primary focus will be on listening, reading and writing with speaking being allowed to emerge gradually. The student work will center on meaningful communication rather than on form and finally, input will be interesting thus contributing to a relaxed classroom atmosphere.

The students' roles will vary according to their English proficiency level. Students may respond to either/or questions using single words or short phrases, complete charts or puzzles, and used fixed conversational patterns if their skills are limited. Students may also be involved in role plays and games, contribute personal information and opinions that is related to instructional content and participate in group problem solving if their skills allow them to feel comfortable and confident in the classroom.

The ESL instructor will assume three central roles. First, the instructor will act as the primary source of comprehensible input in the target language (English). Second, the instructor will create a classroom atmosphere that is interesting, friendly and calm with little anxiety. Third, the instructor will select and orchestrate a rich mix of classroom activities, involving a variety of group sizes, instructional content and contexts. The content material will provide a basic understanding of the language and allow for students to contribute their own suggestions and observations. The role of the instructor will be directive but also very responsive to the learning ability of each student.
The primary goal of the instructional material will be to make the classroom activities as meaningful as possible and to promote comprehension and communication. Pictures, diagrams, realia and actual tools and objects are essential because they will supply the content for communication and will facilitate the acquisition of a large amount of vocabulary and comprehensible input within the classroom. Since the "Natural Approach" freely adopts techniques and activities from other methods, the specific procedures for each lesson will be based on student needs and specific lesson content. Throughout these activities outlined in this curriculum, the instructor will maintain a constant flow of "comprehensible input" using key vocabulary items, appropriate gestures, relevant content and context, as well as, repetition, paraphrase and a spiral approach to learning in order to ensure comprehensible input.

VI. Lesson Plans

The lesson plans of this curriculum will contain both structural and communicative activities. Structured activities are defined as having the following characteristics:

1) They focus on specific vocabulary and/or grammatical structures.
2) They are teacher directed or controlled to a degree.
3) Student's errors are corrected judiciously thus eliciting little anxiety as possible.
4) The focus is on form within meaningful context.

Activities such as matching (picture to word) labeling diagrams of machinery or tools with their names are considered structured. Others are nonverbal responses to directives, questioning, sentence conversion, dialogues, verbal identification with repetition, labeling actual objects, written identification of parts of tools and machinery, crossword puzzles, reading exercises, and written exercises.
Communicative activities are defined as having the following characteristics:

1) They focus on a particular situation and draw from any relevant vocabulary and structures;

2) The students say or do anything that is appropriate for the situation;

3) The students are not corrected unless they cannot be understood in which case clarification is sought;

4) Understanding and conveying a message is the primary focus.

Activities such as role playing specific job related situations, listening for comprehension in a systematic way, occupational communication exercises, reading for comprehension, on the job writing and task step sequencing are communicative activities that are job specific and will enhance the students' English communicative ability.

Determining the content of a VESL lesson is a five step process. The first step is to determine the vocational topic which will be presented in the VESL lesson. The specific vocational topic may include one of the following: (task, task step, duty, objective). The second step is to determine the vocabulary which can be divided into technical and non-technical terms, words or utterances. The third step involves determining which grammatical structures are most frequently used for the given vocational topics. This curriculum will concentrate on the following structures since studies have found that they most often dominate this field: Imperatives, passives, prepositional phrases (location), nouns, noun compounds, adjective-nouns, simple present, past and future tenses, third person singular and noun plurals. The fourth step is to match the language components (vocabulary and grammar) of the lesson with the language skills (listening, speaking, reading, writing). The fifth step involves determining what specific cultural information should be included in clarifying the objectives of the lesson.
The VESL instructor will follow the curriculum sequence of lesson plans, but is encouraged to expand on what is being provided. Close collaboration with the skill instructor is necessary and adaptation of technical material will most often be required on the part of the VESL instructor.

The material within each unit will be presented in a carefully ordered sequence and will be based on these psychological laws of learning that encourage using the spiral approach to language learning within a meaningful context. A blend of the cognitive code theory and operant conditioning theory will be applied when fine tuning the application of the unit lessons. The instructor should also be aware of Chomsky's view of the existence in every human being of an innate language acquisition device. The instructor will build on what the student already knows. The instructor will proceed from the simple to the more difficult and complex. He/she will only present one new point, utterance, or function at a time. He/she will relate the new material to other known material in speech, reading and writing, in order to facilitate the students' comprehension of learning as a progressive, building block process.

The curriculum will prioritize the following:

1) Sounds and intonation patterns found in the vocabulary (technical, non-technical), dialogues and readings related to the occupational area.

2) Structures, function words and arrangements of words found in meaningful material which duplicates the communications of real life specifically related to the occupational area.

VII. Curriculum Evaluation

The evaluation of the curriculum will be ongoing and summative, occurring periodically throughout the course. The instructor will be responsible to evaluate the course curriculum by examining the effectiveness, relevance and student comprehension of the instructional content and learning activities as it relates to the curriculum goals and objectives.
The following questions will serve as format guides to examine and evaluate the instructional content of the curriculum:

1) Is the content based on a situational approach rather than a structural approach?

2) Does the curriculum contain the appropriate kinds of content information that is relevant to the course objectives?

3) Does the language reflect the level of sophistication or proficiency of the students?

4) Does the curriculum present and isolate useful and appropriate vocabulary?

5) Does the curriculum present and isolate useful and appropriate grammatical structures?

6) Are a variety of appropriate structures provided for each situational topic?

7) Is the curriculum content accurate and up-to-date in regards to the specific occupation?

8) Are the students able to comprehend and retain the instructional content?

The following questions will serve as format guides to examine and evaluate the learning activities of the curriculum:

1) Does the curriculum provide a sufficient number of structured language exercises?

2) Does the curriculum provide real communicative activities which approximate actual language behavior, allow for a variety of student responses, and which focus on the students' ability to comprehend and convey a message?

3) Do the activities and exercises produce responses that are appropriate and real?

4) Do all the activities or exercises produce responses that are natural sounding and not contrived?

5) Are the written activities or exercises relevant and useful to the course objectives?

6) Are the activities facilitating the student's ability to learn content?

7) Are the students able to understand and participate in the numerous activities and exercises without undue stress?
The instructor will provide periodic evaluation reports in a written format for purposes of measuring effectiveness and appropriateness.

The following is a listing of resources which may be utilized to implement this curriculum. The instructor will be urged to expand this listing to include other appropriate resources depending on the needs of the student.

a) Textbook used in skill class
b) English/Spanish lexicon for terms
c) Diagrams, charts and pictures
d) VESL occupational textbook, if available
e) Filmstrips, video tapes and films
f) Realia such as actual tools, machinery, products and stock
g) Handouts such as job sheets, information sheets, task detailing sheets, lists of tools and equipment, and operation/procedural sheets.
h) ESL textbooks with grammar functions and communicative exercises that are relevant to the needs of the student in the occupational field
UNIT 1: Machine Trades Orientation

Learning Objective: Learn and identify the vocabulary associated with describing certain facts about the machine trades; different jobs, types of organizations, open and closed shops, shop working conditions.

Learner Competency: The learner will be able to identify and recognize the vocabulary used to describe machine trades. The learner will orally describe the basic structure of machine trade occupations.

UNIT 2: Materials and Alloys

Learning Objective: To recognize and utilize the terms used to describe the materials and alloys of the machine trade.

Learner Competency: The students will identify the different terms and vocabulary and be able to read them and explain their meanings.

UNIT 3: Occupational Safety

Learning Objective: To learn to identify, understand, read and vocalize the vocabulary associated with shop safety and safety signs.

Learner Competency: Students will demonstrate knowledge by reading signs and performing actions based on given directions.

UNIT 4: Basic Math Concepts

Learning Objective: Students will become familiar with the math related vocabulary, e.g. fractions, decimals, inches, measurement etc., and be able to read and make utterances using the terminology.

Learner Competency: Students will be able to read statements and perform those math calculations according to the directions.

UNIT 5: Blueprint Reading and Sketching

Learning Objective: Students will become familiar with, and be able to, read and vocalize vocabulary and statements of direction pertaining to blueprint reading.

Learner Competency: Students will read blueprint directions and demonstrate knowledge by completing a blueprint and explaining what it will produce.
UNIT 6: **Hand Tools and Bench Work**

**Learning Objective:** Student will become familiar with the names given to bench work equipment and tools. They will also learn to read and understand directions on how to use those tools and equipment in different operations.

**Learner Competency:** Following written directions and verbal commands, students will demonstrate the ability to identify tools and equipment as well as the operations associated with specific tools and equipment.

UNIT 7: **Cutting Fluids and Layout**

**Learning Objective:** Student will learn the vocabulary and terminology associated with cutting fluids and layout procedures.

**Learner Competency:** Students will be able to verbally describe different fluids and layout procedures. Student will demonstrate this knowledge by identifying different fluids and by describing layout procedures.

UNIT 8: **Measuring Tools**

**Learning Objective:** Student will become familiar with the names given to the myriad of measuring tools such as rules, micrometers, calipers, etc. They will learn to identify them and be able to read their names in different contexts. They will also learn to describe their physical properties, as well as their care and maintenance.

**Learner Competency:** Students will be able to identify each tool and verbally describe their physical properties and care and maintenance.

UNIT 9: **Horizontal Band Saw**

**Learning Objective:** The student will learn the names and terms given to the different parts of the horizontal band saw. They will also demonstrate familiarity with the terminology used to describe the operation of the horizontal band saw.

**Learner Competency:** The student will verbally demonstrate the ability to read and identify the different parts of the band saw as well as describe how to safely operate the band saw.

UNIT 10: **Vertical Band Saw**

**Learning Objective:** Student will learn the names and terms given to different parts of a vertical band saw. They will be able to read the writing on the band saw as well as demonstrate familiarity with the terminology used to describe the operation of the vertical band saw.
UNIT 11: Drill Press Operation and Safety

Learning Objective: Students will learn the names and terms given to different parts of a drill press as well as demonstrate familiarity with the terminology used to describe the operation of a drill press.

Learner Competency: Students will verbally demonstrate the ability to read and identify the different parts of a drill press as well as describe how to safely operate a drill press.

UNIT 12: Operating the Drill Press

Learning Objective: Students will learn the terminology used to describe the six (6) major operations of the drill press. They will learn to verbalize, read and write the terminology.

Learner Competency: Students will demonstrate acquisition of those verbal, reading and writing skills by demonstrating the procedures (from a list of directions) and by writing down the steps they are taking to accomplish the process.

UNIT 13: Characteristics of an Engine Lathe

Learning Objective: Students will learn the terminology used to describe the physical characteristics of the engine lathe, lathe safety, and the basic parts and controls of the lathe and the function of its accessories.

Learner Competency: Students will verbally demonstrate acquisition of those skills by identifying and describing the physical characteristics of the engine lathe and explaining the functions of its accessories.

UNIT 14: Engine Lathe Computations

Learning Objective: Students will become familiar with the terminology and vocabulary used in lathe computations. They will develop an understanding of the terminology's meaning and function.

Learner Competency: Students will be able to explain how to solve computational problems by describing the computational process.
UNIT 15: Lathe Operations

Learning Objective: Students will acquire the necessary vocabulary and terminology required to explain the steps involved in the operation of the lathe.

Learner Competency: Student will be able to demonstrate language skill acquisition by performing a lathe operation while describing the process.

UNIT 16: Milling Machines Operation and Safety

Learning Objective: Students will learn the vocabulary and terminology related to safety signs and directions for milling machine operation. They will also learn the names and terms given to different parts of the milling machine.

Learner Competency: Students will be able to verbally identify and read the names of safety signs as well as the different parts and controls of the milling machine.

UNIT 17: Milling Machine Operation

Learning Objective: The learner will develop the ability to read directions concerning the operation of milling machines. Student will also be able to read a job sheet and explain how to perform the required tasks on a milling machine.

Learner Competency: Student will demonstrate language skill acquisition by performing a milling machine operation while describing the process.

UNIT 18: Surface Grinder

Learning Objective: Student will learn the names and terms used to describe the different parts of a surface grinder as well as the accessories used in performing operations related to the surface grinder.

Learner Competency: Student will identify and describe the different parts and accessories of a surface grinder.

UNIT 19: Surface Grinder Operation

Learning Objective: Student will learn the vocabulary and terminology used to describe surface grinder operations.

Learner Competency: Student will verbally describe the different operations and their procedures. Student will also be able to read job task sheets related to surface grinders and describe how to accomplish the specific tasks.
UNIT 20: Finding a Machine Trade Job

Learning Objective: Student will learn to read want ads in newspapers and job listings at local public employment offices and private employment agencies.

Learner Competency: Student will identify and read a want ad and job listing from each source and be able to explain what is being advertised to the instructor and/or other students.

UNIT 21: Completing a Job Application

Learning Objective: Student will learn the terminology and vocabulary that is used to formulate the questions asked on a job application. Student will understand the nature of the questions and correctly provide answers.

Learner Competency: Student will successfully complete (in writing and verbally) four or five different job applications.

UNIT 22: Job Interview

Learning Objective: Student will learn the vocabulary and terminology that is specific to the job interview process.

Learner Competency: Student will successfully complete a mock job interview, by making a positive impression through effective use of language interview skills.
The emphasis will be on individualized instruction with some group instruction being provided through lecture and demonstration. The following methods and techniques will be utilized and implemented depending on lesson content and level of difficulty.

- lecture, demonstration
- matching
- non-verbal responses
- questioning
- sentence conversion
- dialogues
- verbal identification with repetition
- labeling actual objects
- written identification
- crossword puzzles
- micro-ESL activities
- listening for comprehension
- occupational communication exercises
- close technique for written comprehension
- reading for comprehension
- on-the-job writing
- task step sequencing

Instructor will utilize the dynamics of large and small group interaction when implementing the above. A very good description of each method and technique listed above is found in "The Vocational VESL Handbook" by Joan E. Friedenberg and Curtis H. Bradley, Newbury House Publishers Inc., MA 1984.
MACHINE TECHNOLOGY

VOCATIONAL ENGLISH INSTRUCTION

INSTRUCTIONAL MATERIALS AND RESOURCES

MATERIALS: Overhead transparencies, textbook, workbook, instruction sheets, actual objects, tools and machinery found in a machine shop

TEXTBOOKS, WORKBOOKS:

Machine Tool Technology (Textbook)
Bennett and McKnight division of Gencoe Publishing

Machine Tool Technology Study Guides 1 and 2
Same as above

Technical Terms, Spanish/English Lexicon

Elementary Blueprint Reading for Machinist

English That Works
Scott, Foresman and Co., 1982

Printed and distributed by Metropolitan Life and Affiliated Companies

PHYSICAL RESOURCES:

Academic classroom

Machine Shop Lab with equipment and supplies

Audio-visual equipment including video tape camera, recorder, and player
UNIT 1:  Welding Technology Orientation

Learning Objective:  Students will learn and identify the vocabulary associated with describing certain facts about the welding trade.

Learner Competency:  Students will identify and recognize the technical and non-technical vocabulary of welding and demonstrate the ability to verbally describe certain facts about welding technology.

UNIT 2:  Welding Processes

Learning Objective:  Students will learn and identify the vocabulary associated with describing the five major welding processes: gas welding, arc welding, mig welding, tig welding and cutting welding.

Learner Competency:  Students will be able to verbally describe the five processes of welding, noting their similarities and differences.

UNIT 3:  Protective Clothing

Learning Objective:  Students will recognize and utilize the vocabulary associated with protective clothing, both verbally and in written format.

Learner Competency:  Students will demonstrate knowledge by verbally identifying the purpose and use of clothing, as well as read the terminology associated with protective clothing.

UNIT 4:  Gas Welding and Arc Welding Tools

Learning Objective:  Students will learn to identify, understand and verbalize the vocabulary and terminology associated with welding tools.

Learner Competency:  Students will demonstrate knowledge by completing an oral test identifying the tools and explaining their usage. Students will also complete a fill-in-the-blank questionnaire, write simple statements and questions regarding the function of tools.

UNIT 5:  Welding Shop Tools

Learning Objective:  Same as UNIT 4

Learner Competency:  Same as UNIT 4
UNIT 6: Welding Shop Safety

Learning Objective: Students will learn to identify, understand, read and verbalize the vocabulary associated with shop safety and safety signs.

Learner Competency: Students will be able to demonstrate knowledge by reading signs, explaining their meaning and function as well as follow the directions given through safety rules.

UNIT 7: Measurement in Welding

Learning Objective: Students will become familiar with the terminology associated with basic measurement in welding.

Learner Competency: Students will, given pictures and diagrams, demonstrate the ability to label those pictures and diagrams with appropriate measurement terminology and verbally explain and identify their function.

UNIT 8: Measuring Tools

Learning Objective: Students will learn the vocabulary which describes measuring tools used in welding. They will also learn to write simple declaratory sentences and questions regarding measuring tools.

Learner Competency: Students will demonstrate ability to label each tool, verbally and in written format, as well as describe, using simple sentences, the function of each tool.

UNIT 9: Degrees and Angles

Learning Objective: Students will learn to recognize the vocabulary and terminology associated with degrees and angles as it related to welding technology.

Learner Competency: Students will demonstrate knowledge by verbally and in written format identifying the different degrees and angles associated with the welding processes.

UNIT 10: Lines and Shapes

Learning Objective: Same as UNIT 9, concentrating on lines and shapes.

Learner Competency: Same as UNIT 9, concentrating on lines and shapes.

UNIT 11: Blueprint Reading and Sketching

Learning Objective: Student will develop an understanding of the vocabulary and terminology used in blueprint reading and sketching. They will learn to read directions and word problems that relate to blueprint reading and sketching.
Learner Competency: Students will demonstrate ability to understand the vocabulary and terminology of blueprint reading and sketching by solving problems and following directions.

UNIT 12: Standard Stock in Welding

Learning Objective: Student will recognize and be able to use (verbally and written) the vocabulary and terminology associated with standard stock.

Learner Competency: Students will be able to read and verbalize the information on stock order sheets, as well as write an order.

UNIT 13: Welding Rods

Learning Objective: Students will learn to identify, understand, read and verbalize the names of different welding rods. They will also learn how to verbally describe their characteristics and how they are used in welding processes.

Learner Competency: Students will demonstrate their knowledge of welding rod terms and associated vocabulary by verbally describing their characteristics and usage.

UNIT 14: Positions, Joints, Grooves and Welds

Learning Objective: Students will become familiar with the vocabulary and terminology associated with welding positions, joints, grooves and welds. They will learn to describe them using simple declaratory sentences.

Learner Competency: Students will demonstrate their knowledge by verbally describing different positions, joints, grooves and welds.

UNIT 15: Welding Beads

Learning Objective: Student will become familiar with the vocabulary and terminology used to describe different welding beads.

Learner Competency: Student will verbally describe different welding beads and be able to read and write the terms describing different beads.

UNIT 16: Gas Welding

Learning Objective: Students will learn the terms and vocabulary associated with the tools and equipment of gas welding, as well as with the processes of gas welding.

Learner Competency: Students will be able to explain and describe the process of gas welding.
UNIT 17: Arc Welding

Learning Objective: Same as UNIT 16, concentrating on the processes of Arc Welding.

Learner Competency: Same as UNIT 16, concentrating on the processes of Arc Welding.

UNIT 18: Tig Welding

Learning Objective: Same as UNIT 16 and 17, concentrating on the processes of Tig Welding.

Learner Competency: Same as UNIT 16 and 17, concentrating on the processes of Tig Welding.

UNIT 19: Weld Defects and Corrections

Learning Objective: Students will learn the vocabulary and terminology that describes verbally and in written format the different kinds of weld defects and methods of correction.

Learner Competency: Students will describe (verbally and in written format) welding defects and ways to correct such defects.

UNIT 20: Finding a Welding Job

Learning Objective: Students will learn to read want ads in newspapers and job listings from local public employment agencies and private employment agencies. Students will become familiar with the vocabulary and terminology used in job advertisements.

Learner Competency: Students will demonstrate ability to read different want ads and job listings and understand what is being advertised. Students will be able to paraphrase what is being presented.

UNIT 21: Completing a Job Application

Learning Objective: Students will learn to read, understand and respond verbally and in written format to the questions and information requests of different job applications.

Learner Competency: Students will demonstrate knowledge and ability by successfully completing and responding to three or more different job applications.

UNIT 22: Completing a Job Interview

Learning Objective: Students will learn the vocabulary and terminology that is specific to the job interview process.

Learner Competency: Students will demonstrate knowledge and skill acquisition by successfully completing a practice job interview.
The emphasis will be on individualized instruction with some group instruction being provided through lecture and demonstration. Small group activities will be provided when appropriate and relevant to the instructional content. The following methods and techniques will be utilized and implemented, depending on lesson content and level of content difficulty.

- lecture, demonstration (small and large groups)
- nonverbal responses, labeling actual objects
- matching exercises and activities (verbal, written, action)
- questioning activities (directed, undirected)
- sentence conversions, substitution exercises
- dialogues, role play
- verbal identification with repetition
- written identification, crossword puzzles
- micro-ESL activities
- listening for comprehension exercises
- occupational communication exercises
- close technique for written comprehension
- reading for comprehension exercises
- on-the-job writing, task writing
- task step sequencing (verbal, written format)
B.2.c.

WELDING TECHNOLOGY

VOCATIONAL ENGLISH INSTRUCTION

INSTRUCTIONAL MATERIALS AND RESOURCES

MATERIALS: Textbooks, workbooks, instruction sheets, films, filmstrips, actual welding tools, products and supplies, diagrams, charts and specification sheets.

TEXTBOOKS/WORKBOOKS:

Elementary Blueprint Reading for Welders
Delmar Publishing Inc. 1981
Albany, NY

Student Manual 1984
Prepared by West Bay Vocational Technical School
Coventry, RI

Technical Terms (Welding) Spanish/English Lexicon
Career Development Center
School of Technical Careers
Southern Illinois University
Carbondale, ILL
June, 1981

Welding: Vocational English as a Second Language
The Alemany Press, 1984
2501 Industrial Parkway, West
Hayward, CA 94545

Speaking Up at Work
Oxford University Press, 1985
Madison Avenue
New York, NY

Printed and Distributed by Medtropolitan Life
and Affiliated Companies

PHYSICAL RESOURCES:

Welding laboratory with equipment, academic classroom, audiovisual equipment.
UNIT 1: Being a Nursing Assistant

Learning Objective: Students will recognize, understand and be able to read the terminology and vocabulary associated with describing the duties and responsibilities of a nursing assistant, the medical ethics of patient care, and the rights of the patient.

Learner Competency: Students will demonstrate their ability to recognize and understand appropriate terminology and vocabulary by reading a text and verbally explaining its meaning using their own words and visual aids provided by the instructor.

UNIT 2: Communication in the Health Care Setting

Learning Objective: Students will learn to understand and verbalize the appropriate terminology and vocabulary associated with professional communication with other workers and patients. Students will learn to use appropriate language in dealing with patients, visitors and other professional staff members.

Learner Competency: Students will demonstrate their ability and knowledge acquisition of proper terminology and vocabulary by role playing situations concentrating on verbal skills.

UNIT 3: Introduction to Medical Terminology

Learning Objective: Students will become familiar with medical abbreviations, medical specialties, common medical roots, prefixes and suffixes. They will develop the knowledge and ability to read and write the terminology correctly and accurately.

Learner Competency: Students will demonstrate knowledge acquisition by recognizing medical abbreviations, spelling and announcing various medical terms correctly and defining terms and elements relating to anatomy, physiology, diseases, diagnoses and surgical procedures.

UNIT 4: Safety and Fire Prevention

Learning Objective: Students will become familiar with the terminology and vocabulary used to describe rules of institutional safety, procedures to prevent fires and evacuate in case of emergency and with safety procedures relating to the use of oxygen.
Learner Competency: Students will be able to read and explain the rules and procedures associated with safety and fire prevention.

UNIT 5: Infection Control

Learning Objective: Students will learn to read and understand the meaning of words and terminology associated with microbes and medical asepsis. They will learn the meaning of sterilization and disinfection and their associated vocabulary. They will also learn to read and understand the vocabulary and terminology used to describe handwashing and isolation techniques.

Learner Competency: Students will be able to read and understand expository text describing microbes and medical asepsis. They will also be able to read and understand directions concerning handwashing and isolation techniques and demonstrate proper procedures to accomplish those tasks.

UNIT 6: Patient's Environment

Learning Objective: Students will learn the vocabulary and terminology associated with describing the equipment in a patient's environment. They will learn to read and understand the operating instructions of all the equipment in a patient's unit. They will also learn the vocabulary associated with describing the purposes of different bed making techniques.

Learner Competency: Students will demonstrate knowledge acquisition by verbally describing and labeling the equipment in a patient's environment as well as describing their use. Students will also list different bed making techniques and explain the purpose of each technique.

UNIT 7: Human Anatomy and Physiology

Learning Objective: Students will be introduced to the terminology and vocabulary related to describing the basic concepts of anatomy and physiology. Students will learn to read and understand the meaning of the various vocabulary words and terminology used in explaining basic concepts of anatomy and physiology.

Learner Competency: Students will be able to read expository text concerning theories associated with anatomy and physiology and demonstrate understanding by explaining the concepts using their own language skills and visual aids provided by the instructor.
UNIT 8: The Musculoskeletal System

Learning Objective: Students will learn and understand the terminology and vocabulary utilized to describe and explain the basic concepts and functions of the musculoskeletal system.

Learner Competency: Students will demonstrate knowledge and understanding by identifying and describing (verbally) the numerous functions of the skeletal system. Students will be able to read and understand the terminology and vocabulary describing the functions and demonstrate such knowledge and ability by successfully completing oral and written tests.

UNIT 9: Lifting, Moving and Transporting Patients

Learning Objective: Students will learn to read and understand the vocabulary and terminology used to describe principles of body mechanics, techniques for moving patients; instructions on using walkers, crutches, canes, restraints and the principles of various positioning techniques.

Learner Competency: Students will demonstrate understanding of vocabulary and terminology by completing tasks involving principles of body mechanics outlined on instructional task sheets.

UNIT 10: The Integumentary System

Learning Objective: Students will learn to identify, read and understand the vocabulary and terminology used to describe and explain the anatomy and physiology of the integumentary system.

Learner Competency: Students will demonstrate understanding of vocabulary and terminology by labeling a diagram of a cross section of skin; and by explaining (verbally) the role of skin in regulating body temperature.

UNIT 11: Personal Care of the Patient

Learning Objective: Students will become familiar with and be able to understand the vocabulary and terminology utilized in explaining and describing the theories and procedures associated with patient care as it relates to bed, bath, and back rub; tub and shower; oral hygiene; bed shampoo; nail and foot care; special skin care (prevention of decubiti); foley and peri care; and care of patients with I.V. and N.G. tubes.
Learner Competency: Students will be able to successfully describe (verbally) the procedures which they must perform regarding the personal care of the patient.

UNIT 12: Circulatory and Respiratory Systems

Learning Objective: Students will learn to identify, read and understand the terminology and vocabulary utilized in explaining and describing the basic anatomical and physiological concepts of the circulatory and respiratory systems.

Learner Competency: Students will be able to label a diagram with the organs of the circulatory and respiratory systems; verbally describe the functions of the circulatory and respiratory systems; and verbally describe the functions of blood.

UNIT 13: Measuring and Recording

Learning Objective: Students will become familiar with and learn to read and write the vocabulary and terminology associated with measuring and recording vital signs, body temperature, pulse, respirations and blood pressure.

Learner Competency: Students will demonstrate their understanding and ability to record information by performing the steps and procedures as outlined in an instructional task sheet and verbally describing the process.

UNIT 14: The Gastrointestinal System and Nutrition

Learning Objective: Students will learn to identify, read and understand the vocabulary and terminology used in describing the anatomy and physiology of the gastrointestinal system. They will also become familiar with the vocabulary and terminology associated with nutrition specific to the occupation.

Learner Competency: Students will be able to label a diagram showing the organs of the digestive system and verbally describe the function of each organ. The students will also be able to read a patient menu card and explain the four basic food groups. Students will also demonstrate the ability to read and understand the procedures or steps to prepare a patient for feeding by performing the steps according to an instructional task sheet.
UNIT 15: The Excretory System

Learning Objective: Students will learn to recognize, understand and read the vocabulary and terminology utilized to describe the anatomy and physiology of the excretory system. Students will be able to read and understand the procedures and directions listed on equipment used to perform procedures associated with the care of the excretory system.

Learner Competency: Students will be able to label a diagram with the organs of the excretory system and verbally explain their functions. The students will also be able to demonstrate their knowledge of the terminology and vocabulary used to describe the procedures for patient care relating to the excretory system by role playing the directions on specific instructional task sheets.

UNIT 16: The Endocrine System

Learning Objective: Students will learn to recognize, understand and read the vocabulary and terminology utilized to describe the anatomy and physiology of the endocrine system and the procedures in the care of the diabetic patient.

Learner Competency: Students will be able to label a diagram of the endocrine glands in the body; verbally describe the function of each gland using the correct terminology and vocabulary and recognize the names of common disorders of the endocrine system. Students will also demonstrate the ability to read and understand terminology associated with the care of diabetic patients; e.g. insulin shock, diabetes coma, etc. Students will also be able to complete reports and follow directions concerning urine tests.

UNIT 17: Reproductive System

Learning Objective: Students will learn to recognize, understand and read the vocabulary and terminology utilized to describe the anatomy and physiology of the reproductive system and the procedures for the care of the gynecological patient.

Learner Competency: Students will be able to label a diagram of the male and female reproductive systems and verbally explain the function of those organs utilizing the appropriate vocabulary and terminology. Students will also demonstrate their understanding of the written procedures regarding perineal care and vaginal douche.
UNIT 18: Warm and Cold Applications

Learning Objective: Students will learn to recognize, understand and read the vocabulary and terminology utilized to describe the procedures of warm and cold applications.

Learner Competency: Students will be able to read the directions involved in warm and cold applications by physically demonstrating the steps and procedures.

UNIT 19: Physical Examinations

Learning Objective: Students will learn to recognize, understand and read the vocabulary and terminology associated with physical examinations. Students will be familiar with the names given to the equipment used in a physical examination.

Learner Competency: Students will be able to label the different pieces of equipment used in a physical examination and give directions to the patient regarding different patient positions used in a physical examination.

UNIT 20: Pre-operative and Post-operative Care

Learning Objective: Students will learn to recognize, understand and read the vocabulary and terminology used in describing the principles and procedures related to pre and post operative care, intravenous infusion equipment, the care of the ostomy patient and the use of binders and elastic bandages.

Learner Competency: Students will be able to complete a pre-operative checklist; explain to the patient the procedures which are being utilized relating to post-operative care, deep breathing exercises, ostomy care and application of binders and bandages.

UNIT 21: Geriatric Care

Learning Objective: Students will learn to recognize, read and understand the vocabulary and terminology used to describe and explain the specialized care and needs of a geriatric patient. Students will also learn to verbalize appropriate instruction and directions to the geriatric patient.

Learner Competency: Students will be able to verbally describe the common ailments of a geriatric patient and demonstrate verbal skills in giving directions and instructions to the geriatric patient.
UNIT 22: C.P.R. Orientation and Certification

Learning Objective: Students will learn to recognize, read and understand the terminology and vocabulary associated with C.P.R. procedures.

Learner Competency: Students will be able to demonstrate an understanding and utilization of the appropriate vocabulary and terminology by completing a written test and by performing the appropriate procedures leading to certification.

UNIT 23: Finding a Nursing Assistant Job

Learning Objective: Students will learn to read want ads in newspapers and job listings from local employment agencies and private employment firms. Students will become familiar with the vocabulary and terminology used in job advertisements.

Learner Competency: Students will demonstrate the ability to read different want ads and job listings and understand what is being advertised. Students will also learn how to respond to different types of ads by appropriately responding to such ads.

UNIT 24: Completing a Job Application

Learning Objective: Students will learn to read, understand and respond (verbally and written) to the questions and directions of five different job applications related to the nursing field. They will also learn how to solicit references by writing a letter requesting references.

Learner Competency: Students will demonstrate acquisition of knowledge and ability by successfully completing five applications and by verbally responding to the questions. Students will also solicit references and establish five references.

UNIT 25: Completing a Job Interview

Learning Objective: Students will become familiar with the terminology and vocabulary related to the job interview process. Students will learn the verbal skills needed to successfully complete a job interview.

Learner Competency: Students will demonstrate acquisition of those verbal skills by successfully completing a practice job interview on two occasions.
The emphasis will be on individualized instruction with some group instruction provided through lecture and demonstration. Small group activities will be provided when appropriate and relevant to the instructional content. The following methods and techniques will be utilized and implemented, depending on lesson content and difficulty.

- Lecture, demonstration (small and large groups)
- Nonverbal directions and responses
- Labeling actual objects
- Matching exercises and activities (verbal and written)
- Questioning activities (directed and non-directive)
- Sentence conversions, substitution exercises
- Dialogues, role play
- Verbal identification with repetition
- Written identification, crossword puzzles
- Micro-ESL activities
- Listening for comprehension exercises
- Cloze techniques for written comprehension
- Pre-reading preparation exercises
- On-the-job writing, task writing
- Task step sequencing (verbal, written formats)
- Instructional sheets
MATERIALS: Textbooks, workbooks, instructional sheets, films, filmstrips, actual equipment and products, diagrams, charts, audiovisual equipment, video camera, recorder and player.

TEXTBOOKS AND WORKBOOKS:


- Workbook for Being a Nursing Assistant 4th Edition 1986 Same as above


- Speaking Up at Work International Institute of Minnesota Oxford University Press, 1985, New York, NY

- Double Action English by Stevick and Yedlin Addison-Wesley Publishing Co. 1985, Reading, MA

- English Spoken Here, Health and Safety by Messic and Kranich, Cambridge Book Co. 1982, New York, NY (includes textbook and workbook)


- "Working", A Handbook for Education, 1985, Printed and distributed by Metropolitan Life and Affiliated Companies

- Spanish/English Lexicon "Spanish for Vocational Nurses" 1983 Adult/Regional Occupational Centers/Programs Education Division, Los Angeles Unified School District, LA, CA

PHYSICAL RESOURCES:

Academic classroom, nursing lab, audiovisual equipment including video camera, recorder and player
UNIT 1: Introduction to the Dental/Clerical Assistant

Learning Objective: Students will recognize, understand and be able to read the terminology and vocabulary associated with describing the duties and responsibilities of the dental/clerical assistant, as well as the general work environment of the dental office and clinic.

Learner Competency: Students will be able to read a text, listing the duties and responsibilities of the dental/clerical assistant and explain them verbally.

UNIT 2: Career Options for the Dental/Clerical Assistant

Learning Objective: Students will learn to identify, read and verbalize the terminology and vocabulary used to describe the career options of the occupation.

Learner Competency: Students will be able to understand and read text describing career options for the occupation.

UNIT 3: Personal Appearance and Oral Hygiene/Patient Oral Hygiene

Learning Objective: Students will understand the terminology and vocabulary used to describe proper grooming and oral hygiene for work in a dental office or clinic. Students will learn the terminology and vocabulary associated with instruments used for personal and patient oral hygiene.

Learner Competency: Students will demonstrate the skills and ability to verbally describe proper grooming and oral hygiene for themselves as dental/clerical workers and the instruments an individual uses to maintain proper oral hygiene.

UNIT 4: Understanding the Dental Patient

Learning Objective: Students will learn to read and understand the vocabulary and terminology associated with the psychology of the patient regarding pain, anxiety and stress.

Learner Competency: Students will be able to read and explain text which discusses and describes the behavior of patients and ways of dealing with it.
UNIT 5: Helping the Dental Patient

Learning Objective: Students will acquire those verbal skills necessary to communicate effectively with patients for purposes of trust building, responsive listening, and alleviating patient pain, anxiety and stress.

Learner Competency: Students will demonstrate the skills and abilities to communicate effectively with the dental patient regarding pain, anxiety and stress by successfully completing structured role playing situations addressing these topics.

UNIT 6: Working Well Together: The Dental Health Team

Learning Objective: Students will become familiar with the vocabulary and terminology utilized by the dental health team to discuss patient concerns and daily office procedures. Students will learn to effectively, verbally communicate with other members of the dental health team.

Learner Competency: Students will demonstrate the ability to effectively communicate with other members of the dental health team by successfully completing structured role playing situations addressing specific concerns of the dental health team.

UNIT 7: Patient Reception

Learning Objective: Students will become familiar with the vocabulary and terminology associated with procedures relating to greeting patients, completing a patient's medical history and registration form, as well as preparing a patient treatment record.

Learner Competency: Students will demonstrate proper language use in greeting patients. Students will properly complete a patient's medical history, registration form and treatment record.

UNIT 8: Telephone Procedures

Learning Objective: Students will learn the vocabulary and terminology associated with the use of the telephone. Students will develop an understanding and ability for proper language use regarding incoming and outgoing telephone calls. Students will learn to document telephone calls and verbally respond to request for information.
Learner Competency: Students will demonstrate language skills necessary to utilize the telephone. Students will demonstrate proper oral skills to answer requests and give directions. Students will also document messages received and directions given effectively and appropriately.

UNIT 3: Appointment Scheduling

Learning Objective: Students will learn the vocabulary and terminology associated with different appointment books. Students will learn to read the directions and headings of different appointment books. Students will also learn to write entries into appointment books and transmit such information verbally to the patient, as well as answer any questions which the patient may ask.

Learner Competency: Students will demonstrate the ability to verbally schedule patients according to proper procedures and to write entries into appointment books correctly and legibly using proper terminology and vocabulary. Students will demonstrate ability to verbally communicate with patients regarding the scheduling, cancellation and confirmation of appointments.

UNIT 10: Recall Program

Learning Objective: Students will learn the vocabulary and terminology associated with recall systems and notification methods. Students will learn to read and write appropriate entries utilized in a recall system.

Learner Competency: Students will demonstrate the ability to utilize appropriate recall systems by demonstrating necessary written and verbal skills.

UNIT 11: Records Management

Learning Objective: Students will learn to use the English alphabetical and numerical filing system. Students will learn to read and classify information regarding patient record files, business record files and appointment files.

Learner Competency: Students will demonstrate appropriate English language skills to establish and maintain various filing systems related to records management in a dental office and/or clinic.
UNIT 12: Basic Typing

Learning Objective: Students will learn the vocabulary and terminology associated with the parts of a typewriter and the functions of such parts. Students will also learn the vocabulary and terminology associated with the parts of a letter and different styles of writing letters. Students will learn the terminology associated with typing letters, envelopes, statements and labels.

Learner Competency: Students will demonstrate an understanding of the vocabulary and terminology used to identify the different parts and functions of a typewriter. Students will be able to verbally describe different styles of letter writing and typewriting procedures for envelopes, labels and statements.

UNIT 13: Dental Hand Instruments/Lab Equipment

Learning Objective: Students will learn to read and verbalize the names of different hand instruments and lab equipment. Students will also learn the vocabulary and terminology used to describe the function of the hand instruments and lab equipment.

Learner Competency: Students will demonstrate the ability to verbally identify, label and explain the function of different hand instruments and lab equipment through structured identification exercises.

UNIT 14: Sterilization, Disinfection, Sanitation

Learning Objective: Students will learn the vocabulary and terminology describing the procedures associated with sterilization, disinfection and sanitation.

Learner Competency: Students will demonstrate the ability to follow directions by performing appropriate procedures for surface disinfection, chemical sterilization, physical sterilization, instrument preparation for disinfection, hand scrubbing, ultrasonic cleaning and autoclaving.

UNIT 15: Disease Transmission and Prevention

Learning Objective: Students will learn the vocabulary and terminology associated with disease transmission and prevention pertaining to the dental patient and staff. Students will become familiar with the terminology associated with theory and facts concerning droplet infection, indirect transmission, self infection, operator infection, personal contact and carrier.
Learner Competency: Students will demonstrate knowledge and ability by listing sources of disease transmission and verbally explaining the methods and procedures used to prevent disease transmission in the dental setting.

UNIT 16: Charting

Learning Objective: Students will learn the vocabulary and terminology that is used in completing a patient's personal history file and the maintenance of an accurate chart of a patient's visits to the dental office. Students will learn to utilize the universal numbering system, recognize the terminology of different dental charts, recognize and use tooth surface terminology and the vocabulary associated with tooth restorations and cavity classifications.

Learner Competency: Students will demonstrate the knowledge, skill and ability to maintain accurate charting of a patient's history and services rendered by performing all the necessary procedures on a fictitious patient and explaining the steps to the other members of the class.

UNIT 17: Radiology

Learning Objective: Students will learn the terminology and vocabulary associated with the procedures and safety rules involved in mounting and developing radiographs.

Learner Competency: Students will demonstrate the ability to read and interpret the procedures and safety rules associated with mounting and developing radiographs.

UNIT 18: Dental Health Insurance

Learning Objective: Students will learn the vocabulary and terminology associated with completing different insurance forms. Students will also learn the meanings of insurance terms, e.g.: schedule of allowances, coinsurance deductibles, exclusions, inclusions, annual maximums, etc. Students will learn to read, understand and reply to the questions presented on an insurance form.

Learner Competency: Students will be able to describe verbally the different kinds of insurance companies. Students will be able to complete the different insurance claim forms accurately and correctly.
UNIT 19: Charges and Payments

Learning Objective: Students will learn the vocabulary and terminology associated with basic bookkeeping procedures and techniques.

Learner Competency: Students will understand and read the vocabulary and terminology associated with the procedures and tasks related to basic bookkeeping functions pertaining to the patient ledger card, daily journal page, receipts, bank deposits, method of payment, collections and preventive account control.

UNIT 20: Medical Emergencies in the Dental Office

Learning Objective: Students will learn the vocabulary and terminology associated with the following medical emergencies: pulmonary arrest, cardiac arrest, epilepsy, drug addiction, carcinogenic shock, angina pectoris, heart failure, heart attack, and cerebrovascular accident. Students will learn to associate the terminology with specific procedures and know how to respond appropriately.

Learner Competency: Students will demonstrate an understanding of the terminology describing medical emergencies in a dental office and the ability to list/describe proper procedures for such emergencies.

UNIT 21: Post-Operative Instructions

Learning Objective: Students will learn to provide verbal directions to patients regarding the proper care for amalgam and composite dental work, oral surgery, periodontal procedures, root canal therapy and removable prosthodontics.

Learner Competency: Students will demonstrate verbal skills by completing structured role-playing activities which involve providing post-operative instructions to patients receiving a variety of dental services.

UNIT 22: Patient Management

Learning Objective: Students will review vocabulary and terminology for the greeting and seating of patients, establishment of a patient's medical history, registration of a patient, recording of a patient's treatment, scheduling of a patient's appointments and the translation and interpretation of a patient's need to the dentist and dentist's directions to the patient.
UNIT 23: Finding a Job

Learning Objective: Students will learn to read want ads in newspapers and job listings from local employment agencies and private employment firms. Students will learn to read and understand the vocabulary and terminology used in job advertisements.

Learner Competency: Students will demonstrate the ability to read and understand different want ads and job listings by reading a number of them and verbally explaining what they mean. Students will also explain how to respond to such ads.

UNIT 24: Completing a Job Application

Learning Objective: Students will learn to read, understand and respond (verbally and written format) to the questions of different job applications. They will also learn how to solicit references through letter writing.

Learner Competency: Students will demonstrate skill acquisition by successfully completing a number of job applications and by soliciting three references.

UNIT 25: Completing a Job Interview

Learning Objective: Students will learn the necessary verbal skills to successfully arrange for a job interview and complete a job interview.

Learner Competency: Students will demonstrate the ability (verbal) to successfully complete the job interview process by completing two job interview practice sessions and by arranging an interview with a prospective employer.
Individualized instruction will be emphasized with some group instruction provided through lecture and demonstration. Small group activities will also be emphasized when appropriate and relevant to course content and the communicative aspects of the job duties. The following techniques and methods will be utilized and implemented depending on lesson difficulty and content:

- lecture, demonstration (small and large groups)
- nonverbal directives and responses
- labeling actual objects, equipment, tools, etc.
- matching exercises and activities (verbal and written)
- questioning activities (directed and non-directed)
- sentence conversions, substitution exercises
- dialogues, role-plays
- verbal identification, crossword puzzles
- micro-ESL activities
- listening for comprehension exercises
- cloze technique for written comprehension
- pre-reading preparation exercises
- on-the-job writing, task writing
- task step sequencing (verbal, written formats)
- variety of instructional sheets
DENTAL/CLERICAL ASSISTANT INTERPRETER

VOCATIONAL ENGLISH INSTRUCTION

INSTRUCTIONAL MATERIALS AND RESOURCES

MATERIALS: Films, filmstrips, transparencies, textbooks, workbooks, instruction sheets, learning activity packets, pictures and diagrams of instruments, actual instruments and equipment used in a dental office.

TEXTBOOKS/WORKBOOKS:

Dental Management Encyclopedia
Semantodontics Inc., P.O. Box 15668, Phoenix, AZ

Psychology in the Dental Office, 1982

Managing Insurance Claims in the Dental Office, 1982

Dental Hand Instruments Study Cards, 1982

Business Administration for the Dental Assistant, 1982
Colwell Systems Inc., 201 Kenyon Road, Champaign, ILL 61820

English Spoken Here, Health and Safety, 1982
Messic and Kranich, Cambridge Book Co., New York, NY

Speaking Up at Work, 1985
International Institute of Minnesota
Oxford University Press, New York, NY

"Working"; A Handbook for Educators, 1985
Printed and distributed by Metropolitan Life and Affiliated Companies

Spanish/English Lexicon; "Spanish for Vocational Nurses", 1983
Adult Regional Occupational Center/Program Education Division
Los Angeles Unified School District, LA, CA

PHYSICAL RESOURCES:

Academic classroom, dental laboratory, audiovisual equipment including; video recorder and tape recorder/player.
UNIT 1: **Word Processing/Data Entry Orientation**

**Learning Objective:** Students will demonstrate the ability to read and understand the vocabulary and terminology used to describe the historical development of computers in word processing and data entry. Students will become familiar with the terminology associated with dedicated word processors and personal computers. Students will become familiar with basic sentence structure.

**Learner Competency:** Students will demonstrate the ability to verbally explain the historical development of computers in word processing and data entry utilizing simple structures.

UNIT 2: **Career Options in Word Processing and Data Entry**

**Learning Objective:** Students will demonstrate the ability to understand, read and write the vocabulary and terminology which describe the duties and responsibilities of word processors and data entry clerks. Students will become familiar with the vocabulary and terminology which describes various occupational and career options for word processors and data entry clerks.

**Learner Competency:** Students will demonstrate the ability to list the duties, responsibilities of the occupation and various career/occupational options in written and verbal modes of expression.

UNIT 3: **Computer Terminology**

**Learning Objective:** Students will demonstrate the ability to recognize, understand, read and write the basic vocabulary and terminology associated with computer technology word processing and data entry.

**Learner Competency:** Students will demonstrate the ability to read and write simple and compound statements and sentences regarding computer technology, word processing and data entry. Students will also demonstrate the ability to verbally utilize the basic vocabulary and terminology to discuss certain facts about computer technology, word processing and data entry.
UNIT 4: Organization and Structure of a Word Processing Installation

Learning Objective: Students will demonstrate the ability to recognize, understand and utilize the vocabulary and terminology used to describe the organization and structure of a word processing installation.

Learner Competency: Students will be able to verbally list and describe the organization and structure of a word processing installation, as well as identify, read and write statements utilizing the vocabulary and terminology.

UNIT 5: Personal Computers: Hardware

Learning Objective: Students will develop an indepth understanding and ability to read and write the vocabulary and terminology used to describe the numerous elements of personal computer hardware, as well as describe their usage and functions.

Learner Competency: Students will utilize appropriate vocabulary and terminology to verbally identify the different hardware elements of a computer word processing system and the functions and purposes of each element. Students will also demonstrate the ability to recognize, read and write simple statements of fact utilizing the vocabulary and terminology associated with computer hardware.

UNIT 6: Personal Computers: Hardware Functions

Learning Objective: Students will demonstrate the ability to understand, read and write the vocabulary and terminology used to describe the function of various computer hardware for word processing systems. Students will learn the vocabulary and terminology used to describe basic concepts of disk management and information storage and keyboard functions.

Learner Competency: Students will demonstrate the ability to read and understand written text which describes the function of personal computer hardware and basic concepts concerning diskette management, information storage and keyboard operations.

UNIT 7: Basic Features of Word Processing Hardware and Software

Learning Objective: Students will become familiar with the vocabulary and terminology used to describe basic features of word processing software. Students will demonstrate the ability to read and understand text describing functions and features of computer software as it contrasts to the features and functions of computer hardware.
UNIT 8: Basic Typing

Learning Objective: Students will become familiar with the vocabulary and terminology used to describe the basic functions of the typewriter and the procedures to perform basic typing tasks. Students will demonstrate the ability to understand and read directions concerning basic typing tasks, such as, calculating margins, centering data, typing personal correspondence, addressing envelopes, and formatting different styles of business letters, manuscripts, memorandums and reports.

Learner Competency: Students will demonstrate the ability to read and understand the vocabulary and terminology used to describe the basic functions of the typewriter and procedures to perform basic typing tasks. Students will demonstrate verbal skills in describing and listing those procedures needed to perform a variety of typing functions. Students will demonstrate the ability to read and understand expository text describing procedures to perform basic typing tasks.

UNIT 9: Diskette Handling Procedures

Learning Objective: Students will demonstrate an understanding of the vocabulary and terminology used to describe the physical handling and care of diskettes. Students will also demonstrate the ability to verbally discuss and explain the proper procedures for the care and handling of diskettes.

UNIT 10: Computer Printer

Learning Objective: Students will demonstrate the ability to read and understand the vocabulary and terminology used to describe the physical components of a computer printer and the procedures for operating the computer printer.

Learner Competency: Students will be able to verbally describe and explain the physical qualities and operating procedures of a computer printer as well as list them utilizing simple, compound and complex sentence structures.
UNIT 11: Documentation for Software Packages

Learning Objective: Students will demonstrate the ability to read and understand the vocabulary and terminology utilized in software manuals. Students will learn to read the descriptions and directions, and be able to explain what is written and how to follow the procedures stated in the directions.

Learner Competency: Students will be able to read and understand the vocabulary and terminology utilized in software manuals. Students will demonstrate the ability to verbally explain the descriptions and physically execute the directions and procedures listed in the manual.

UNIT 12: Specific Software Packages

Learning Objective: Students will demonstrate the ability to read and understand the vocabulary and terminology of the displaywrite III and multimate software packages.

Learner Competency: Students will demonstrate their ability to read and understand the vocabulary and terminology by explaining the meaning of the directions and procedures and by demonstrating how the tasks and procedures are to be performed.

UNIT 13: Computer Software Operating System

Learning Objective: Students will demonstrate the ability to read and understand the vocabulary and terminology associated with the disc operating system (DOS), with copying disc, formatting disc, establishing files, copying files, deleting files, date and time, erase procedures and rename procedures.

Learner Competency: Students will demonstrate the ability to verbally, or in written format, explain the theory and procedures associated with the disc operating system (DOS), copying disc, formatting disc, etc.

UNIT 14: Computer Software and Application Software

Learning Objective: Students will demonstrate the ability to read and understand the vocabulary and terminology associated with main menu procedures such as; create a document, edit, print and merge a document, spell-check procedures, and utilize document archiving and naming conventions.
UNIT 15: Application Software; Multimate, Displaywrite III

Learning Objective: Students will demonstrate an ability to read and understand the vocabulary and terminology associated with word processing computer functions such as: help; format; delete; copy; move; center; indent; search/replace; paginate; repaginate; merge creation; library; header/footer; highlight; cursor movement; vertical/horizontal math; column manipulation; escape; save, resume and exit functions.

Learner Competency: Students will be able to verbally explain the meaning of the various terms and vocabulary associated with word processing functions such as: help; format; delete; copy; etc. Students will be able to read directions and procedures for such functions, understand what is being presented and be able to perform the function.

UNIT 16: Keyboarding/Typing Text or Document Formats

Learning Objective: Students will demonstrate the ability to understand and read the vocabulary and terminology used to describe a variety of structural formats for documents, manuscripts, letters, memorandums, unbounded reports, topic outlines, and formal reports. Students will also develop the ability to compose and write letters and memorandums.

Learner Competency: Students will demonstrate the ability to verbally, and in written format, explain and describe a variety of structural formats for documents, manuscripts, letters, memorandums, unbounded reports, etc. Students will be able to explain and describe the differences between a block style letter and modified block letter. Students will also demonstrate the ability to write and compose text associated with letters and memorandums.

UNIT 17: Finding a Job

Learning Objective: Students will develop the ability to read, understand and use the vocabulary and terminology found in want ads in newspapers and job listings from local employment agencies and private employment firms that are specifically related to word processing and data entry.
Learner Competency: Students will demonstrate the ability to read and understand different want ads and job listings. Students will demonstrate the ability to effectively respond to such ads and job listings. They will also demonstrate the ability to identify various job sources for word processing and data entry positions.

UNIT 18: Completing a Job Application

Learning Objective: Students will become familiar with the vocabulary and terminology used in various job or employment applications. They will also demonstrate the ability to read and understand the vocabulary and terminology, as well as, provide the appropriate verbal and written responses for various employment and job applications.

Learner Competency: Students will demonstrate the acquisition of those skills by successfully completing various employment applications.

UNIT 19: Completing a Job Resume

Learning Objective: Students will develop the ability to recognize, understand and use the vocabulary and terminology of word processing and data entry to construct and write a job resume. Students will develop the ability to use different resume writing styles in constructing their resumes. Students will also acquire the ability to compose and write application, thank-you, and cover letters. Students will become familiar with those job application procedures associated with resumes.

Learner Competency: Students will demonstrate the ability to construct and write resumes, application letters, thank-you letters and cover letters. Students will demonstrate the ability to follow correct procedures when applying for jobs utilizing resumes.

UNIT 20: Job Interview

Learning Objective: Students will develop the ability to recognize, understand and use the vocabulary and terminology of word processing and data entry specific to the job interview process. Students will develop an understanding of, and the ability to, utilize correct interview procedures and techniques. Students will learn how to successfully complete a job interview.
Individualized instruction will be emphasized with some group instruction being provided through lecture and demonstration. Small group activities will be provided when appropriate and relevant to the instructional content. The following methods and techniques will be utilized and implemented depending on lesson content and difficulty:

- lecture and demonstration (small and large groups)
- nonverbal responses and directives
- labeling objects, equipment, tools, etc.
- matching exercises and activities (verbal and written)
- questioning activities (directed and non-directed)
- sentence conversions, substitution exercises, fill-in-the-blanks
- dialogues and role-plays
- verbal identification, crossword puzzles
- listening for comprehension exercises
- cloze technique and other written exercises for written comprehension
- pre-reading preparation exercises
- on-the-job reading, task writing
- micro-ESL activities
- task step sequencing (verbal and written formats)
B.5.c. WORD PROCESSING/DATA ENTRY

VESL INSTRUCTION

INSTRUCTIONAL MATERIALS AND RESOURCES

MATERIALS: Films, filmstrips, transparencies, textbooks, workbooks, instruction sheets, learning activity packets, teacher prepared task sheets, instruction sheets, assignment sheets, pictures and diagrams of equipment, computer hardware and software manuals and guides.

TEXTBOOKS/WORKBOOKS:


Controlled Composition in English-as-a Second Language Paulston and Dykstra, 1973, Regents Publishing Co. Park Avenue, New York, NY


"Working", A Handbook for Educators, 1985 Metropolitan Life and Affiliated Companies

Business in English, 198u, Hacikyan and Gill Regents Publishing Co., New York, NY

PHYSICAL RESOURCES:

Academic Classroom

Computer and Typing Labs

Audio-Visual Equipment, including: Video Camera, Recorder and Player

123
The following textbooks and workbooks were available for use by Project BILLET staff in providing services to students. Counselors, for instance, utilized the Career and Life Planning texts, as well as, the "Working" text when providing career readiness instruction. VESL instructors, in addition to those books listed in the curriculum guides, utilized sections of the numerous ESL texts to supplement their instruction. Skill instructors implemented many of the recommendations and suggestions made in the text "Instructional Materials for Bilingual Vocational Education". The list is being presented in this curriculum package as possible resources for your review and edification.

Career and Life Planning, A Workbook, 1979
Moorpark College, Moorpark, CA
Instructor's copy and student's copy

Instructional Materials for Bilingual Vocational Education, 1984
Friedenberg and Bradley, Harcourt Brace Janovich Publishers
Orlando, FL

The Vocational ESL Handbook, 1984, Friedenberg and Bradley
Newbury House Publishers Inc., Rowley, MA

Regents Publishing Co., New York, NY

Everyday Dialogues in English, 1983, Robert Dixson
Regents Publishing Co., New York, NY

Essential Idioms in English, 1983, Robert Dixson
Regents Publishing Co., New York, NY

Speaking Up at Work, 1985, Robinson and Rowekamp
Oxford University Press, New York, NY

Reading, Thinking, Writing, "A Text for Students of English-as-a
Second Language", Mary Lawrence, University of Michigan Press
Ann Arbor, MI

Double Action English, 1985, Stevick and Yedlin
Addison-Wesley Publishing Co., Reading, MA

Talk-A-Tivities, 1985, Richard Yorkey
Addison-Wesley Publishing Co., Reading, MA

Express Ways, 1986, Molinsky and Bliss
Prentice-Hall, Englewood Cliffs, NJ

Side By Side English Program, (A,1B,2A,2B), 1983, Molinsky and Bliss
Prentice-Hall, Englewood Cliffs, NJ

Fitting In, A Functional/Notional Text, 1983, Margaret Coffey Prentice-Hall Co., Englewood Cliffs, NJ

English That Works, Pre-Vocational ESL for Adults, 1982 Savage, How and Yeung, Scott Foresman and Co., Oakland, NJ

"In Touch", A Beginning American English Series (Levels 1,2,3) 1980, Castro and Co., Longman Inc., New York, NY

Modern American English (Levels 1,2,3,4), 1979, Robert Dixson Textbook and Workbook, Regents Publishing Co., New York, NY

Practical Conversation in English (Levels 1,2,3), 1982, Eugene Hall Regents Publishing Co., New York, NY

Practical Vocabulary Builder, 1983, Dorothy Liebowitz National Textbook Co., Chicago, ILL

Basic Vocabulary Builder, 1983, Dorothy Liebowitz National Textbook Co., Chicago, ILL

Easy Vocabulary Games, 1985, Linda Schinke-Llano National Textbook Co., Chicago, ILL

Vocabulary Games, 1985, Linda Schinke-Llano National Textbook Co., Chicago, ILL

Advanced Vocabulary Games, 1985, Linda Schinke-Llano National Textbook Co., Chicago, ILL

English Essentials, 1985, Jewel Varnado Steck-Vaughn Co., Austin, TX