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ABSTRACT

This guide is designed to assist vocational education program planners and curriculum specialists in selecting appropriate word processing curriculum materials. Discussed in the introductory section of the guide are the development of the field of word processing and procedures for organizing word processing education and training. The next section consists of action planning steps and worksheets for use in developing word processing education and training programs. The third section consists of examinations of eight existing word processing curriculum resources. Included in each resource description are the following: the resource title, an address for the source of the resource, a list of materials contained in the resource, a statement concerning the level and scope of the resource, an outline of the resource format, a list of any special features that the resource might contain, a list of instructional units included in the resource, and sample pages from the resource. A summary chart comparing the eight measures is appended along with lists of references and related resources. (MN)

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Leadership Training Series No. 65

WORD PROCESSING: A GUIDE TO PROGRAM PLANNING

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FOREWORD

Word Processing: A Guide to Program Planning provides an action planning process for use in developing word processing education and training programs and reviews selected word processing curriculum resources. Its primary purpose is to assist vocational education program planners and curriculum specialists in selecting word processing curriculum materials that are appropriate for the population they serve.

The profession is indebted to the authors for their scholarship in preparing this guide. The authors are Dr. Wilma Jean Alexander, Department Chairperson for Business Education and Administrative Services; Dr. Patsy A. Dickey-Olson, Assistant to the Dean; and Dr. Jean Grever, Professor of Business Education and Administrative Services, all at Illinois State University; and Dr. Marilyn Wilkins, Associate Professor of Business Education, Eastern Illinois University.

Dr. Judy Lambrecht, University of Minnesota; Dr. Kathleen Wagoner, Ball State University, and Dr. Barbara Kline and Linda Pfister of the National Center for Research in Vocational Education contributed to the development of the guide through their review of the manuscript. Staff who assisted in the production of the guide included Judy Balogh, Dr. Judith Samuelson, and Dr. Jay Smink. Ruth Nunley typed the manuscript and Janet Ray served as word processor operator. Editorial assistance was provided under the supervision of Janet Kiplinger.

Robert E. Taylor
Executive Director
The National Center for Research
in Vocational Education

EXECUTIVE SUMMARY

This guide is designed to assist vocational education program planners and curriculum specialists in planning, implementing, and improving word processing education and training programs at the junior high, secondary, postsecondary, and adult levels. The guide is especially helpful in the following activities:

- Identifying essential elements of word processing education and training programs
- Becoming aware of available word processing curriculum materials
- Selecting appropriate materials for a given program
- Becoming aware of alternative approaches to implementing programs
- Developing a plan for implementing word processing programs

The following five steps are suggested to assist planners in implementing education and training programs: assessing needs, defining the problem, selecting a solution, implementing the solution, and monitoring implementation. Worksheets are included to help planners examine the available curriculum resources. These worksheets are guides to (1) designing word processing training, (2) assessing curriculum priorities, (3) selecting word processing equipment and software, and (4) implementing word processing training.

In addition, eight curriculum resources are reviewed. Each review (1) discusses the source of the product, available materials, level and scope of the resource, format, special features, and instructional units and (2) includes samples taken from each resource. The eight resources reviewed are the following:

- *Competency-Based Education Curriculum for Word Processing*
- *Competency-Based Word Processing*
- *Developing a Curriculum for a Word Processing Certificate*
- *Introduction to Word Processing Units of Instruction*
- *Word Processing*
- *Word Processing Correspondence Specialist*
- *Word Processing Curriculum Guide: A Beginning Text for WordStar*
- *Word Processing Curriculum Update*

Summary charts showing comparative data on the eight resources are included in the Appendix. Using the information from these charts, planners can determine the curricula best suited to their needs. The charts can be used also in completing the worksheets provided in the guide. Additional resources are listed in the section entitled Related Resources.

INTRODUCTION

Purpose of the Guide

The purpose of this guide is to assist vocational education program planners and curriculum specialists in planning, implementing, and improving word processing education and training programs. An action planning process is provided for the purpose of selecting word processing materials appropriate for a given population. The guide also presents an overview of eight word processing curriculum resources available in the public domain. These resources provide learning activities, teaching methods, media, and course outlines that can be implemented in the classroom. The guide is useful for the following activities:

- Identifying essential elements of word processing education and training programs
- Becoming aware of word processing curriculum materials, equipment, and software
- Selecting materials, equipment, and software that are appropriate for a particular program
- Becoming aware of alternative approaches to implementing programs
- Developing a plan for implementing or improving a word processing program

Word Processing: A Brief Background

Technological advancements have caused great changes in offices over the past twenty years. *Word processing* has become the buzzword of the decade. Although many business educators believed it was a fad that would go away, word processing has become an essential component of the office of the future.

Word processing can be defined as the process of changing ideas and information into a readable communication form through the management of procedures, equipment, and personnel. This definition implies using automated equipment and trained personnel to produce higher quality work more efficiently. Word processing may occur in centralized systems, workstation clusters, networks of clusters, and/or in the traditional secretarial workstation. Because businesses need to improve productivity to reduce costs and increase profits, word processing—either in the form of centralized word processing centers or decentralized satellite systems—has become a vital part of most business office operations. As businesses adopt more and more technology, students will need even more knowledge of word processing concepts and the skill to operate sophisticated word processing equipment.

Traditionally, business educators have responded to office employment needs of businesses. Today they are responding to their information processing demands by developing curriculum materials to meet students' varying requirements. Presently, there is a great need in business education to keep up-to-date with technology. The Policies Commission for Business and Economic

Education has given impetus to this need by issuing a statement titled "This We Believe about Word Processing in Business Education." This statement includes the following about word processing curriculum:

CURRICULUM

Word Processing instruction is necessary in the business education curriculum. WE BELIEVE WORD PROCESSING CONCEPTS AND APPLICATIONS SHOULD BE INTEGRATED INTO EXISTING BUSINESS EDUCATION COURSES. IN ADDITION, WE BELIEVE THAT AN INTRODUCTORY COURSE(S) OR A PROGRESSIVE SERIES OF COURSES SHOULD BE OFFERED TO PROVIDE FOR OCCUPATIONAL PREPARATION.

In the task of budgeting for equipment, it is imperative that business education keep pace with the technology being used in business. THEREFORE, WE BELIEVE THAT IT IS ESSENTIAL TO HAVE UP-TO-DATE WORD PROCESSING EQUIPMENT SO THAT STUDENTS MAY ACQUIRE EMPLOYABLE SKILLS.

Business Teacher Education

WE BELIEVE BUSINESS TEACHER EDUCATION PROGRAMS MUST PROVIDE PRESERVICE AND INSERVICE EDUCATION IN WORD PROCESSING. The preservice and inservice business teacher should be able to:

1. Understand and apply the concepts of word processing as they relate to information management.
2. Evaluate, select, and justify word processing hardware/software.
3. Demonstrate proficiency in operating word processing equipment.
4. Modify instructional programs based on continuous research and evaluation.

WE BELIEVE THAT ALL STUDENTS MUST HAVE AN OPPORTUNITY TO ACQUIRE AN UNDERSTANDING OF AND COMPETENCY IN WORD PROCESSING TECHNOLOGY.*

Organizing for Word Processing Education and Training

Word processing programs are evolving in schools just as word processing systems in business have developed to meet the unique needs of individual firms. Programs in word processing training and education can be as creative as the program planner. Educators have the responsibility to help students to learn about word processing and to develop word processing skills for employment. This knowledge and skill can be integrated and taught at several levels:

*Reprinted with permission of the Policies Commission for Business and Economic Education (1983).

- Junior high school programs
- Secondary school programs
- Postsecondary programs
- Adult education programs

JUNIOR HIGH SCHOOL PROGRAMS

Target population

- Junior high school students in career exploration and awareness programs

Instructional goals

- To explore career opportunities in word processing in the automated office
- To develop skills in using the keyboard
- To develop text-editing skills (using a microcomputer and word processing software) in creative or business writing projects

Delivery systems

- Integrated word processing concepts and microcomputer text-editing skills instruction (in existing business education courses)
- Introduction to typewriting/keyboarding class

SECONDARY SCHOOL PROGRAMS

Target populations

- Secondary school students in career exploration programs
- Students enrolled in business education programs who are preparing for careers in business
- Students enrolled in vocational office education programs

Instructional goals

- To explore career opportunities in word processing
- To develop an understanding of word processing concepts, equipment, and software and their role in the automated office
- To develop word processing equipment operator skills for entry level employment in word processing in business, industry, and government

Delivery systems

- Special core of courses in word processing
- Integrated word processing instruction (in existing business education courses)
- Capstone course (simulation)
- Part of a cooperative office education program
- Unit of instruction in other business education courses
- Individualized instruction

POSTSECONDARY PROGRAMS

Target populations

- Students enrolled in vocational business and office education programs
- Students enrolled in junior or community college programs leading to associate degrees in office education, secretarial science, or specialized courses such as legal secretarial, medical secretarial, or word processing specializations
- Students enrolled in four-year college and university programs leading to baccalaureate degrees in office administration or business teacher education programs

Instructional goals

- To develop an understanding of word processing concepts, equipment, and software
- To develop word processing and keyboarding operator skills for entry-level positions in word processing in business, industry, and government
- To develop an understanding of the role of word processing in the automated business office
- To develop word processing supervisory and management skills
- To develop teaching skills for future business teachers and as inservice training for current business teachers

Delivery systems

- Separate vocational program
- Part of a postsecondary associate degree program

- Part of a business teacher education degree program
- Part of an office management/information processing degree program

ADULT EDUCATION PROGRAMS

Target populations

- Adults reentering the work force
- Employed adults seeking to update current skills
- Unemployed adults seeking new job skills

Instructional goals

- To develop an understanding of word processing concepts, equipment, and software
- To develop keyboarding and word processing operator skills for entry-level word processing positions
- To develop word processing supervisory and management skills
- To develop an understanding of the role of word processing in the automated office

Delivery systems

- Adult education courses in public school systems
- Continuing education courses in colleges and universities
- Special management seminars conducted by colleges and universities
- Special workshops and seminars presented by colleges, universities, and professional associations
- General college and university degree programs
- Individualized instruction

DEVELOPING WORD PROCESSING EDUCATION AND TRAINING PROGRAMS

Implementation of word processing education and training programs is a planned-change effort. Like any other planned-change effort, implementing word processing programs requires a systematic approach. A five-step action planning process* is suggested:

Step 1: Assessing needs

Step 2: Defining the problem

Step 3: Selecting a solution

Step 4: Implementing the solution

Step 5: Monitoring implementation

This section briefly discusses each step in the action planning process.** Action planning worksheets related to these steps are provided at the end of the section.

Action Planning Steps

Step 1: Assessing Needs

Prior to designing a new program, planners must have knowledge about "what is" in light of "what should be." A discrepancy between existing and desired programs demonstrates the need that must be filled. Advisory committees and community survey data provide viable means for determining the current as well as the desired status.

During the needs assessment, planners should seek answers to the following types of questions:

- What populations are currently served?
- What populations should be served?
- What current activities relating to word processing are being conducted?

*Adapted from Davis and Zelinko (1982).

**Workshops based on this action planning process are available through the National Center for Research in Vocational Education.

- What are the gaps in current program offerings?
- What are the existing and potential instructional delivery formats?
- What resources are available?

To determine program status, planners should try to complete one or more of the following activities:

- Discuss the potential for word processing training with the business education advisory committee and local vocational educators. Conduct follow-up meetings with other school staff, including counselors and administrators.
- Review policy statements and administrative guidelines related to new or innovative programs to determine procedures for implementation.
- Conduct student surveys to determine the specific characteristics of various target populations.

Data from these activities should be collected and analyzed to assist the planner in identifying a structure for word processing training. Worksheet 1: A Guide to Designing Word Processing Training (p. 11) will assist planners in gathering this information.

Step 2: Defining the Problem

On the basis of the assessment in Step 1, program planners can delineate program parameters. The problem definition step involves formulating tentative program goals, identifying target populations, specifying areas and levels of instruction, and establishing potential schedules.

The information gathered in Step 1 through the use of Worksheet 1 can serve as a blueprint for the problem definition stage.

Step 3: Selecting a Solution

After the basic program structure is identified, planners must select the resources that provide the greatest potential for successful instruction. Curriculum materials, up-to-date word processing equipment, and qualified teaching staff are the key resources for a word processing program.

In order to select the most appropriate resources, the planner should identify the relative value of a number of different criteria used in the selection process. The selection process is based on the program goals and objectives of the local education agency and on the availability of data.

Once a decision about the criteria to be used in the selection process is made, the planner should organize the data in such a way that comparison may be accomplished. A priority matrix is useful for this task. First, the criteria for evaluating the resources are specified. Second, a point value is assigned to each criterion. The relative value of any given criterion can be designated by assigning a numerical value to that criterion to reflect its importance. Finally, a cumulative score for each resource is computed and its priority rank entered on the matrix. The example below

shows a priority matrix for selecting curriculum resource materials. In this example, the criterion labeled Appropriate Depth of Instruction was deemed to be twice as important as any of the other four criteria.

Sample Curriculum Resource Priority Matrix

Priority Criteria / Resources	Content Outline	Audio-visuals	Individualized Instruction	Special Population & Materials	Appropriate Depth of Instruction (weight = 2)	Curriculum Priority Index (total scores)	Rank Priority Order
Resource X	1*	1	3	3	3 x 2 = 6	14	1
Resource Y	2	0	1	0	3 x 2 = 6	9	2
Resource Z	0	2	2	3	1 x 2 = 2	9	2

*General ranking of cell scores:

0 - inappropriate
1 - somewhat appropriate
2 - moderately appropriate
3 - highly appropriate

Worksheet 2: A Guide to Assessing Curriculum Priorities (p. 15) and Worksheet 3: A Guide to Selecting Word Processing Equipment and Software (p. 19) will help in the selection of curriculum materials and word processing equipment and software. By completing these worksheets, planners will become familiar with a process that may be used to select among other types of resource alternatives.

Step 4: Implementing the Solution

By this stage of the program planning process, the planner should be able to identify the target populations, the program structure, the program objectives, and the needed resources. Actual program implementation will vary within local educational institutions; however, successful implementation will depend on providing the relevant information to key individuals.

A structured description of the proposed training program is useful for a variety of purposes. First, it helps to organize the decisions made in earlier planning stages into a concrete plan of implementation: It can serve also as a guide to further development of word processing training or as a part of a proposal to begin the training. Worksheet 4: A Guide to Implementing Word Processing Training (p. 25) is designed to assist the program implementation plan. The new program can then be scheduled, budgeted, staffed, and publicized.

Step 5: Monitoring Implementation

Every aspect of implementation of a training program must be continually reviewed in order to evaluate its effectiveness. On the basis of these reviews, adjustments should be made to bring program operation into line with program objectives or changing goals. An excellent tool for monitoring any vocational program is the use of an advisory committee. Such a committee could be particularly useful to this type of training program. A broad representation of educators, government personnel, current practitioners, and program graduates would provide a great deal of assistance in monitoring the program.

Program monitoring will help program planners make decisions based on the following questions:

- Should the word processing training program be expanded?
- Is the current program meeting the employability needs of students?
- How can the program be strengthened and improved?
- How accessible is the program to those who need and want it?
- How does this program compare with similar programs?

Action Planning Worksheets

The following worksheets are provided to assist the planner in completing the action planning steps just discussed:

- Worksheet 1: A Guide to Designing Word Processing Training (p. 11)
- Worksheet 2: A Guide to Assessing Curriculum Priorities (p. 15)
- Worksheet 3: A Guide to Selecting Word Processing Equipment and Software (p. 19)
- Worksheet 4: A Guide to Implementing Word Processing Training (p. 25)

Note: Charts summarizing information about the eight curriculum resources reviewed in this guide are located in the Appendix. This information will assist readers in completing the worksheets.

WORKSHEET 1

A Guide to Designing Word Processing Training

The purpose of this worksheet is to identify circumstances and constraints currently affecting word processing training in a local educational institution.

1. **Identify current word processing program**

- Identify sources, programs, or units of instruction that are currently available in the following areas:

Area	Junior High	Secondary	Post-secondary	Adult
Word processing systems/equipment concepts				
Equipment operation skills				
Supervisory/management skills				

- What areas and levels of instruction are not being served adequately by the current offerings?

2. **Identify target populations**

- Identify the number of students interested in word processing in each area of instruction.

  [Sources of data: student interest surveys; personal interviews with students; and discussions with guidance counselors, advisory committees, and community leaders]

Area	Junior High	Secondary	Post-secondary	Adult
Word processing systems/equipment concepts				
Equipment operation skills				
Supervisory/management skills				

- Utilizing the above data, determine the populations with the greatest documented needs.

3. **Identify scheduling of facilities**

- Identify the time frames currently used for instruction in each program (e.g., one-hour block, three-hour block).

  (a) _____

  (b) _____

(c) _____

(d) _____

[Sources of data: scheduling policies, administrators, class list, etc.]

Program	Junior High	Secondary	Post-secondary	Adult
Days				
Evenings				
Other (identify)				

- What type of schedule would be most effective for the population identified?

_____

_____

_____

WORKSHEET 2

A Guide to Assessing Curriculum Priorities

The purpose of this worksheet is to assist the planner in evaluating the various word processing curriculum resources by considering several different criteria at the same time. This process will guide planners through four tasks.

Task 1—Identify the criteria to be used in evaluating the resources.

Task 2—Identify, for each criterion, a series of standards ranging from most desirable to unacceptable and assign a point value to each standard.

Task 3—Assign numerical values to the various criteria to allow for relative importance.

Task 4—Enter the criteria on the priority matrix for each product.

Task 1

Select criteria to be used in evaluating the various curriculum resources. Criteria should be based on the objectives of the program being planned and should be reviewed by all school and industry personnel involved in the proposed program. Suggested criteria from which to select are as follows:

- Cost
- Population served
- Approximate course length
- Number of units or modules
- Format
- Requirements for special facilities or equipment
- Depth of instruction
- Specific content (e.g., operator skills, concepts, etc.)
- The inclusion in the curriculum of the following:
  - — Behavioral objectives
  - — Content outlines
  - — Transparency masters or handouts
  - — Suggested teaching strategies or utlization guide
  - — Evaluation techniques
  - — Content narrative
  - — Student activities
  - — Implementation project(s)
  - — Suggested references
  - — Supplemental readings

Task 2

Each criterion selected can be broken into four general categories that allow the planner to assign a value to each product for each criterion. For example, if depth of instructor knowledge required is determined to be one of the criteria, then a level that is unacceptable must be identified, as well as the ideal knowledge level for the resource. The remaining two values can then be assigned points between the two. The result would take the following format:

0 — extremely advanced skills needed by instructor

1 — advanced skills needed by instructor

2 — moderate skills needed by instructor

3 — minimal skills needed by instructor

Indicate criteria you have selected on the left side and the various standards (or cell values) on the right, as shown below. You may need more than five criteria; if so, simply list them on a separate page.

Criteria	*Cell Values*
1. _____	0 — 1 — 2 — 3 —
2. _____	0 — 1 — 2 — 3 —
3. _____	0 — 1 — 2 — 3 —
4. _____	0 — 1 — 2 — 3 —
5. _____	0 — 1 — 2 — 3 —

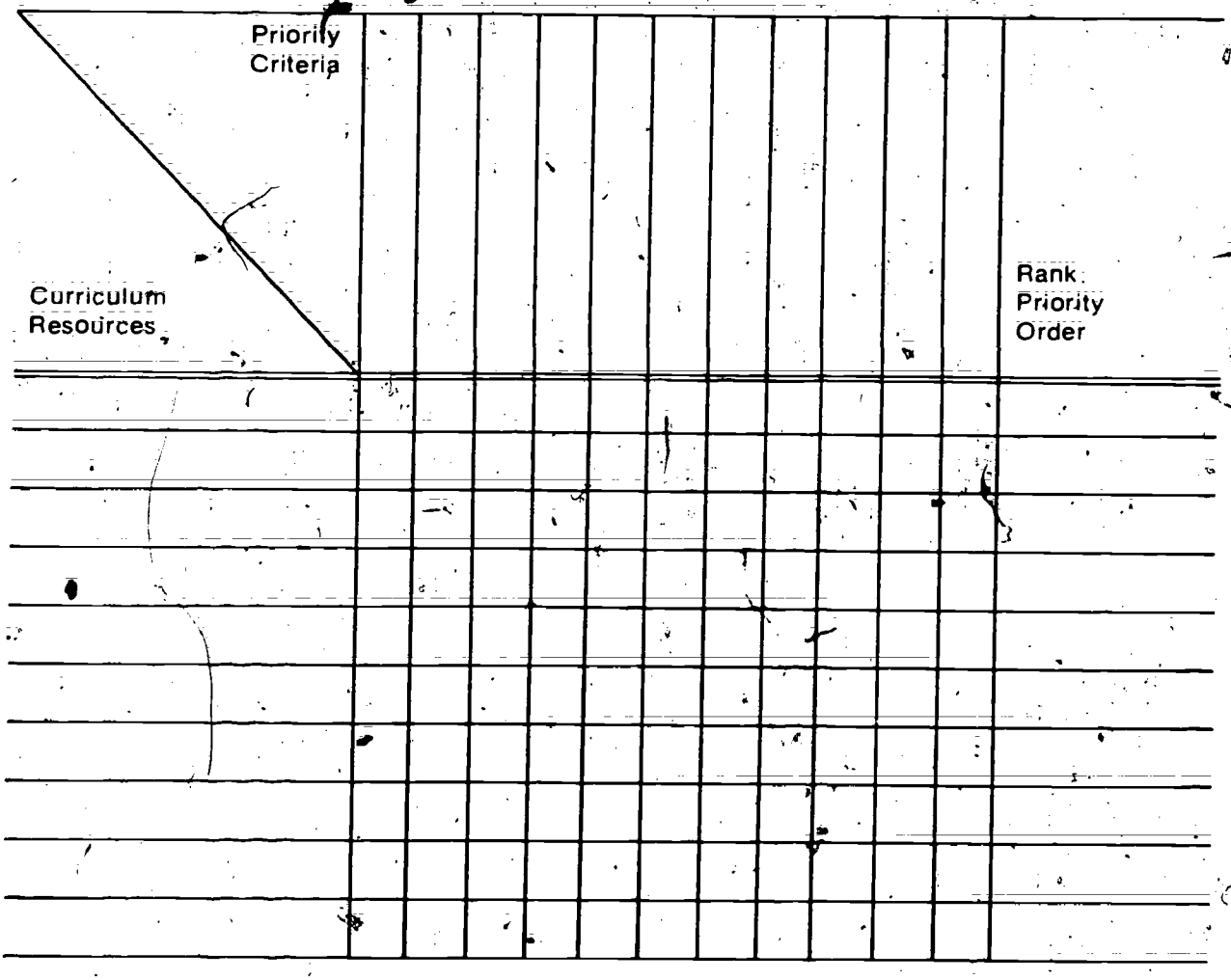
Task 3

After criteria and cell values have been identified, review them in order to determine whether each should be considered equal or whether one or more have greater value to your proposed program. For example, if the course length is critical, its score may have to be doubled in your decision making.

Task 4

Next, criteria should be entered on the priority matrix and each resource reviewed. (The four summary charts in the Appendix should be helpful in this process.) Cell values should be assigned to each product, adjustment made for greater weight, and a rank order identified. The results will be the identification of the most useful curriculum resource for your objectives. (A sample appears in Step 3 on page 8.)

Curriculum Resource Priority Matrix



WORKSHEET 3

A Guide to Selecting Word Processing Equipment and Software

The purpose of this worksheet is to help in identifying criteria for comparing and selecting word processing equipment and software. This process will guide planners through four tasks.

Task 1—Identify the criteria to be used in evaluating equipment or software.

Task 2—Identify, for each criterion, a series of standards ranging from most desirable to unacceptable and assign a point value to each standard.

Task 3—Assign numerical values to various criteria to allow for relative importance.

Task 4—Enter criteria on the priority matrix for each product.

Task 1

Select criteria to be used in evaluating the various types of word processing equipment and software. Criteria should be based on the objectives of the program being planned and should be reviewed by advisory committee and industry personnel involved in the proposed program. Equipment for word processing need not be complex or expensive. Word processing concepts can be taught using electric typewriters and transcription equipment. However, word processing equipment concepts and equipment operation training require some electronic equipment with memory and storage capabilities. Dedicated word processors, shared-logic systems, terminals connected to mainframes, and/or microcomputers can be used. Some word processing software designed for microcomputers and mainframes does not have all the features that most dedicated word processors have. Microcomputers are less expensive than dedicated word processors. Some considerations when selecting equipment include the following:

- *Cost:* What is the cost of equipment in terms of the number of workstations provided?
- *Service and repair:* Is reputable, prompt local service available at a reasonable cost?
- *Training:* Is sufficient training offered at no cost for teachers to become thoroughly familiar with the equipment?
- *Teaching and training materials:* Are materials easy to use, free of "promotional features," adaptable to class time frames, inexpensive, and easy for students to understand?
- *Hidden requirements:* Does equipment require special lighting, a dedicated electrical line, static-free carpeting, special temperature control, special desks, special ventilation, or soundproofing and/or noise control?
- *Rent, lease, or purchase:* Which option is available? Are there any hidden, ongoing charges?

- *Storage (filing) capabilities:* Is there enough storage (memory) available for all students who may use the equipment at one time? Is external storage (in the form of disks) available for student use? What is the cost?

- *Ease of operation:* Are equipment operations easy to perform? Are keys coded for easy operation? Are operations closely related to standard typewriter functions? Is software menu-driven, or are there dedicated word processing function keys? If menu-driven, can the menu be bypassed to speed up word processing operations? Is there a charge for software use? Is backup copy provided? If selecting a microcomputer, are software packages available to provide the needed functions?

- *Upgrading Capabilities:* Can equipment be upgraded by hardware expansions or by upgrading of software? How expensive is it?

- *Durability:* Will equipment stand up under classroom use?

- *Screen:* What size is the screen? thin window? full? partial page? How many characters appear horizontally on the screen? What size is the print on the screen? What color is the background and print? Can the screen scroll to wider widths?

- *Keyboard:* Is the keyboard similar to the typewriter keyboard?

- *Printer:* Is the printer letter quality, quick, and quiet? Can it support more than one keyboard?

- *Feature capabilities of equipment:* Will it perform and how does it perform these functions?

  — Automatic centering

  — Automatic underscore

  — Temporary left margins (block indentations)

  — Adjusting text (delete, move, insert) by character, word, line, or paragraph

  — Spelling check (proof pass)

  — Sorting

  — Insert/merge

  — Automatic carrier return and hyphenation

  — Automatic page numbering, page ending, and repagination

  — Communications

  — Programmable keystroke for repetitive operations, phrases, or formats

  — Automatic header/footer

— Table of contents/index

— Math functions/data processing

— Global search and replace

— Search

— Varied line spacing

— Format lines on screen or in document

Task 2

Each criterion selected can be broken into four general categories to allow a planner to assign a value to each piece of equipment for each criterion. For example, if training is determined to be one of the criteria, then a level of training that is unacceptable must be identified, as well as the ideal level of training. The remaining two values can then be assigned points between the two. The result would take the following format:

0 — no training available

1 — on-site demonstration only

2 — introductory training only

3 — extensive training given with follow-up training available

Indicate criteria you have selected on the left side and the various standards (or cell values) on the right, as shown below. You may need more than five criteria; if so, simply list them on a separate page.

Criteria	*Cell Values*
1. _____	0 — 1 — 2 — 3 —
2. _____	0 — 1 — 2 — 3 —
3. _____	0 — 1 — 2 — 3 —

4. _____ 0 —
1 —
2 —
3 —

5. _____ 0 —
1 —
2 —
3 —

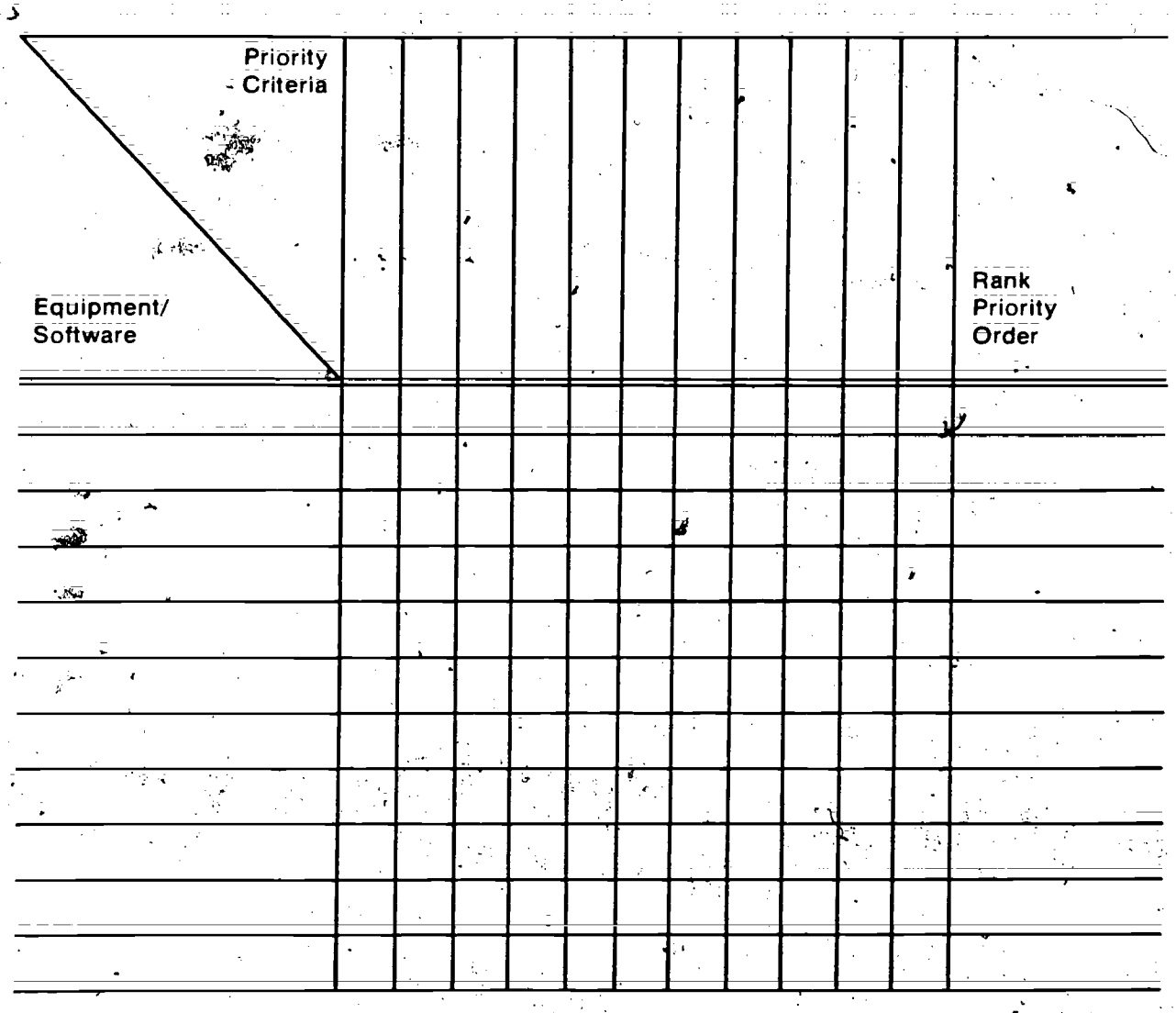
Task 3

After criteria and cell values have been identified, review them in order to determine whether each should be considered equal or whether one or more have greater value to your equipment requirements. For example, if cost is critical, its score may have to be doubled in your decision making.

Task 4

Next, criteria should be entered on the priority matrix and each piece of equipment reviewed. Cell values should be assigned to each product, adjustment made for greater weight, and a rank order identified. The results will be the identification of the most useful equipment for your objectives. (A sample appears in Step 3 on page 8.)

Equipment/Software Priority Matrix



WORKSHEET 4

A Guide to Implementing Word Processing Training

The purpose of this worksheet is to summarize and organize the decisions made on Worksheets 1, 2, and 3 into a concrete plan of implementation. This plan can serve as a guide to further development of word processing training or as a part of a formal proposal to begin the training.

A. Objectives for a Word Processing Training Program

Complete those objectives that are applicable for this program.

1. _____ Number of junior high students to be enrolled
2. _____ Number of secondary students to be enrolled
3. _____ Number of postsecondary students to be enrolled
4. _____ Number of adult students to be enrolled
5. _____ Total number of hours required to complete this program
6. _____ Number of contact hours per week to be provided to each student
7. _____ Student-teacher ratio
8. _____ The area of instruction planned (e.g., concepts, operator skills, or management skills)
9. _____ Describe facilities available for operating this curriculum. Attach a list of equipment items needed for use by students in this program. (Worksheet 3 provides assistance in selecting word processing equipment and software.)

10. _____ Describe the need for this program. Such a description should include but should not be limited to human resource needs, lack of similar offerings by other training sources in the area, and results of student interest surveys.

B. Curriculum Description for New Program

- List the criteria used to select the curriculum. (See Worksheet 2, pages 15-17.)

1.

2.

3.

4

5.

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9.

10.

- List major topics planned. (Obtain from curriculum resources selected.)

Topics	Instructional hours

EXPLORING SELECTED CURRICULUM RESOURCES

The eight curriculum resources selected for this guide were identified through a review of recent word processing curriculum development projects. In order to be included in the review, each resource had to meet the following criteria:

- Public domain: Available from noncommercial sources and developed under contracts or grants from private foundations or government sources
- Availability: Available through purchase, loan, or the ERIC system
- Usability: Appropriate for use with one or more of the target populations served by vocational education
- Compatability: Appropriate for use in one or more of the delivery systems used by vocational educators
- Timeliness: Developed within the last five to six years
- Cost: Cost of purchasing and implementation reasonable in terms of expected outcomes

The following resources met these requirements and are included in this guide:

Curriculum Resource	Author(s)/Project Director(s)
1. *Competency-Based Education Curriculum for Word Processing*	Susan Armstrong
2. *Competency-Based Word Processing*	E. Elaine Webb and Betty A. Kleen
3. *Developing a Curriculum for a Word Processing Certificate*	Bert Williamson and Sally N. Samuels
4. *Introduction to Word Processing Units of Instruction*	Elaine Burrow
5. *Word Processing*	*Patricia Moody, Gerelyn Burch, Joan Coughman, Evelyn Harvey, Nancy Hawkins, and Frances Wells*
6. *Word Processing Correspondence Specialist*	*William J. Schurter, Helen S. Hayman, and Craig A. Seger*

7. *Word Processing Curriculum Guide: A Beginning Text for WordStar*	*Frances Larsen, Sydney Barton, Kathleen Carlile, Cheryl Hardy, Glade Mower, and ElRoy Zentner*
8. *Word Processing Curriculum Update*	*Mary Elizabeth Reilly, Elaine Turk, and Carol Pam*

The review of each of these resources is organized as follows:

1. *Title*
2. *Source*
3. *Materials*
4. *Level and Scope*
5. *Format*
6. *Special Features*
7. *Instructional Units*
8. *Sample Pages*

In order to provide the reader with further assistance, summary charts are provided in the Appendix. Using the information from these charts, planners can determine the curricula best suited to their needs.

RESOURCE 1

1. *Title:* *Competency-Based Education Curriculum for Word Processing*

2. *Source:* Vocational Curriculum Laboratory
Cedar Lakes Conference Center
Ripley, WV 25271
(304) 372-8673

3. *Materials:* Teacher's Guide for the *Competency-Based Education Curriculum*
Student Material for the *Competency-Based Education Curriculum*

4. *Level and Scope:*

Competency-Based Education Curriculum for Word Processing provides seven modules of instruction that can be used in sequence for an introductory course in word processing or for integration into other courses. Each module contains a set of objectives with a Job Sheet and tasks to be accomplished through the learner-centered activities for each of these objectives. Materials are appropriate for secondary and postsecondary students.

5. *Format:*
- Objectives
- Job sheet for each objective
  - — Task to accomplish
  - — Materials needed
  - — Learning activities
- Evaluation
- Information sheets

6. *Special Features:*
- Used for group or individualized instruction
- Requires use of reference materials

7. *Instructional Units:*
- Introduction to Word Processing
- English/Proofreading
- Typing
- Office Machines
- Job Techniques
- Office Procedures
- Operation of Word Processing Equipment

8. *Sample Pages:*

Sample 1: List of Competencies and Tasks (from student material)

Following is a list of all the tasks included in each module of this curriculum:

Unit I - Introduction to Word Processing Module

1. Define word processing and describe the methods of processing words.
2. Describe the word processing cycle and how word processing may interact with other office systems.
3. Identify the four basic parts of a word processing system and explain the role of each part.
4. Define a list of word processing terms and spell these terms correctly.
5. Make an oral or written report on either a correspondence secretarial position, an administrative secretarial position, or a supervisory position in the field of word processing.

Unit II - English/Proofreading Module

1. Capitalize words correctly in written communication.
2. Express numbers correctly (figures or words) in written communication.
3. Use abbreviations correctly in written communication.
4. Use the comma correctly in written communication.
5. Use the hyphen correctly in written communication.
6. Use the apostrophe correctly in written communication.
7. Use the semicolon, quotation marks, and colon correctly in written communication.
8. Use the dash, parentheses, question mark, and exclamation point correctly in written communication.
9. Recognize complete sentences, sentence fragments, and run-on sentences.
10. Spell business vocabulary words correctly.

Sample 2: Introduction to Word Processing, Unit I, Job Sheet 4

Task: Define a list of word processing terms and spell these terms correctly.

Materials Needed:

1. Information Sheet I-4 - "A List of Word Processing Terms and Definitions"
2. Cassette tapes of word processing terms
3. Cassette player
4. Paper
5. Pen or pencil
6. Information Sheet I-4a - "Unscramble the Words"

Learning Activities:

1. Obtain Information Sheet I-4, a list of word processing terms and definitions, from your instructor.
2. Your instructor will designate 15 words each week for you to study. Of the 15 words, 10 words will be selected and dictated from a cassette tape for you to spell and define.
3. Write on a sheet of paper the correct spelling of each word as it is dictated on the cassette tape. (Leave enough room after each word to write the definition later.) After you have written each word correctly, go back and define each of the words.
4. When you have finished each quiz, be sure to recheck all of your words and then turn your paper in to your instructor for grading.
5. You may choose to take more than one quiz each week depending on your individual progress. Ask your instructor for the tape each time you take a quiz.
6. Using the list of word processing terms, play the game of "Word Processing Password." Your instructor will explain the procedures for playing this game.

Unscramble the following word processing terms:

Group 1

1. DTIGEIN _____
2. RIROYTPI _____
3. TKESEDIT _____
4. VIBIASELR _____
5. EGOTSRA _____
6. RNEPTRI _____
7. TUOTPU _____
8. RCORSU _____
9. VIROINES _____
10. FUEFRB _____

Group 2

1. UNMDCOET _____
2. LNSLCGROI _____
3. MFIELISAC _____
4. RIPRUSEVSO _____
5. TSBIUDTONIRI _____
6. RTELET _____
7. TPUNI _____
8. PLYFPO _____
9. YMSETS _____
10. GLNGIGO _____

RESOURCE 2

1. *Title:* *Competency-Based Word Processing*

2. *Source:* ERIC Document Reproduction Service No. ED 229 627

On loan from:

Dissemination and Utilization Program
The National Center for Research in Vocational Education
The Ohio State University
1960 Kenny Road
Columbus, OH 43210
(614) 486-3655
1-800-848-4815 (in the continental U.S. outside Ohio)
and
State Supervisors of Business Education

3. *Materials:* Units in thirteen instructional areas that provide specific entry-level jobs in word processing; instructional aids and suggested instructional activities sources for additional teaching aids and supplementary materials

4. *Level and Scope:*

The purpose of this resource is to introduce students in grades nine through twelve to word processing—basic concepts, career opportunities, human relations, clerical skills, communication skills, machine transcription, proofreading and editing, and records management and reprographics. Units of instruction that provide students with an opportunity to learn to operate equipment and develop a marketable skill in producing various documents with word processing equipment are included also. They may be used in total as a course in word processing, or various topics and activities may be integrated into other courses such as office procedures, office machines, Typing II, and cooperative programs. Ideally, the materials would be presented to students who have completed Typing I and have had two years of English.

5. *Format:*

- Introduction
- Competencies to be achieved
- General performance objectives/goals
- Specific performance objectives and mastery criteria
- Suggested interest approaches
- Methodology for teaching
  - — Unit outline
  - — Specific performance objectives with individual and group learning activities
- Unit test
- Unit test answer key
- Evaluation and testing
- Needed equipment and supplies
- Supplementary teaching materials
- Resources

6. *Special Features:*

The curriculum guide provides a bibliography of the materials used for resources in developing each of the units. Each unit contains an extensive list of sources for supplementary teaching materials. These source materials include films, film strips with cassettes, kits, periodicals, practice sets, simulations, transparencies, and textbooks.

7. *Instructional Units:*

- Basic Concepts of Word Processing
- Career Paths and Opportunities
- Human Relations Skills for Today's Office
- General Clerical Skills
- Effective Communication Skills
- Equipment-related Skills
- Machine Dictation and Transcription
- Proofreading and Editing
- Records Management and Reprographics
- Producing Mailable Documents from Longhand
- Producing Mailable Documents from Rough Drafts
- Producing Mailable Documents from Machine Dictation
- Producing Mailable Documents Using the Unique Features of the Provided Software

8. *Sample Pages:*

Sample 1: Career Paths and Opportunities

Introduction

The word processing movement has been responsible for the changing job responsibilities associated with office jobs. There has been a tendency to redefine jobs in the office under a centralized management system offering greater opportunities for advancement in this field. The purpose of this unit is to prepare students who enter the field of word processing to identify available career opportunities. If office workers are made aware of these opportunities, they will be motivated to use their jobs as "stepping stones" to promotions. These "stepping stones" form career paths.

Competencies:

1. Identifying career opportunities in word processing.
2. Describing job positions for word processing.

General Performance Objectives Goals:

1. Identify career path options in word processing including correspondence support, administrative support, management and supervisory personnel, and marketing support.
2. Describe career possibilities in word processing.

Specific Performance Objectives and Mastery Criteria:

1. On a written test, students will be able to list and describe at least three jobs made available by word processing.
2. Given an applicant's qualifications, students will be able to identify on a written test at least five entry-level word processing skills the applicant possesses.
3. Given a list of five word processing positions in a company organization on a written test, students will be able to explain the relationship of at least three positions to a company's organization.
4. Given a list of job titles on a written test, students will be able to identify the job functions associated with at least four of these.
5. On a written test, students will be able to illustrate a vertical career path in word processing with 75 percent accuracy.

Sample 2: Methodology and Outline for Career Paths and Opportunities

Methodology

This unit will enable the students to work in small groups, individually, or as a cooperative part of a large project. It has been designed to utilize skills already developed and to expand these skills to better prepare the students for employment in word processing. Methods of teaching to be employed include lecture, audiovisual, individual library research, sharing through reports, field trips, traditional text reading, question and answer discussions, and testing. Much of the content must be gathered from various sources available to the instructor. Many of these sources are listed in the resource section of this unit.

Unit Outline

Career Paths and Opportunities

I. Skills needed by entry-level word processors
   - A. Keyboarding
   - B. Proofreading
   - C. Oral communication
   - D. Basic language
   - E. Human relations
   - F. Composition and editing
   - G. Machine transcription
   - H. Records management
   - I. Reprographics
   - J. Mail distribution
   - K. Using reference materials

II. Career paths
   - A. Correspondence support
     1. Word processor trainee
     2. Word processor operator
     3. Word processor specialist
     4. Phototypesetting specialist
     5. Word processor trainer
     6. Proofreader
   - B. Administrative support
     1. Administrative secretary
     2. Senior administrative secretary
   - C. Management and supervisory personnel
     1. Word processor specialist II/assistant supervisor
     2. Word processor supervisor
     3. Word processor manager
     4. Administrative support supervisor
     5. Staff analyst
     6. Administrative support manager

Sample 3: Suggested Interest Approaches*

1. Give a pretest to determine students' understanding of the term "career paths," the opportunities available in word processing, and the route to follow to achieve the desired career goals.
2. Introduce this unit by explaining the difference between correspondence support and administrative support. Ask students which path they would be more interested in and from their responses ascertain which fields you will emphasize.
3. Invite a word processing operator or administrative secretary to explain the operation of a word processing center and the duties of various job categories.
4. Arrange a field trip to a local word processing center if there is one in your community. During the visit have the manager describe the categories of employees, their duties within the categories, and the skills needed by prospective employees.
5. Raise the following question for discussion: Which office careers, other than word processing, have the potential for advancement of entry-level personnel without *extensive* retraining and/or study?
6. Assign articles to be read on job titles in word processing and have students report on their findings.

*These are included in each unit.

Sample 4: Specific Performance Objectives and Learning Activities

1. Students will be able to list and describe on a written test at least three jobs made available by word processing.

Subject Matter Content	Learning Activities
Career Paths	• Complete the Crossword Puzzle after reviewing the career path terms. • Complete the Scrambled Words activity after reviewing career path terms. • Discuss various jobs made available by word processing. • Select two jobs in the traditional office setting and two jobs in the word processing center and describe each. • Prepare a bulletin board using job titles made available by word processing.

2. Given an applicant's qualifications, students will be able to identify on a written test at least five entry-level word processing skills the applicant possesses.

Subject Matter Content	Learning Activities
Skills Needed by Entry-level Word Processors	• Complete the Misspelled Words exercise. • Complete the exercise on the use of reference materials. • Discuss the importance of clear, concise oral communication. • Prepare a mailable copy from a typing textbook rough draft containing proofreaders' notations.

RESOURCE 3

1. *Title:* *Developing a Curriculum for a Word Processing Certificate*

2. *Source:*
Research Coordinating Unit
Commission for Vocational Education
Airdustrial Park, Building 17
State of Washington
Olympia, WA 98504
(206) 753-1301

3. *Materials:* Ten course descriptions and outlines that are used to plan programs for a certificate in word processing (one-year) and an associate degree in technical arts (two-years)

4. *Level and Scope:*

The curriculum is designed to provide training at the two-year college level by utilizing existing courses in office occupations, midmanagement, business administration, computer science, English, and psychology and to create word processing courses as needed. The objective is to provide marketable skills for word processing operators.

5. *Format:* Ten course outlines including—
- Course descriptions
- Course content and performance objectives
- Course grade evaluation
- Required materials
- Optional materials
- Class handouts (in some courses)

6. *Special Features:*

Items are based on review of the literature and review by word processing professionals
Includes appendix on job titles, current salaries, and job descriptions

7. *Instructional Units:*
- Advanced Typing
- Advanced Typing II
- Typing Skill Building
- Memory Typewriter
- Business English
- Introduction to Word Processing
- Electronic Typewriter
- Machine Transcription
- Word Processing
- Computer Application in Word Processing

8. *Sample Pages:*

Sample 1: Course Outline

Computer Science Department
CS132 - Computer Applications In Word Processing
3 credits

Course Objectives:

Student will learn to use the WordStar program for the DEC computer and apply acceptable word processing techniques to produce mailable copies.

Procedural Objectives:

1. Student will learn to turn on the computer, log onto the system, bring up the word processing package, keyboard data, and produce a hard copy.
2. Student will gain practice in keyboarding, editing, storing, retrieving, and distributing information.
3. Student will be able to handle short and long documents, standard and repetitive documents, and documents requiring variations such as letters or contracts consisting of standard paragraphs needing to be rearranged, form letters with three to five variations, and reminders calling for a standardized letter with a blank in the body to be filled out.

Course Content:

1. Specialized terminology
2. Computer manipulation
3. Creating a document
4. Retrieving a stored document
5. Correction methods
6. Editing capabilities
7. Formatting
8. Printing

Sample 2: Course Description

Office 252
Word Processing
2 credits

Student will learn word processing concepts and applications on the Lexitron VT 1202. This course will be taught with permission of the instructor at a time arranged by both the student and the instructor.

Prerequisites: Typing Speed: 50 W.P.M.
Ability to follow directions and work independently

Supplies: Diskette, ribbon, and paper (provided)

Course Procedure:

1. Student must arrange a time for an introductory session with the instructor. Student will then arrange a reserved time to use the equipment.
2. Training on the Lexitron VT 1202 is available on an individual basis with supplementary help as needed. The materials have been carefully selected to enable the student to proceed on this basis. IT IS VERY IMPORTANT to follow the instructions in the book.
3. The Lexitron VT 1202 is reserved for the student at the time indicated. Reserved time only should be used. It takes approximately 10 hours to complete the basic instruction. An additional 10 hours should be planned for learning applications.
4. The diskette should be handled and stored properly. Exercises are not to be submitted to the instructor; they are for the student's reference.
5. After completing the basic learning modules, the student will submit an original piece of work. This work will show the student's understanding of the machine's basic capabilities.
6. Grading for this course will be on a Pass/Fail basis. Students wishing a letter grade must make arrangements with the Office Occupations Department chairperson.
7. The instructor should be notified immediately if any problems occur. Smoking, drinking, and eating are prohibited in the word processing center.

RESOURCE 4

1. *Title:* *Introduction to Word Processing Units of Instruction*

2. *Source:* ERIC Document Reproduction Service No. ED 216 179

   Occupational Curriculum Laboratory
   East Texas State University
   Commerce, TX 75428
   (214) 886-5623

3. *Materials:* Curriculum guide to word processing

4. *Level and Scope:*

   This resource is designed to provide secondary students with prerequisite skills for entry-level positions in word processing.

5. *Format:*
   - Objective sheet, subjects covered, and competencies required
   - Note to instructor sheet—includes suggestions for gathering reference materials and supplies, visual aids, field trips, speakers, and presentation ideas
   - Information sheets for either group or individual instruction
   - Transparency masters
   - Activity sheets—designed for student use
   - Answer sheets for activities
   - Unit tests (with answers)

6. *Special Features:*
   - Resources, films, publications, and manufacturer information
   - Illustrations, pictures, and transparencies

7. *Instructional Units:*
   - Concepts and Theories of Word Processing (including microcomputer)
   - Language Usage
   - Mathematics
   - Machine Transcription and Dictation
   - Proofreading
   - Using Resources and References
   - Typing (separate curriculum guide from same source)

8. *Sample Pages:*

Sample 1: Objectives from Unit II—Word Processing Equipment

After completion of this unit, the student will be able to identify equipment used in word processing systems. This knowledge will be evidenced through demonstration and successful completion of the unit test.

SPECIFIC OBJECTIVES

After completion of this unit of instruction, the student will be able to:

1. Define terms associated with word processing equipment
2. Identify four types of discrete media equipment
3. List four types of discrete media
4. Describe endless loop media equipment
5. Identify three types of stand-alone systems
6. List the components of a display and mechanical text-editor
7. Identify three types of interactive typing systems
8. List the two types of equipment that can be interfaced with word processing equipment
9. List the storage media used with output equipment
10. Identify the printing mechanisms used to print out the information that has been stored
11. Identify the four types of reproduction equipment
12. Identify the methods used for distribution of documents in a word processing system

Sample 2: Notes to Instructor for Unit II—Word Processing Equipment

I. Preparation for Unit
   A. Order films from sources provided in order to show appropriate film to introduce word processing equipment.
   B. Obtain brochures and information on word processing equipment and supplies from the list of manufacturers provided in Unit I.
   C. Gather any additional resources and references to provide additional information to supplement the unit.
   D. Design a bulletin board using the brochures and pictures obtained from the manufacturers to introduce the unit. Categorize the equipment and supplies according to use so students will be able to identify the word processing equipment more easily.
   E. Arrange for a word processing vendor to visit the class to tell about various word processing equipment available. See if the vendor will bring some equipment for demonstration to the class.
   F. Arrange for a field trip to a company that has a word processing center or uses word processing equipment so students will have an opportunity to see the equipment in use.

II. Objective Sheet
   A. Discuss the unit and specific objectives.
   B. If necessary, add objectives to meet fully the needs of the students.
III. Information and Activity Sheets
   A. Information Sheet 1—INPUT EQUIPMENT
      1. Discuss the information presented.
      2. Have students complete Activity Sheet 1—TERMINOLOGY to reinforce the information studied.
      3. Have students read and report on an article regarding word processing equipment. (Use the magazines subscribed to in Unit I.)
   B. Information Sheet 2—OUTPUT EQUIPMENT
      1. Discuss the information presented.
      2. Provide examples of the various types of equipment discussed.
      3. Have students complete the following activity sheets:
         a. Activity Sheet 2—TERMINOLOGY
         b. Activity Sheet 3—CATEGORIES OF EQUIPMENT
         c. Activity Sheet 4—COMPONENTS
   C. Information Sheet 3—REPRODUCTION AND DISTRIBUTION EQUIPMENT
      1. Discuss the information presented.
      2. Provide examples of the equipment discussed.
      3. Have students complete Activity Sheet 5—TERMINOLOGY.
IV. Answers to Activity Sheets
   A. Answers are provided.
   B. Provide answers for any activities added.
V. Unit Test
   A. Various approaches may be used in testing.
      1. Tests may be used as an additional activity.
      2. Each part may be given as the information is completed.
      3. Tests may be given upon completion of the entire unit.
   B. Add test parts for any information added to the unit.
VI. Answers to Unit Test
   A. Answers are provided.
   B. Provide answers for any questions added.

Sample 3: Information Sheet for Unit II—Word Processing Equipment

As you have already learned, equipment is one of the three components of a word processing system. The following information explains the various types of equipment available and how each is used in a word processing system. To assist you in understanding the information presented, the equipment is categorized according to the four areas of use:

- Input Equipment
- Output Equipment
- Reproduction Equipment
- Distribution Equipment

I. Terms and Definitions

A. Access time—the time required to transfer information from an input unit to the location in memory where it will be stored
B. DE—dictation equipment
C. Dedicated recorder—a recorder used for one type of dictation or by a specific individual(s). For example, the recorder may be used for dictation of correspondence or for dictation of legal documents.
D. Discrete media—recording media which can be removed and stored, mailed, or placed in other equipment
E. Endless loop medium—a sealed, continuous loop of magnetic tape used for recording information
F. Input unit—a device into which information can be entered; a dictation recorder
G. Magnetic media—belts, cards, disks, tapes, or cassettes coated with magnetic material, for use with word processing equipment; dictation or keystrokes are recorded and stored on the media
H. Magnetic medium—the singular form of the word magnetic media
I. Optical Character Recognition (OCR) Reader—a reader used to scan and recognize printed characters and change them into digital signals for input onto a magnetic medium
J. Random access—the ability to find information quickly on magnetic media, regardless of where the information is located on the media
K. Recorder—the unit in a dictation system which records dictation on a magnetic medium
L. Recording media—paper or magnetic supplies used to record and store information

II. Input Equipment

Use of dictation/recording equipment is one of the methods through which material to be typed is put into the system. The dictation/recording equipment is used by the principals to dictate material onto a recording medium. The material is later transcribed by a word processing specialist using a text-editing typewriter. Dictation equipment is categorized by the type of recording media used as either discrete or endless loop media.

A. **Discrete Media Equipment.** Equipment which uses discrete media for recording information. The recording unit has a removable recording medium, such as a magnetic belt, tape cassette, cartridge, or disk, which can be removed from the recording unit and placed in a transcription unit or filed for later use.

1. Types of discrete media equipment. *Portable units* are self-contained, hand-held units which enable the principal to dictate outside the office at any time. When the material is ready to be transcribed, the recording medium is removed and placed in the transcription unit (i.e., a battery-operated cassette recorder).

Sample 4: Activity Sheet for Unit II—Word Processing Equipment

Directions: From the list of words below, write each term under the appropriate category with which it is normally associated.

Typebars	Shared-logic text-editors	Fiber optic
Core memory	Automatic repetitive typewriters	OCR
Perforated tape	Magnetic floppy disks	Daisy wheel
Magnetic tape	Communicating text-editor	Built-in storage device
Mechanical text-editor	Photocomposition equipment	Laser
Time-sharing text-editor	Display text-editor	Ink jet printer

Stand-Alone Systems

Interactive Systems

Interfaced Equipment

Storage Media

Printing Mechanisms

RESOURCE 5

1. *Title:* *Word Processing*

2. *Source:* ERIC Document Reproduction Service No. ED 179 804

Curriculum Publication Clearinghouse
76 B Horrabin Hall
Western Illinois University
Macomb, IL 61455
(309) 298-1917

3. *Materials:* Guide to word processing instruction including an introduction, a course outline, and a section giving clusters of word processing competencies

4. *Level and Scope:*

This is a twelfth-grade level, complete guide to activities for word processing instruction. Section one stresses word processing concepts, history, components, phases, future job descriptions, skills, and prerequisites. Section two presents the complete course outline. Section three gives the cluster of word processing competencies. The learning activities provide activity sheets, guidelines, suggested projects, and other resources to be used in mastering competencies.

5. *Format:* Each cluster contains word processing competencies along with suggested activities required to achieve competency. Teachers could include equipment competencies. The guide is designed to be used as a resource for teaching word processing introduction and entry-level training for secondary students. It includes enrichment activities for advanced students to learn word processing supervisory skills.

6. *Special Features:*

- Bibliography, guide to selecting equipment
- Advisory committee guidelines
- Sample word processing forms, word processing methods
- Glossary
- Cooperative work experience statement
- Guidelines for simulation of word processing system

7. *Instructional Units:*

- Human Relations
- History, Concepts, Procedures, and Job Opportunities
- Communication Skills (oral/written)
- Equipment Proficiency, Keyboarding, Dictation, and Transcription
- Reprographics, Records Management, and Dissemination
- General Clerical Skills
- Enrichment Activities (Supervisory Skills)

8. *Sample Pages:*

Sample 1: Equipment Proficiency—Keyboarding, Dictation, and Transcription

Competency 1: The student will demonstrate correct and efficient operation of keyboarding equipment. (Correspondence)

A. Proper coding, formatting, and error correction by appropriate means.
   1. Record alphabetic and numeric data correctly.
   2. Correct errors while recording by using backspace correction.
   3. Edit recorded data.
   4. Know all codes pertinent to your machine:
      a. Centering
      b. Tabulating
      c. Underscoring
      d. Stopping
      e. Switching
   5. Use magnetic media properly when applicable.
   6. Use memory feature correctly.
   7. Operate CRT when available.
   8. Retrieve stored material and be able to play back when applicable.

B. Accuracy and speed in typing straight copy, statistical copy, reports, and other office correspondence with errors corrected by appropriate means.
   1. Use touch method and error correction by backspacing.
   2. Use features that are peculiar to operator's machine when formatting.

C. Efficiency in producing final copy from rough drafts.
   1. Follow proofreader's marks.
   2. Follow all directions.
   3. Use proper format:
      a. Margins
      b. Pagination
      c. Headings
      d. Tabs

Sample 2: Equipment Proficiency—Keyboarding, Dictation, and Transcription

Activity 3: Type and play back two repetitive letters with variables.

Instructions:

1. Type the letter exactly as shown in Problem Two on page 95 putting in the appropriate STOP instructions.
2. Store the letter.
3. Recall the letter from storage.
4. Depress the proper button so that variable information will not go into memory.
5. Play back the letter typing in variables provided in Problems 3 and 4 on page 95.
6. Proofread variable information.

Sample 2: Equipment Proficiency—Keyboarding, Dictation, and Transcription (con't.)

Problems: 2-4. (Use the letter format in problem 2 to complete problems 3 and 4.)

Problem 2.

Date (1)

Inside Address (2)

Dear _____ (3):

Thank you for your letter of **Date** (4), indicating interest in the services offered by Inst-a-Word and requesting a visit by one of our staff members.

Name of staff member (5) will be in touch with you to arrange an appointment.

We look forward to working with you and your company.

Sincerely,

Carolyn T. Spencer
President

Problem 3.

(1) current date
(2) Mr. Scott J. Cox
East Columbia National Bank
Sumter Highway
Columbia, SC 29209
(3) Mr. Cox
(4) Five days before date of this letter
(5) Tanya DeLoache

Problem 4.

(1) current date
(2) Mrs. Juanita Malloy
City of North Columbia
City Hall
North Columbia, SC 29200
(3) Mrs. Malloy
(4) Five days before date of this letter
(5) Mason Reese

RESOURCE 6

1. *Title:* *Word Processing Correspondence Specialist*

2. *Sources:* Vocational Technical Education Consortium of States
Southern Association of Colleges and Universities
795 Peachtree Street
Atlanta, GA 30365
(404) 897-6157

3. *Materials:* Catalog of performance objectives and performance guide for those objectives

4. *Level and Scope:*

This is a compilation of performance objectives for a correspondence specialist. It may be used with existing programs as a basis for designing curricula using performance objectives as performance guides for specific programs, or for individual performance goals. This compilation may be used for secondary or postsecondary programs.

5. *Format:* This catalog is comprised of performance objectives and performance guides based on job-relevant task statements. Each performance objective contains the following elements: (1) the condition under which the student will perform the objective, (2) the performance required of the student after instruction has taken place, and (3) a job-relevant standard for measuring successful performance of the objective. The performance guides that accompany the objectives are procedural steps entailed in the performance of the task.

6. *Special Features:*

- Job relevant tasks identified through research
- Lists of equipment used in business
- State-of-the-art literature sources
- Cross-reference table for duties and tasks
- Additional word processing and administrative support available

7. *Instructional Units:*

- Organizing and Planning
  - Maintain Inventory of Office Supplies
  - Develop Long-Range, Departmental Objectives
  - Schedule Work Flow
- Supervising and Implementing
  - Orient New Employees
  - Demonstrate Equipment Use
  - Explain Office Procedures
  - Interview Applicant for Employment
- Performing Clerical Activities
  - Schedule Maintenance of Office Equipment
  - Keep Classified or Confidential File Materials Secure

Establish Subject Filing System
Establish Alphabetical Filing System
Establish Numerical Filing System
Maintain Personnel Files on Office Employees
Paste-up Materials to Be Printed
Update Procedural Manuals
Compose a Business Letter

- Performing Mail-Handling Activities
  - Process Outgoing Mail
- Performing Transcription Activities
  - Transcribe from Recorded Media
- Performing Keyboarding (Typewriting) Activities
  - Change Cartridge Ribbon on Word Processing Unit
  - Keep Record of Work Production
  - Keyboard Addresses into a Master Mailing List
  - Play Out Addresses onto Mailing Media
  - Keyboard Reports
  - Assemble Standardized-Paragraph Correspondence
  - Keyboard Correspondence Using Variable Inserts
  - Keyboard Budgets
  - Complete Preprinted Forms
  - Maintain Files of Disks

8. *Sample Pages:*

Sample 1: Performing Keyboarding (typewriting) Activities

DUTY: PERFORMING KEYBOARDING (TYPEWRITING) ACTIVITIES

TASK: Change cartridge ribbon on word processing unit

Performance Objective:

Given a word processing unit and a replacement ribbon cartridge, remove the used cartridge ribbon and replace it with a new ribbon, following manufacturer's instructions. The new ribbon should be installed so that it does not bind or crimp and the printer can generate legible copy.

Performance Guide:

1. Read specific instructions for changing ribbon.
2. Move printer head to center of carriage.
3. Remove old ribbon cartridge.
4. Insert new cartridge.
5. Advance past nonprint portion of ribbon.
6. Test for proper printing.

DUTY: ORGANIZING AND PLANNING

TASK: Schedule Work Flow

Performance Objective:

Given work requests, criteria for prioritizing, and departmental production capabilities, schedule work flow on a weekly basis allowing for daily adjustments. This will minimize delays in meeting prioritized criteria demands.

Performance Guide:

1. Review work requests daily to estimate total volume of work in each priority status: immediate, end-of-day, or end-of-week.
2. Confirm availability of workstations at beginning of scheduling period.
3. Allot work to stations equitably.
4. Prioritize work, redistributing as needed, to minimize delays while maintaining equity of work load.
5. Revise schedule daily to accommodate "immediate" and "end-of-day" status work requests.

RESOURCE 7

1. *Title:* *Word Processing Curriculum Guide: A Beginning Text for WordStar*

2. *Source:*
Utah State Office of Education
250 East Fifth, South
Salt Lake City, UT 84111
(801) 533-5371

3. *Materials:*
Teacher's Manual
Student's Manual

4. *Level and Scope:*

Word Processing Curriculum Guide: A Beginning Text for WordStar provides nine projects of instruction covering various functions of the software program, WordStar. Each project contains objectives, instructions, exercises, and review questions.

The materials are appropriate for secondary, postsecondary, and adult learners.

5. *Format:*
- Objectives
- Instructions
- Exercises
- Review Questions

6. *Special Features:*
- Individualized Instruction

7. *Instructional Units:*
- Cursor/Delete/Insert
- Margins/Format
- Block/Cursor/Find and Replace
- Tabs/Margins/Centering/Cursor
- Dot Commands
- Tables
- Special Printing Feature
- Review and Incidentals
- MailMerge

8. *Sample Pages:*

Sample 1: Project Objectives—Project 2

Objectives:

1. Change left and right margins.
2. Reform the typewritten material to conform to the new margins or new spacing.
3. Use the hyphen-help, justification, and word wrap.

Sample 2: Project Instructions—Project 2

INSTRUCTIONS TO THE STUDENT:

1. Turn on *all* machines.
2. Boot up system (main terminal only). Type b, (return).
3. Type in your User #, (if different than on the screen).
4. Type b:
5. Type in ws, for WordStar program and wait.
6. When the No-File Menu appears at the top of your screen, type a d to Open a Document File----Now wait.
7. When the sentence NAME OF FILE TO EDIT appears, set up a new file by using the name of your choice.
8. Type the information shown on the next page.
9. When you have finished typing the paragraphs, move the cursor back to the beginning of the file by depressing ^QR.

10. Change the spacing from single spacing to double spacing. WordStar comes up automatically with single spacing. To change the spacing, type OS. The computer will ask ENTER space OR NEW LINE SPACING 1-9): Type 2 and reform all paragraphs to new line spacing.* Return to top of file ^QR.

11. Depress ^OR to change your right margin. The computer will ask RIGHT MARGIN COLUMN NUMBER (escape for cursor column)?

12. Change the present right margin to 47 by typing 47. Notice that the ruler line at the top of your file will move to column 47.

13. Reform the paragraphs to conform to the new right margin setting, type ^B. The computer will reform the first paragraph to the 47-space line unless some of the words need to be divided.(^B necessary every time there is a return).

14. WordStar has a feature called hyphen-help. When a word needs to be divided, the cursor will stop on the word. You will notice at the top of your screen the computer tells you what to do. If you don't want to divide a word depress B again. If you want to divide, you can move the cursor to the left with the cursor movement keys. When the cursor is to the immediate right of where you would like to hyphenate, simply depress the hyphen key. Follow the correct word division rules.

15. You must type ^B for *each* paragraph in your document: make sure the cursor is located at the beginning of the paragraph. Type ^OL to change left margin. The computer will ask LEFT MARGIN COLUMN NUMBER (escape to cursor column)?

16. Change the preset left margin to 3 by typing 3.

17. Return to beginning of second paragraph and reform the second and third paragraphs. Remember hyphenation procedure in Step 13.

18. Justification keeps your right margin even when you first type and when you reform material. To turn justification off—depress ^O. If you look at your O Menu, you will see the word On printed beside J=Justify. Type J to turn justification off. Main Menu will reappear. Reform the third paragraph (^B). Notice a ragged right margin.

19. Now it's time to save this file and print. Depress ^KD and wait, print and hand in to your instructor.

---

*If your terminal shows a line of ---------- followed by a P, it is merely WordStar's way of telling you that you've typed enough to fill up one page of file. Keep typing.

Sample 3: Project Exercise—Project 2

It is a natural thing that you would have some concern about using equipment that almost thinks for you and anticipates your every concern. Nevertheless, learning the application and varied use of word-processing equipment is a necessity if one is to succeed in the office of today. What tomorrow's office will require from its skilled worker is anyone's guess; but for sure, he/she will need to be flexible and willing to learn to use equipment that will probably be awesome in its speed and application.

At present it is felt that knowing how to typewrite correctly is a necessary skill that will add to the success and productivity of today's office worker. Some people feel keyboarding is hitting the keys on the typewriter or computer terminal keyboard in any manner with no apparent system or skill. Typewriting is a skill that uses the same fingers for the same keys all of the time in a systematic procedure that will insure that the typist or operator can develop a certain degree of skill.

The touch method of typewriting is based on the concept that if an operator does not have to look at his/her fingers all of the time more speed and accuracy in the typewriting process will be achieved. Experiments have proven this to be true. However, some computer operators insist that their hit-and-miss system of keyboarding is effective. But it causes one to wonder and smile somewhat as one watches the ineffective techniques of the computer operator.

Sample 4: Project Review Questions—Project 2

1. When you call up WordStar, what is the default or automatic line length on your terminal?
2. How do you turn off the justification command?
3. What is the command to reform a paragraph after you have changed the margins?
4. How does the computer tell you that you need to make a decision about a hyphen?
5. How do you quickly return to the beginning of your file?

RESOURCE 8

1. *Title:* *Word Processing Curriculum Update*

2. *Source:* Curriculum Publication Clearinghouse
76 B Horrabin Hall
Western Illinois University
Macomb, IL 61455
(309) 298-1917

3. *Materials:* Activity packets for word processing machine operation, reprographics, machine transcription, and case studies; and an Instructor's Guide containing keys for activity packets

4. *Level and Scope:*

Word Processing Curriculum Update contains activity packets for upper-level secondary students who have completed initial training on word processing equipment. The instructions for the activities are designed to permit students to use decision-making skills.

5. *Format:*
   - Each activity packet contains the title and directions.
   - The Instructor's Guide contains a key for the activities.

6. *Special Features:*
   - Contains cassettes for transcription.
   - Some pages need to be reproduced from teacher's guides.
   - Includes course outline for Mechanics of Business (office machines).

7. *Instructional Units: The instructional unit contains the following activity packets—*
   - IBM Electronic 50 Typewriter
   - IBM Electronic 60
   - IBM Magnetic Card
   - Vydec word processor
   - Reprographics/Cut and Paste
   - Machine Transcription
   - Case Study 1
   - Case Study 2
   - Case Study 3
   - Case Study 4
   - Case Study 5

8. *Sample Pages:*

Sample 1: Case Study 1—Organization

The Research and Training Division is headed by Robert Burton who has four people reporting directly to him. Joe Bruno is Vice-President of Public Opinion and Marketing Surveys. He has two project directors, Ronnie Goldfarb and Linda McAlair, reporting to him. The Vice President of Government Surveys is Larry Talbert; no one reports directly to him. The Vice President of Employee Surveys is Donald Gray. Since the employee surveys tend to be standard surveys which are repeated for client after client, there is a great deal of system built around them. For this reason, Dr. Gray has a research assistant assigned to him who is in charge of survey administration, those activities involved in scheduling with clients, handling questions about timing or formats from the project people, etc. Dr. Gray also has reporting to him Jane Peters who is Coordinator of Survey Processing. Jane is responsible for receiving the survey forms as they are mailed in, logging them, keeping track of the numbers of forms received on each of the jobs in progress and sending them to an outside keypunching house when sufficient numbers have been returned. The fourth person reporting directly to Dr. Burton is Dot Banoff who is the Data Processing Coordinator. Her job is to receive the keypunch cards from Jane Peters and the analysis specifications from either Lorie Tischman or one of the Project directors or vice presidents and produce the computer analysis which is then given to the appropriate project person. There are also three secretaries who are shared by the professional staff.

(A sample of the questions given with the case study)

1. What is the current organization chart for this office?
2. What problems is such an organization likely to produce?
3. What organization would you recommend and why?

Sample 2: Directions for a Learning Activity on a Word Processor

Instructions for Typing Memorandum Report on IBM 50

Assignment: Type the following report on the IBM 50 Typewriter. Be sure to use the correct instructional keys of the typewriter.

Read all directions before beginning.

1. The report should be set up in the form of a memorandum.
2. The columns should be centered attractively within the margins of the memorandum.
3. Each column heading should be underscored.
4. Leave enough space between columnar information and the remainder of the body of the memorandum so that the information can fit adequately.

(The Text-Editing Problem)

TO: Thomas McGrath

FROM: Laura Thornton
Administration Manager

SUBJECT: Delinquent Plant Returns

The following machines have been requested to be returned to the plant. As of this date, manifests have not been received. Please provide a copy of the manifest on which the machines have been returned or an expected return date.

Serial No.	Customer	Date	Plant	Trans. No.

If you have any questions concerning the above information, please call me on extension 885.

RELATED RESOURCES

Numerous materials have been produced by both the public and private sectors that supplement the curriculum materials identified in this guide. Publicly developed curriculum materials are described briefly in this section.

The Bilingual Word Processing Curriculum Development Project, available from Essex County College, 303 University Avenue, Newark, NJ 07102

This is a proposal to demonstrate that quality bilingual (Spanish/English) curriculum materials for word processing can be developed. It describes a plan for development of bilingual word processing training materials. Materials are not included.

Kansas Information/Word Processing Curriculum Guide, available from Kansas State Department of Education, Vocational Education Division, 120 East Tenth Street, Topeka, KS 66612, (913) 296-3954. ERIC Document Reproduction No. 221 698

This is a curriculum guide for secondary and postsecondary schools. It includes the following sections:

Introduction to Need for Word Processing Instruction
Recommended Course, Course Descriptions, Teaching Methods, and Instructional Materials
Selecting Word Processing Equipment
List of Resources
List of Equipment, Supplies, and Service
Glossary and Evaluation Sheet

Machine Dictation and Transcription, available from South Carolina Department of Education, Office of Vocational Education, Vocational Curriculum Development Section, 1107 Barringer Building, 1338 Main Street, Columbia, SC 29201, (803) 758-5971

This is a curriculum guide for machine transcription for the secondary or postsecondary level. The *Instructor's Manual* includes letters prepared for dictation and keys to transcribed letters. The *Student's Manual* includes materials that can be duplicated, an overview for transcribing letters, preview sheets for letters, and instructions and problems to be dictated. Also included are: (1) tips for proofreading, (2) proofreader marks, (3) spelling errors, (4) state abbreviations, (5) transcribers daily log, (6) phonetic alphabet, (7) line count sheet, and (8) letter and address styles.

Study of Word Processing Competencies with Implications for Training of Handicapped and/or Disadvantaged Students, available from Dr. Donald Busche and L. Joyce Arntson, Saddleback Community College District, 28000 Marguerite Parkway, Mission Viejo, CA 92692

This is a study to provide data needed to develop a word processing curriculum that will properly serve the needs of handicapped and/or disadvantaged community college students. It includes survey results, recommendations, and bibliography.

Survey of Word Processing Jobs, Equipment, & Practices, available from Dr. Madan Capoor, Middlesex County College, Edison, NJ 08818

This is a survey of word processing installations in New Jersey and includes data on the following:

1. Employers of word processing personnel
2. Job market
3. Breakdown of sex stereotyping
4. Organization
5. Education and training
6. Salaries
7. Equipment
8. Future plans

Vocational Competency Measures: Word Processing Specialist, available from American Institute for Research in the Behavioral Sciences, P.O. Box 1113, Palo Alto, CA 94302, (415) 493-3550

This test package can be used by training institutions as a final competency evaluation instrument, for assessing students' achievement, and as a screening tool for advanced standing in a word processing program. This package contains a job information test, performance tests, and a work habits inventory.

1983 Word and Data Processing Curriculum Materials Review, available from the New Jersey Vocational Education Resource Center, Curriculum Sales Section, Rutgers University, 200 Old Matawan Road, Old Bridge, NJ 08857, (201) 390-1191

This product has been developed as an aid for teachers, trainers, and administrative designers of instruction in word and data processing at the secondary, postsecondary, and adult levels. The 76 curriculum products included in the review are described according to source, delivery mode, profile, operational characteristics, suggested prerequisites, administrative data, and readability. These items were collected through requests for examination copies from publishers as well as from instructional materials holdings of the New Jersey State Department of Education, Division of Vocational Education.

APPENDIX

SUMMARY CHARTS

Summary Chart 1: Selected Features

Curriculum Resource	Population	Course Length	Instructional Content	Instructional Format	Resources Needed	Instructor Skill Level Needed
Competency-Based Education Curriculum for Word Processing	Secondary Postsecondary	Instructor determined	7 modules	Group Individualized	Text resources Word processing equipment and diskettes Business personnel forms Duplicating equipment Typewriter Business machines Cassette player	Advanced
Competency-Based Word Processing	Secondary	Instructor determined	13 units	Group Individualized	Word processing equipment Transcription equipment Reference material	Advanced
Developing a Curriculum for a Word Processing Certificate	Postsecondary	1-2 years	10 course outlines	Course descriptions Course outlines	Word processing equipment Transcription equipment Calculators	Advanced
Introduction to Word Processing Units of Instruction	Secondary	1 semester or integrated into other classes	7 units	Group Individualized	Dictation equipment Transcription tapes	Moderate
Word Processing	Secondary	1 semester or integrated into classes	7 cluster units	Cluster units broken down by competencies that include - activity - material - instruction	Word processing equipment (optional) Transcription equipment Typewriters Transcription and dictation tapes Training materials	Minimal
Word Processing Correspondence Specialist	Secondary Postsecondary	Instructor determined	6 units (28 tasks)	Group Individualized	Word processing equipment	Advanced
Word Processing Curriculum Guide: A Beginning Text for WordStar	Secondary Postsecondary Adult	Instructor determined	9 projects	Individualized	Microcomputer, CP/M operating system WordStar, SpellStar, MailMerge	Moderate
Word Processing Curriculum Update	Secondary	1 year	11 learning activity packets	Group Individualized	Word processing equipment	Advanced

Summary Chart 2: Background Information

Curriculum Resource	Developer(s)	Sponsor(s)	Source
Competency-Based Education Curriculum for Word Processing 1980/353 pp.	PRT Vocational-Technical Center, St. Marys, WV	West Virginia Department of Education, Bureau of Vocational, Technical and Adult Education	Vocational Curriculum Laboratory Cedar Lakes Conference Center Ripley, WV 25271 (304) 372-8673 **Cost:** $15.00
Competency-Based Word Processing n.d./394 pp. **Note:** ERIC Document Reproduction Service No. ED 229 627	Business Education Section, Office of Vocational Education, Louisiana State Department of Education Nicholls State University of Louisiana	Office of Vocational Education, Louisiana State Department of Education	**On loan from:** Dissemination and Utilization Program The National Center for Research in Vocational Education Columbus, OH 43210 (614) 486-3655 1-800-848-4815 (in the continental U.S. outside Ohio) and State Supervisors of Business Education
Developing a Curriculum for a Word Processing Certificate 1982/63 pp.	Skagit Valley College, Mt. Vernon, WA	Research Coordinating Unit, Commission for Vocational Education, State of Washington	Research Coordinating Unit Commission for Vocational Educatio Airdustrial Park, Building 17 State of Washington Olympia, WA 98504 (206) 753-1301 **Cost:** to be determined
Introduction to Word Processing Units of Instruction 1982/419 pp. **Note:** ERIC Document Reproduction Service No. ED 216 179	Occupational Curriculum Laboratory, East Texas State University	Texas Education Agency, Occupational Education and Technology	Occupational Curriculum Laboratory East Texas State University Commerce, TX 75428 (214) 886-5623 **Cost:** In-state—$14.00-Teacher's Manual $10.00-Student's Manual Out-of-state— $17.00-Teacher's Manual $12.00-Student's Manual

Summary Chart 2: Background Information (Continued)

Curriculum Resource	Developer(s)	Sponsor(s)	Source
Word Processing 1979/212 pp. **Note:** ERIC Document Reproduction Service No. ED 179 804	Business and Office Education Section, Office of Vocational Education, South Carolina State Department of Education	Office of Vocational Education, South Carolina State Department of Education	Curriculum Publication Clearinghouse 76 B Horrabin Hall Western Illinois University Macomb, IL 61455 (309) 298-1917 **Cost:** $6.75
Word Processing Correspondence Specialist 1978/14 pp.	Department of Industrial Education, University of Maryland	Division of Vocational-Technical Education, Maryland State Department of Education	Vocational Technical Education Consortium of States Southern Association of Colleges & Universities 795 Peachtree Street Atlanta, GA 30365 (404) 897-6157 **Cost:** V-TECS Member States—Nominal Nonmember States—$49.00
Word Processing Curriculum Guide: A Beginning Text for WordStar 1982/56 pp.	Utah State Board of Education Utah State Board of Vocational Education	Utah State Board of Education Utah State Board for Vocational Education	Utah State Office of Education 250 East Fifth, South Salt Lake City, UT 84111 (801) 533-5371 **Cost:** $5.00-Teacher's Manual $5.00-Student's Manual
Word Processing Curriculum Update 1980/406 pp. Two cassette tapes are included.	Middlesex County College, Edison, NJ	New Jersey Vocational-Technical Curriculum Laboratory	Curriculum Publication Clearinghouse 76 B Horrabin Hall Western Illinois University Macomb, IL 61455 (309) 298-1917 **Cost:** $20.00

Summary Chart 3: Word Processing Competencies

This chart provides an overview of the concept and skill competencies covered by each of the eight resources. Use the key below to identify the resources (designated by numbers across the top of the chart).

	1	2	3	4	5	6	7	8
Word Processing Systems/Equipment Concepts								
Word processing history/concepts		X			X	X		
Procedures/organization	X			X	X	X		
Terminology	X			X	X			
Career/job specialization	X	X	X	X	X			
Types of equipment/applications			X	X	X			X
Traits needed for word processing		X	X	X	X			
Using procedures manuals					X	X		
Document coding and filing	X	X			X			
Work prioritization/time management	X	X			X			
Equipment Operation Skills								
Word processing machine operation	X	X	X		X	X		X
Microcomputer word processing			X				X	
Transcription	X	X	X	X	X	X	X	X
Dictation	X	X		X	X			X
Language arts skills	X	X	X	X	X		X	
Proofreading	X	X		X	X			X
Supervisory/Management Skills								
Planning	X				X	X		
Organizing	X	X			X	X		
Production control		X			X			
Training								

Key:
1—*Competency-Based Education Curriculum for Word Processing*
2—*Competency-Based Word Processing*
3—*Developing a Curriculum for a Word Processing Certificate*
4—*Introduction to Word Processing Units of Instruction*
5—*Word Processing*
6—*Word Processing Correspondence Specialist*
7—*Word Processing Curriculum Guide: A Beginning Text for WordStar*
8—*Word Processing Curriculum Update*

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Summary Chart 4: Teacher and Student Materials

This chart provides an overview of the concept and skill competencies covered by each of the eight resources. Use the key below to identify the resources (designated by numbers across the top of the chart).

	1	2	3	4	5	6	7	8
Teacher Materials								
Behavioral objectives	X	X	X	X	X	X		X
Content outline	X	X		X	X		X	
Transparency masters/handouts		X		X				
Sug. teach. strat. or utiliz. guide	X	X		X	X		X	X
Evaluation techniques	X	X	X	X	X			
Student Materials								
Content narrative				X	X		X	X
Student activities	X	X		X	X		X	X
Implementation projects				X	X		X	X
Suggested references	X	X		X	X			
Supplementary readings	X	X		X	X			

Key: 1—*Competency-Based Education Curriculum for Word Processing*
2—*Competency-Based Word Processing*
3—*Developing a Curriculum for a Word Processing Certificate*
4—*Introduction to Word Processing Units of Instruction*
5—*Word Processing*
6—*Word Processing Correspondence Specialist*
7—*Word Processing Curriculum Guide: A Beginning Text for WordStar*
8—*Word Processing Curriculum Update*

REFERENCES

Davis, Edward L., and Zelinko, Margaret. *Entrepreneurship in VocEd: A Guide for Program Planning*. Columbus: The National Center for Research in Vocational Education, The Ohio State University, 1982.

Policies Commission for Business and Economic Education. "This We Believe about Word Processing in Business Education." *Business Education Forum* 38, no. 1 (October 1983): 12.

TO ORDER ADDITIONAL COPIES OF THIS PUBLICATION, USE —	ORDER NUMBER	PRICE
• *Word Processing: A Guide to Program Planning*	LT 65	$4.95

TO ORDER RELATED PUBLICATIONS, REFER TO —		
• *Microcomputers in Small Business Management*	LT 64	$6.50
• *Courseware Evaluation: Form & Guide for Vocational and Technical Education*	SN 44	$2.50
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• *Communications Technologies: Their Effect on Adult, Career, and Vocational Education*	IN 244	$4.25

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To order additional copies, please use order number and title. Orders of $10.00 or less should be prepaid. Make remittance payable to the National Center for Research in Vocational Education. Mail order to:

The National Center for Research
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