The Waubonsee Community College Comprehensive Development Plan in Office Skills served 208 students by assessment of basic skills and referral to appropriate programs or help with job skills and referral to employment during the 18-month grant period from December 1988 through June 30, 1990. The target population was minority women or economically disadvantaged individuals ineligible for training programs funded under Job Training Partnership Act Title II. Of the 208 students, 65 percent were placed in competitive employment. Pre- and post-tests were administered to each student in typing speed, math, filing, spelling, and English. Each participant was provided with an individualized program. Students worked at their own pace and became employed or were promoted when they had achieved the required skills. A multilevel curriculum was developed. (The two-page report is followed by two pie charts and one chart with student outcomes and the curriculum. This curriculum consists of course outlines—description, recommended students, objectives, methods, text, evaluation methods, topic outline, and some activities—for computerized shorthand; Superwrite; computerized data entry; CCMAIL electronic mail program; introduction to DOS using a hard disk drive; data entry activities for the microcomputer; microfile; programmed proofreading; professional development; job search; beginning technical typing; "M.V."; UNIX word processing; telephone techniques; business English; and technical typing, part 2.) (YLB)

***********************************************************************
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OBJECTIVES

Objectives of the Waubonsee Community College Comprehensive Development Plan in Office Skills were met, and in some cases exceeded, during the 18-month grant period from December 1988 through June 30, 1990.

A comparison of the actual accomplishments to the goals established for the period are outlined below and in the attached documents.

Objective 1: To serve a minimum of 200 minority women, or economically disadvantaged individuals who are ineligible for Title II (JTPA) funded training programs, during the 18-month project period.

208 students were serviced by assessment of basic skills and referred either to appropriate programs or helped with job skills and referred out to employment.

Of the 208 students, 65% or 135 of the total were placed in competitive employment, 12% or 24 were carryovers into the current program, and 4% or 9 dropped due to medical reasons.

19% or 40 of the 208 received assessment services and/or were referred to employment or other sources.

Above results have been illustrated on a pie chart in Appendices B and C. Surveys results, which will be compiled after they have been received from students who completed the program, will be mailed under separate cover.

Even though the evening program did not begin until October 1989, the goal was exceeded by 8 participants. A list of all program participants including their start date, completion date and status is contained in Appendix A.

Objective 2: To provide assessment of basic skills for each incoming participant, and remedial course work in English, spelling, or math as indicated.

This objective was met through pre- and post-tests given to each student in the areas of Typing speed, Math, Filing, Spelling and English. A compilation of these scores is reflected in the chart, Appendix D, which reflects considerable increases in scores. The Spelling increase was lower due to the type of test given. This is being re-assessed for change.
Objective 3: To offer each participant an individualized program of instruction, which is self-paced and open-entry/open-exit. Students will enter the required core current their current level of competence, and a complementary set of optional courses will allow each individual to prepare for their own selected career objectives.

This objective was met by providing each participant with an individualized program which is reflected in Appendix A, the CDT Student Listing, and again in the post-test improvement results, Appendix D. Students worked at their own pace and became employed or were promoted when they had achieved the required skills.

A multi-level curriculum, developed during this Project period, is also contained in Appendix E.

Objective 4: To include a Work Experience component for advanced students.

There was not as much demand for this component as first anticipated. When this grant was first written, industry was hiring a lot more employees than they are now. Projects for the school, internally within Waubonsee, were available for students to gain work experience and the CDP program worked directly with temporary agencies in lieu of work experience.

Two evaluations were completed by an external evaluator (see copies of previous evaluations enclosed).

BUDGET

$18,948 of the federal grant monies was unused. Cash match was under by $2,740. Even though the Project goal of 200 was met for students serviced, only 135 were trained to completion and employment.

Also, the Recruiter Advisor and evening sessions did not begin until 9 months into the grant period due to administrative changes at the college. The Financial Status Report is enclosed with this performance report.
CDT Program
1988/1990

208 Total Students
CDT Program
1988/1990 Employment/Job Upgrade

144 Total Students
Core Subjects
Average Increase After
Pre and Post Tests

Typing Speed: 60%
Math: 50%
Filing: 40%
Spelling: 10%
English: 70%

Percentages
I. CATALOG DATA:

<table>
<thead>
<tr>
<th>Department</th>
<th>Course Number</th>
<th>Course Title</th>
<th>Sem. Hrs. Credit</th>
<th>Contact Hours Per Week</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Computerized Short-hand</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

II. COURSE DESCRIPTION:

This is a comprehensive computerized shorthand course which uses a powerful software program (Productivity Plus) that shortens keyboarding time and improves accuracy by using short forms for commonly used words and phrases. The short forms are based on phonetic principles and other guidelines. The program, also, allows the user to create new forms.

Prerequisite: 01040 and WordPerfect

III. RECOMMENDED FOR:

Students who want an additional employability skill.

IV. COURSE OBJECTIVES:

1. To learn phonetic principles and other guidelines in order to make short forms.

2. To learn short forms for commonly used words, derivatives, phrases, word beginnings, and word endings.

3. To develop skill by using phonetic principles and other guidelines to create new short forms—both text and single words.

4. To develop skill in keyboarding short forms from word lists.
IV. COURSE OBJECTIVES:

5. To develop skill in keyboarding connected material by using previously learned short forms.

6. To develop skill in forming new short forms while keyboarding from connected material.
V. METHODS OF PRESENTATION:

1. Lecture
2. Teacher-directed drills
3. Dictation by teacher
4. Timings

VI. REQUIRED TEXT (Author, Title, Publisher, Copyright Date):


Date Adopted:
August, 1990

VII. SUPPLEMENTARY TEXTS AND RELATED MATERIALS:

1. Word Division Manual (South-Western)

VIII. METHODS OF EVALUATING STUDENT PROGRESS:

1. Unit theory tests
2. Thirty-second timings in keyboarding short forms
3. One-minute timings in keyboarding sentences
4. Final theory exam
IX. COURSE OUTLINE

I. THEORY

A. Unit 1
   1. Short forms a to d
   2. Spaces and punctuation marks

B. Unit 2
   1. Short forms e to n
   2. Capitalizing words

C. Unit 3 - Short forms o to q
D. Unit 4 - Short forms r to t
E. Unit 5 - Short forms u to y

F. Unit 6 - Keyboarding commonly used phrases
G. Unit 7 - More ing words

H. Unit 8
   1. Days of the week
   2. Months of the year
   3. City and state names

I. Unit 9 - Words ending in ment

J. Unit 10
   1. Words beginning with de and di
   2. Words beginning with re

K. Unit 11
   1. Words ending in able and ible
   2. Words ending in ification

L. Unit 12 - Letter salutations and closings

M. Unit 13
   1. Words with for
   2. Words with trans

N. Unit 14
   1. Words ending with ical and icle
   2. Words beginning with per and pur

O. Unit 15
   1. Words beginning with com
   2. Words beginning with con
IX. COURSE OUTLINE

P. Unit 16
   1. Words ending in ful
   2. Words with dev and div
   3. Words with def and dif

Q. Unit 17
   1. Words with ten and tan
   2. Words ending in tain
   3. Words with den

R. Unit 18
   1. Additional short forms: a through r
   2. Additional short forms: s through y

S. Unit 19
   1. Words beginning with enter and inter
   2. Words ending in quire and quiry
   3. Words ending in quent
   4. Words ending in cial and tial

T. Unit 20
   1. Words ending in ulate and ulation
   2. Words with rity and ure
   3. Words ending in lity
   4. Words ending in val and ule

II. POST THEORY DICTATION AND PRACTICE
COURSE OUTLINE

I. CATALOG DATA:

<table>
<thead>
<tr>
<th>Department</th>
<th>Course Number</th>
<th>Course Title</th>
<th>Sem. Hrs. Credit</th>
<th>Contact Hours Per Week</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Superwrite</td>
<td></td>
<td>5 for at least 12 wks.</td>
</tr>
</tbody>
</table>

II. COURSE DESCRIPTION:

This is a comprehensive course in Superwrite, which is a writing system based primarily on longhand and secondarily on phonetics. It uses only letters of the alphabet and common punctuation marks.

Prerequisite: OP040 and English proficiency

III. RECOMMENDED FOR:

Students who want to gain an additional employability skill.

IV. COURSE OBJECTIVES:

1. To learn Superwrite rules.
2. To develop skill in reading words written in Superwrite.
3. To write words in Superwrite as rules are learned.
4. To develop skill in taking dictation in Superwrite at least 60 WPM on unfamiliar material.
5. To develop skill in transcribing dictation on the typewriter in mailable form.
6. To review basic grammar and punctuation rules.
V. METHODS OF PRESENTATION:

1. Lecture
2. Teacher-directed drills
3. Dictation by teacher
4. Speed building tapes

VI. REQUIRED TEXT (Author, Title, Publisher, Copyright Date):


Date Adopted:

August, 1990

VII. SUPPLEMENTARY TEXTS AND RELATED MATERIALS:

1. Superwrite Dictionary
2. Word Division Manual (South-Western)

VIII. METHODS OF EVALUATING STUDENT PROGRESS:

1. Lesson theory tests with 80% proficiency or retake.
2. Three-minute dictation takes at least 60 WPM on unfamiliar material with 95% accuracy.
3. Transcription of letters in mailable form.
4. Final theory exam.
IX. COURSE OUTLINE

I. UNIT I - THEORY AND BASIC DICTATION

A. Lesson 1*
   1. Silent letters
   2. Punctuation
   3. Abbreviations - you, your, as, is, will

B. Lesson 2
   1. The letter T
   2. Long vowels
   3. Abbreviations - are, or, our, can, for

C. Lesson 3
   1. Different long vowel sounds
   2. Short vowels
   3. Abbreviations - at, it, to, has, have, very, do

D. Lesson 4
   1. Sh sound
   2. Ch sound
   3. Word ending ing
   4. Adding s to a word
   5. Abbreviations - we, which, soon
   6. Personal titles and names

E. Lesson 5
   1. Th sound
   2. Abbreviations - the, and, in
   3. Salutations and closings
   4. Geographic names

F. Lesson 6
   1. Abbreviations - am, more, be, been, by, month
   2. Word beginnings
      a. Be
      b. In, en
      c. Re
      d. De

G. Lesson 7
   1. Word ending tion
   2. Ou and ow sounds
   3. Word ending ly
   4. Abbreviations - from, of, year, let

*Each lesson has an application section and an application reinforcement section. Beginning with Lesson 6, each lesson has a "Word to the Wise" section.
IX. COURSE OUTLINE

H. Lesson 8
   1. Word endings
      a. Ment
      b. Able
   2. Abbreviations - after, business, company, responsible
   3. Quantities
      a. Hundred
      b. Thousand

I. Lesson 9
   1. Oi, oy sound
   2. Word beginnings
      a. Im
      b. Em
   3. Quantities
      a. Million
      b. Billion
   4. Abbreviations - was, were, with, important, importance, department, week, work, employ
   5. Capitalization

J. Lesson 10
   1. Qu sound
   2. Word ending lty
   3. Abbreviations - how, out, require, they

K. Lesson 11
   1. Word beginning
      a. For
      b. Fore
      c. Fur
   2. Abbreviations - appreciate, please, enclose, thank, provide

L. Lesson 12
   1. Word ending ful
   2. Word beginnings
      a. Inter
      b. Enter
   3. Abbreviations - ever, every, about, complete, interest

M. Lesson 13
   1. Word beginnings
      a. Un
      b. Pre
      c. Pro
   2. Abbreviations - include, information, program, consider, consideration
IX. COURSE OUTLINE

N. Lesson 14
1. Word beginning ex
2. Abbreviations - any, executive, insurance, hour, present, time

O. Lesson 15
1. Abbreviations - suggest, suggestion, manager, management, report
2. Word beginnings
   a. Over
   b. Trans

P. Lesson 16
1. Abbreviations - order, amount, street, state, receive, number, letter
2. Word beginning under

Q. Lesson 17
1. Word endings
   a. Ple
   b. Pal
2. Abbreviations - available, organize, organization, paid, represent, representation

R. Lesson 18
1. Prefix before a short vowel
2. Suffix after a short vowel
3. Abbreviations - question, regard, cover

S. Lesson 19
1. Word endings
   a. Ious
   b. Eous
   c. Ous
   d. Us
2. Mem sound
3. Abbreviations - avenue, convenient, convenience
4. Days of the week
5. Months of the year

T. Lesson 20
1. Abbreviations - apply, application, develop
2. Short i followed by a vowel
3. Using additional abbreviations

II. POST THEORY DICTATION
AN INTRODUCTION TO CCMAIL--AN ELECTRONIC MAIL PROGRAM

**Course Objectives:**

1) To introduce the concepts and terms of an electronic mail program

2) To learn the menu system of the CCMAIL program in reading, preparing and sending messages; in managing one's mailbox for mailing lists and folders; and in editing messages using program text editing commands.

3) To learn how to attach files or other message items from other programs (such as word processing and spreadsheet applications) and through the CCMAIL program.

4) To apply all concepts on a regular basis in communicating between instructors and students as required.

**Prerequisites:**

Students are introduced to the CCMAIL program when they have entered a word processing or spreadsheet program.

**Materials and Equipment Needed:**

- Computer connected to the network providing the CCMAIL program
- Local or Network printer
- Handouts for quick reference to CCMAIL

**Requirements:**

- Completion of five-part instructor lecture
- Hands-on application activities
- Regular (daily) communication with CCMAIL
- Objective Test
CCMAIL OUTLINE

I. INTRODUCTION
   A. What is Electronic Mail?
   B. How CCMAIL Works
   C. Communicating in Today's Office
   D. Important Terms/Concepts

II. GETTING STARTED
   A. Loading Your Program
   B. Mailbox Passwords
   C. Menu Screens

III. READING IN-BOX MESSAGES
   A. How to Read Messages
   B. Two Ways to Reply
   C. Sending Messages
   D. Applications

IV. PREPARING MESSAGES
   A. Mailing--Public Directory, Lists, Bulletin Boards
   B. Return Receipts, Carbon Copies, Folders
   C. Preparing Messages
   D. Sending Messages
   E. Storing Messages--Folders
   F. Applications

V. MANAGING YOUR MAILBOX
   A. Creating, Purging, Archiving Messages
   B. Private Mailing Lists
   C. Changing Mailbox Passwords
   D. Applications

VI. FILE ITEMS
   A. DOS Text
   B. CCMAIL Items
   C. Applications

VII. TEXT EDITING FUNCTIONS
   A. Editing Messages
   B. Applications

VIII. APPLICATIONS IN USE
   A. Daily Messages
   B. Assignments

IX. OBJECTIVE TEST
INTRODUCTION TO DOS USING A HARD DISK DRIVE

Objectives:

1) To understand the basis for a Disk Operating System.
2) To be able to give basic commands to DOS including DIR, FORMAT, COPY, DISKCOPY, CHKDSK
3) To understand concepts such as hierarchical directories, paths, batch files, and protecting data

Prerequisites:

Familiarity with a personal computer and preferably an introduction to an application program such as word processing, spread sheets, databases, or keyboarding.

Materials and Equipment Needed:

Comsell Video PC-DOS FOR HARD DISKS
Instruction Manual
Unformatted (4) 3 1/2" disks
Local Printer
IBM PS2 hard drive computer (room 316, 323 or 361)

Requirements:

Completion of Lessons 1-4 and Lessons 6-8
Completion of Activities and Quizzes
Printing of Activities as directed
DOS Objective Test
Summary Command Sheet typed up and given to your instructor from an application program of your choice
COURSE OUTLINE

This course is designed to give you a basic understanding of the disk operating system (DOS) and its most-used commands. Follow the videotape carefully. Be sure to complete activities only when directed! This may cause you trouble (and your instructor pain) if you move ahead too rapidly without following the specific instructions. Check each section complete on your outline as you finish. ASK FOR HELP WHEN YOU NEED IT!!!

I. Read Instructions--Manual pp. 1-8

II. Part 1

A. Lesson 1--Introduction to PC-DOS

B. Lesson 2--Starting DOS

1. Booting/Rebooting
2. Default Prompt
3. Easy DOS Commands
   a. Date/Time
   b. Ver/Vol
   c. CLS
4. ACTIVITY 1--Working with your Prompt
   a. Print a copy with Prt. Screen your prompt with the time and date and a message reading good morning.

C. Lesson 3--Storing Information

1. Hard Disks/Floppy Disks
2. Files
   a. Program Files/Data Files
   b. Naming
3. ACTIVITY 2 and QUIZ 1--File Names
4. DIR Command
   a. DIR
      1) Ctrl-S
      2) Ctrl-C
   b. File Listing
      1) Types
      2) Size
      3) Use of /P and /W Commands
         a) Print a copy of your directory with each of the above commands
D. Lesson 4--DOS Capabilities

1. Format Command (BE EXTREMELY CAREFUL!)
   a. Data diskette
   b. System diskette

2. Copy Command
   a. Source/Target diskettes
   b. Wildcards

3. ACTIVITY 3--Using the Copy Command
   a. Print each directory after you have copied

4. Diskcopy

5. ACTIVITY 4--Practice with DISKCOPY

6. Miscellaneous Commands
   a. Copy Console
   b. Rename
   c. Type
   d. Ctrl-P
   e. Del (erase)

III. Part II

A. Lesson 6--Building Directory Trees

1. Root/Sub-Directories
2. Creating Directories (md)
3. Tree Command
4. Changing Directories (cd)
5. Copying Files into Directories
6. Removing Directories (rd)
7. ACTIVITY 6--Path Command

B. Lesson 7--Batch Files

1. Creating/Saving .BAT Files
2. ACTIVITY 7--Batch Files
3. Autoexec.bat File

C. Lesson 8--Protecting Your Data

1. Chkdsk Command
2. Backing Up Files
DOS ASSIGNMENT

Before taking the DOS test, prepare a command summary sheet of DOS commands you have learned. Include the command name and the command, a description of the command, and an example of the command. Type the summary sheet using the keyboarding program, WordPerfect or CCMail. Send your instructor a copy if you are using either WordPerfect or CCMail. Print a copy for yourself and study from this before taking your test. You may use as a reference the DOS Reference Manual, the Course Manual from the videotape, or
COURSE OUTLINE
DATA ENTRY ACTIVITIES FOR THE MICROCOMPUTER

I. Introduction to the computer and keyboard.
   Practice activities using the alpha/numeric keyboard.
   a. Speed-Building Drill--Minimum Lessons 1-5
   b. Accuracy-Building Drill--Minimum Lessons 1-5
   c. Assignments--alpha, alpha/numeric, numeric keypad

II. Dexterity Drill and Data Entry Activities

The student must complete Dexterity Drill for Activity #1 with a minimum of 8,000 keystrokes per hour before beginning Data Entry Activity #1.

A minimum of 4 activity lessons must be completed before completing the Data Entry final activity. The following activity lessons should be completed and the minimum keystrokes per hour for each lesson’s Dexterity Drill are shown below:

   a. Data Entry Activity #1--Introduction to Data Entry--Minimum 8,000 KSPH
   b. Data Entry Activity #2--Merchandise Inventory--Minimum 8,500 KSPH
   c. Data Entry Activity #5--Accounts Payable--Minimum 9,000 KSPF
   d. Data Entry Activity #6--Payroll Records--Minimum 9,500 KSPH

III. Data Entry Final

Complete Data Entry Activity #13--Summary Project. The Dexterity Drill for Activity #13 should have a minimum of 10,000 keystrokes per hour.

See instructor for minimum accuracy requirement for data entry activities.

IV. Optional Data Entry Activities

Complete remaining Data Entry Activities for additional practice to improve speed and accuracy.
COMPUTERIZED DATA ENTRY

Textbook: Data Entry Activities for the Microcomputer, 2nd Edition, William E. Blk, South-Western
Typewriting Power Drills

GOAL: To develop computer keyboarding skills (alpha/numeric) in speed and accuracy by utilizing realistic data entry activities and drills. Students strive for an acceptable level of keystrokes and accuracy.

PREREQUISITE: Keyboard skill (30 wpm)
Electronic Calculator

Course Description

Speed and Accuracy Drills on the Keyboarding software and other keyboarding drills/applications are used to develop dexterity and accuracy on the computer keyboard (alpha and numeric). In addition, students practice common data entry activities increasing their skill in preparing and handling data entry documents, correcting data entry errors, and understanding the importance of fast and accurate keystroking. Challenging drill practices are provided as well as applications of data entry materials realistic to the business office including merchandise inventory, accounts payable, and payroll records. Optional activities are provided to include applications in accounts receivable, point of sale, census survey, auto insurance and driver license application, and other job related data activities.

Course Objectives

1. To increase the student's skill in entering alpha/numeric data;
2. To provide the student with preparation and handling of data entry documents before entry;
3. To quickly correct data entry keying errors
4. To increase the student's awareness of data entry applications in business.
INSTRUCTIONS FOR DATA ENTRY DEXTERITY DRILLS
APPLE IIe

Before you begin, make sure that you have a Red DATA ENTRY ACTIVITIES FOR THE MICROCOMPUTER program disk, a formatted data disk, the Dexterity Drill sheet; and if you are working on the Data Entry Activities, the DATA ENTRY ACTIVITIES FOR THE MICROCOMPUTER textbook.

1. Insert the Red DATA ENTRY ACTIVITIES FOR THE MICROCOMPUTER program disk in Drive A and your formatted data disk in Drive B. Turn on the CPU, monitor and printer.

2. Enter through the first few screens to the instruction: "Please key-enter the number of disk drives (1 or 2)" Key 2, Return.

3. You are now at the Main Menu. Key 1 for Activity #1, Return.

4. Key in your name and strike Return.

5. You are now at Activity #1 Menu. Key 1, Return.

6. Complete Dexterity Drill for Activity #1. You may repeat this drill as often as you like. You must complete Dexterity Drill #1 with a minimum of 8,000 keystrokes per hour to begin Data Entry Activities.

7. After you have completed the Dexterity Drill for Activity #1 with a speed of 8,000 keystrokes per hour, complete Activity #1 by selecting from the Activity Menu, #2 (Key-enter Activity Data), Enter. Make sure that you have read the Chapter and completed the Study Guide before you begin entering data.

8. After you complete each activity entirely, return to the Activity Menu and Key 3 (Analyze Accuracy and Speed), Enter.

9. At the Analyze Accuracy and Speed Menu, Key 1 (Print Accuracy and Speed Analysis), Return.

10. To exit program, at Activity Menu, Key 6 (Return to Main Menu), Return. Key 14 (End Session), Return. Remove both disks and then power down the computer.
COURSE OUTLINE

Microfile

I. Start-up procedures/introduction

II. Open New Files

III. Enter Data

IV. Print Report

V. Edit Records

VI. Calculate Numeric Fields

VII. Print Labels

VIII. Supplementary Problems

IX. FINAL TEST
MICROFILE


**PREREQUISITE:** Keyboard Skill (30-35 wpm helpful) Filing Coursework

This course is designed to introduce students to computer filing skills. Records management using the computer to store, manipulate and report data through hands-on applications is stressed.

**Course Objectives**

1. To introduce students to a computer records system and database terminology.
2. To open data files; edit, add, delete, locate records; sort records by fields; save/delete files; develop formulas to calculate numeric fields; print reports, folder labels and mailing labels.

**Method of Evaluation**

Chapter questions/exercises; four supplemental projects will measure student's successful completion of unit. Exercises evaluated may be repeated for accuracy. Final objective test.
INSTRUCTIONS FOR MICROFILE
APPLE IIe

Before you begin, make sure that you have a Red MICROFILE program disk, a formatted data disk, the MICROFILE textbook, and a copy of a MICROFILE Index Sheet.

1. Insert the Red MICROFILE program disk in Drive 1 and your data disk in Drive 2. Turn on CPU, monitor and printer.

2. Return through all the copyright and informational screens until you are at MICROFILE MAIN MENU. Strike Enter to Open Files and begin to create your first file for Lesson 1.

3. To exit the program, escape to the Main Menu and use space bar to highlight Leave MICROFILE, then Return. Remove the disks from Drive A and Drive B and power down the computer.
EVENING CLASS OFFICE PROCEDURES CURRICULUM

DIRECTIONS: Check off completed assignments. Turn in study guides, job development exercises, and worksheets when completed. Please return videos, audio tapes, and textbooks daily. These materials will be signed in and out each time they are used. HAVE A GREAT TIME!

JOB DEVELOPMENT

Reading/Writing Assignment: "Dimensions in Professional Development", Southwestern Publishing Co.,

Read Chapters One and Ten. Complete corresponding study guides.

Chapter Ten: Write cover letter, resume, and thank you letter in rough draft and final copy form.

Video Assignment: Watch "Do You know What to say in an Interview?" and "Goals". Be prepared to discuss video with your instructor and take notes while viewing.

PROOFREADING

Complete Proofreading Excercise as directed. Please pick up copy from your instructor.

OFFICE PROCEDURES

Photocopying: You will be assigned photocopy projects. You must do two projects. These must be multi-page documents.

Machine Transcription: Job 1, Machine Transcription/Southwestern Publishing, 1979 Word Processing, Introduction to Using the Dictaphone. Type the following as directed on the audiotape.

Practice Paragraph
Five business letters with carbon copies.
TELEPHONE TECHNIQUES

"Thank you, Please Call Again", complete project as directed. Audiotapes will be required for some exercises. Telephone books are available from the instructor.

View video "Telephone Techniques".

PROFESSIONAL DEVELOPMENT

Reading/Writing Assignment: Dimensions in Professional Development, Southwestern Publishing Co.

Hygiene/Clothing Fundamentals

Read Chapters Four and Five. Complete corresponding study guides.


View videos: "Color Me Beautiful", "Cover Girl", and/or "Eight-Minute Makeover".

Job Visibility

Read Chapter Thirteen. Complete corresponding study guide.

Review Assertive Skills Handout.

FINANCIAL MANAGEMENT

Read Chapter Fourteen. Complete corresponding study guide.

WORDPERFECT TUTORIAL/OFFICE SIMULATION

You will either complete the computerized tutorial for WordPerfect 5.0 or 5.1 or an office simulation project. Please check with your instructor for additional directions.

Evaluation

*Reminder: All videos, tapes, and textbooks that are used must be returned to the instructor immediately when finished.
PROGRAMMED PROOFREADING

Overview:

Improve basic proofreading skills in:
Keyboarding errors and usage of abbreviations, word division, expression of numbers, grammatical errors, confusing words, punctuation errors, capitalization and content errors within four months using a self-paced instructional workbook and taking a series of quizzes and test. The final evaluation will be a post test that will indicate at least a 50 percent improvement over the pretest score.

Essential Objectives:

Explain the importance of good proofreading habits and the use of proofreading symbols.

Identify habits that prohibit good proofreading and outline some personal objectives to improve proofreading habits.

Discuss different proofreading techniques that can be used in the office.

Develop a personal system for excellent proofreading. A solid grasp of fundamental principles of language skills. Increased competency in work that will increase and expand level of personal self confidence.

Secondary Objectives

Identify organizational skills to optimize the production of errorless work.

Identify the proper use of reference materials such as the dictionary, word division manual and other miscellaneous materials.

Supplemental Objectives

Describe and demonstrate the proper use of the programmed workbook.

Describe how to use an index card and typing ruler for good proofreading.

Evaluation

Improvement on Pre/Post Tests as well as quizzes and unit tests.
Improvement on daily production work and timings in class.
PROOFREADING

Proofreading for Quality Control

It is the intent of this segment of Typing, that the student will develop proofreading skills that will allow him/her to detect all kinds of errors quickly because of better identification of errors and an increased knowledge about the English language.

The student will understand why proofreading symbols are used during the proofreading process. Confidence in his/her ability to do a good job proofreading and editing will be increased.

Identification of errors in mechanics, format, content, sentence structure and typographical will be made. Typographical errors include transpositions, misstrokes, omissions, number errors and word division.

Proofreading techniques that will be learned include the verification procedure, reading right to left and from bottom to top, using an adding machine to check figures, and reading "cold" copy.

Reference books that include a typing reference manual, dictionary, telephone book, and word division book will be used.

Improved basic proofreading skills include the following:

Use of proofreading symbols for editing on rough draft material.

Increased efficiency and accuracy in proofreading and editing.

Use reference materials properly.

Increase knowledge of basic grammar, punctuation, spelling.

Organize directions and processing text for proofreading before, during, and after keying a document.
PROGRAMMED PROOFREADING

INSTRUCTIONS

Read objectives and chapter content for the following chapters. Complete all the programmed application exercises, the answers are in the green area; write spelling words once, and read Proofreading Tips for each chapter. Use plain paper for answer sheet. Use answer key to correct quizzes; see instructor for pre/post test and all unit tests.

Pretest

Chapter One, Quality Control
Chapter Two, Keyboarding Errors
Chapter Two Quiz
Chapter Three, Keyboarding and Abbreviation Errors
Chapter Three Quiz
Unit Test 1

Chapter Four, Word Division Errors
Chapter Four Quiz
Chapter Five Quiz
Chapter Five, Errors in the Expression of Numbers
Chapter Six, Errors in Format
Chapter Six Quiz
Unit Test 2

Chapter Seven, Grammatical Errors
Chapter Seven Quiz
Chapter Eight, Grammatical Errors
Chapter Eight Quiz
Chapter Nine, Confusing Words
Chapter Nine Quiz
Unit Test 3

Chapter Ten, Punctuation Errors
Chapter Ten Quiz
Chapter Eleven, Punctuation Errors
Chapter Eleven Quiz
Chapter Twelve, Punctuation Errors
Chapter Twelve Quiz
Unit Test 4

Chapter Thirteen, Capitalization Errors
Chapter Thirteen Quiz
Chapter Fourteen, Content Errors
Chapter Fourteen, Quiz
Unit Test 5

Post Test
PROFESSIONAL DEVELOPMENT

The intent of the Professional Development unit is to educate the student on the importance of personal appearance, assertive skills, and job visibility as part of their career development in the office occupations.

Objectives:

Identify and use proper grooming techniques for the office.

Identify the components of business attire.

Organize a personal and practical wardrobe for the office.

Increase self-confidence because of improved grooming and wardrobe.

Use makeup techniques that improve and enhance appearance.

Identify appropriate assertive skills for the work environment.

Use assertive skills to handle conflicts at work, negotiate salary, and develop career goals.

Use assertive skills to increase job visibility and performance.

Materials: Visual System Applications Handouts
J. C. Penney Handout for Wardrobe Building
"Color Me Beautiful" video
"Cover Girl" video
"Eight-Minute Makeover" video
Assertive Skills Handout

Evaluation: Test
Participation in Dress for Interview Day
Written assignments and participation in group discussions.
Professional Development

View video, "Cover Girl" and discuss makeup and nail techniques.

Group Discussion/Teacher Demonstration

I. Grooming Components
   A. Hair
   B. Clothing
   C. Shoes and belts
   D. Hands
   E. Hygiene

II. Skin Care and Makeup
   A. General Care
   B. Make-up Basics
   C. Foundations
   D. Concealers
   E. Lip Color
   F. Eye Make-up
   G. Highlighting
   H. Face Powder
   I. Blusher

III. Component Dressing
   A. Getting Started
   B. Your Base Wardrobe

IV. Hairstyle
   A. Selection

V. Glasses
   A. Selection

Reading Assignment


Optional reading assignments, Chapters Four and Five in same textbook.
DEVELOPING A RESUME

Step One

Overview: The student will compose a general, specific and final copy of a resume. The final copy will be well-written, errorless, and up-to-date; it will be used in the job application process.

Essential Objectives:

Objective One: Explain the purpose of the resume, i.e., when where, what why, and how the resume is used.

Objective Two: Identify the correct paper quality, format, and professional print of a well-written resume.

Objective Three: Discuss the main sections of a resume.

Objective Four: Develop a job objective and contacts to be used as references.

Secondary Objectives:

Identify: Write at least two different job objectives.

Identify: The best days of the week to read want ads and respond to ads by mail.

Supplemental Objectives:

Describe: Proofreading techniques for resumes.

Describe: Folding and mailing a resume.

Evaluation: Produce errorless, well-written, typed resume.

Materials: Getting a Job Process Kit, Southwestern Publishing
Examples of quality resume paper, handout one
List of action verbs for resume writing, handout two
Goal setting activity, handout three
Blank index cards
Resume reference notebook
Objective One: Lecture Method

Explain the purpose of a resume.

When: When you are applying for a job and a resume is requested, you should submit one. When filling out an application, a resume can be attached to the application.

Why: The resume is a selling tool; the potential employer reads the resume; if the skills seem to fit the open position, you may be invited to interview. You want your resume to show off your best points.

What: Only professional information is included on a resume. Personal information such as weight, height, marital status, children, race, etc. is never included.

How: You will write and type your own resume with assistance from the counselor and instructor. Please follow the resume examples in your instruction booklet and the resume notebook. A rough draft must be done first, a revision will be printed and finally a final copy on rag paper will be printed out.

Where: Use the computers available in Room 316 for rough draft and revision copies, the final copy must be printed in Room 323.

Objective Two: Compare rag paper versus regular typing paper for quality. Compare a handwritten resume versus a typeset one.

Objective Three: Individual Activity

Print information on general and specific resumes, Supplies Booklet. Revise and correct. Type revision and final copy. Print final copy.

Read pages 1 - 2 in the Instruction Booklet.

Review completed resumes in the Resume Reference Notebook.

Write personal information on index cards for reference.

Objective Four: Group Activity

Handout Two, "Goal Setting"; discuss thought process after activity has been completed. Instructor will follow directions as presented on the handout.
PREPARING A COVER LETTER

Step Two

Overview: The student will compose and type an errorless, coherent cover letter on good quality paper.

Essential Objectives:

Objective One: Explain the purpose of a cover letter and how it can be used in conjunction with a resume to "sell" applicant.

Objective Two: Identify the correct organization of a cover letter.

Objective Three: Discuss when, where, how, and why a cover letter should be used.

Objective Four: Develop a cover letter for a secretarial position using current want ads.

Secondary Objectives:

Identify: Qualities that make the difference between a good and bad cover letter.

Identify: Proofreading techniques to be used with cover letters.

Supplemental Objectives:

Describe: Advantages and disadvantages of using a "creative" cover letter.

Describe: Advantages and disadvantages of using block vs semiblock letter styles.

Evaluation: Produce errorless, well-written, typed cover letter; the time limit varies per student.

Materials: Getting a Job Process Kit, Southwestern Publishing
Good quality paper
Resume reference notebook
Objective One:  Lecture Method/Group Activity

Explain the purpose of the cover letter. The details of cover letter are very important; the person's name, title, name of business, correct address that would include zip code, and date must be included. Use examples as shown in Instructional Booklet.

A rough draft must be typed for revision purposes. The student will be required to hand in both rough draft with revision and final copy. Please use proofreading symbols when revising rough draft.

Explain the organization of paragraphs in a cover letter. Paragraph one identifies where the applicant heard about the position and the name of the position. Paragraph two outlines skills and qualifications. Paragraph three concludes the letter with a polite request for an interview.

Objective Two: The student will be able to identify the beginning, middle, and ending paragraphs of a cover letter.

Objective Three: Discuss why a cover letter is organized the way it is. Discuss the importance of using quality materials to produce a cover letter. Discuss how one can use the cover letter to elaborate on skills and experience.

Objective Four: Individual Activity

Write and type a rough draft of a cover letter; proofread it using proofreading symbols to indicate where revision is required.

Type a final copy and print it on good quality rag paper.
PREPARING AN EMPLOYMENT APPLICATION

Step Three

Overview: The student will complete two employment applications. The applications will be printed, in pencil, and will be errorless.

Essential Objectives:

Objective One: Explain the purpose of an application and how it can be used legally.

Objective Two: Identify reasons for leaving a job. Identify acceptable and unacceptable pre-employment inquiries.

Objective Three: Discuss acceptable reasons for leaving a job. Discuss federal laws that have been passed to protect the job applicant. Discuss ramifications for employee for being fired.

Objective Four: Develop strategies to approach future employers after being fired.

Secondary Objectives:

Identify: Different styles of employment applications.

Identify: Proper use of personal index card information.

Supplemental Objectives:

Describe: Title VII, 1964; Age Discrimination, 1976; Rehabilitation Act, 1973; Equal Pay Act, 1972

Evaluation: Produce errorless, neat application.

Materials: Getting a Job Process Kit, Southwestern Publishing Employment applications, handout four Acceptable/unacceptable pre-employment inquiries, handout five Job Skills List, handout six The Business of Oral Communication, audiotape, Section One
Preparing an Employment Application, Step Three

Objective One: Lecture/Group Activity

Use examples in Instructional Booklet as examples while reviewing sections of application with students. Play tape from "The Business of Oral Communication, Section One, Tape One before students complete their first employment application provided in the kit. Explain the following items in detail as they appear on the application:

- salary
- work experience
- health issues
- education
- felonies
- being bonded
- wages
- negative termination

Objective Two: Identify positive and negative reasons for leaving a job. List positive reasons on application. Discuss the affect of negative and positive reasons as stated on an employment application. Use the student's completed applications for this discussion. Compare and contrast the first completed application with the second completed application for overall appearance and thoroughness.

Objective Three: Using the Pre-employment acceptable/unacceptable inquiries as a guide for discussion, review briefly with students the way to handle these types of inquiries. The students should practice responses to these types of inquiries.

Objective Four: Develop strategies if and when one should be fired. Develop strategies to approach future employers after being fired. Role play a firing. Read page 38 in Instructional Booklet before proceeding with role play. Have students write responses before acting out situation.
FINDING JOB LEADS

Step Four

Overview: The student will list ten different avenues available for finding work.

Essential Objectives:

Objective One: Explain the importance of using the "Unlimited" approach to finding a job.

Objective Two: Identify readily available references that can be used to identify potential employers.

Objective Three: Discuss how to organize information received from pursuing job leads.

Objective Four: Develop a personal list of job leads.

Secondary Objectives:

Identify: The benefits of networking, professional organization membership, and establishing direct contact.

Evaluation: Student will produce four viable job leads on their own time using the method as described in the Instructional Booklet.

Materials: Getting a Job Process Kit, Southwestern Publishing Telephone Books Civil Service Test Information, handout seven Five Steps Necessary for your Career Development, handout seven,
Finding Job Leads, Step Four

Objective One: Lecture/Group Activity

Compare and contrast the benefits of using the "Unlimited Approach". Let the students decide which method they feel would be most effective for themselves. Have a group discussion on past methods they have used in obtaining job leads.

Objective Two: Identify specific directories that can be used and where they are located in the library. Bring telephone directories that contain the Yellow Pages and demonstrate how to use it. List the names and address of the temporary agencies that are used frequently for job placement. Point out the location of the newspaper want ads and provide the telephone number for Job Service. Pass out Civil Service Test information. Contact "Staffing Issues" guest speaker if a presentation on federal government employment is warranted. See "Staffing Issues" file for name and information.

Objective Three: Each student will discuss how they plan to organize their information regarding the job search. They should plan to have a file folder, index card, and calendar. Demonstrate how the kit is organized so it can be used as well. Discuss the use of the index cards for recording information after each interview.

Objective Four: Each student will look up one address indicated in the Supplies Booklet and share this information with the group.
BEFORE THE INTERVIEW

Step Five

Overview: Use organizational skills to prepare and plan for a professional interview. Use evaluation skills to determine acceptability of a job position.

Essential Objectives:

Objective One: Explain the importance of personal preparation for the interviewing process. Explain the importance of intangible skills such as assertiveness, self confidence, and a positive attitude. Explain the importance of presentation skills.

Objective Two: Identify factors that will affect decisions about job offers. Identify realistic career goals.

Objective Three: Discuss appropriate business wardrobe and makeup. Discuss how to organize personal materials and time on the day of the interview.

Objective Four: Develop strategy to deal with rejection realistically.

Secondary Objectives:

Identify: Resources to use for building a business wardrobe. Time Management Skills.

Supplemental Objectives:

Describe: Informational Interviewing Techniques

Evaluation: Write answers to Step Five in Supplies Booklet.

Materials: J. C. Penney Wardrobe Booklet
J. C. Penney Wardrobe Presentation, "How to Build a Business Wardrobe"
Professional Dimensions, Chapter One, Study Guide
Professional Dimensions, Chapter Ten, Study Guide
Getting a Job Process Kit, Southwestern Publishing
Video, "How To Get The Job You Want"
Video, "Goals", Zig Ziegler
Video, "The Business of Oral Communications", Sections 1, 2, and 3.
Goal Setting Activity, handout three
Objective One: Lecture

The instructor should review Step Five, Instructional Booklet, with students. Additionally, a large amount of time, at least thirty minutes should be spent on information regarding developing a business wardrobe. A reading assignment, Professional Dimensions, Chapter 1, should be assigned to be completed as homework or as a class assignment. The J. C. Penney Wardrobe handbook should be passed around and discussed.

Presentation skills as well as good grooming techniques, posture and appropriate body language should be addressed at this time.

The instructor should compare the importance of "feeling prepared" and how it will affect self-confidence and positive attitude. Ask students to relate some experiences they might have had and how they could have improved their performance. Then the instructor should list specific items, see the checklist in Instructional Booklet, and review them with students.

The video, "Goals", by Zig Ziegler could be shown at this time.

A professional presentation from an outside agency on developing assertive skills could be arranged for this time.

Objective Two: Group Activity

Students will need help in identifying realistic career goals. Each student should state in the group what she would like to do and how she could do it. The group will provide discussion, feedback, and information to the participants. A review of the "Goal Setting Activity" would be appropriate at this time. New students could complete this activity. Please see handout three.

Objective Three: Group Activity

The group will discuss techniques they use to organize their time and personal materials. Each student will be expected to outline briefly how they will organize their written materials, wardrobe, planning and preparation for interviewing. Proper handshakes and business introductions will be role played within the group setting.

Objective Four: Group Activity

Students will discuss their plans for dealing with frustration, depression, and rejection while they are in the middle of their job hunt. They will be encouraged to watch motivational videotapes that are available. Please see bottom drawer in teacher’s desk for copies.
DURING THE INTERVIEW

Step Six

Overview: The student will know the basic organization of an interview. The student will have good verbal and non-verbal communication skills.

Essential Objectives:

Objective One: Explain the purpose of the interview. Explain the typical organization of an interview; beginning, middle, and end.

Objective Two: Identify typical and difficult interviewing questions. Identify verbal and non-verbal communication skills.

Objective Three: Discuss the many individual and general factors that determine whether a job offer is received or not.

Objective Four: Develop self confidence and assertive skills needed for an interview situation. Develop realistic expectations about interviewing.

Secondary Objectives:

Identify: Appropriate grooming and wardrobe.

Identify: Skills that are necessary to stay organized for the job interview and after the interview.

Supplemental Objectives:

Describe: How to maintain positive attitude and self-esteem when dealing with rejection.

Evaluation: Role Play Activity, see handout eight
Participation in "Dress for Interview Day"
Write answers for Step Six, Getting A Job Supplies Booklet

Materials: Getting a Job Process, Kit, Southwestern Publishing
Role Play Activity, handout eight
Audio, Video and Workbook, The Business of Oral Communication, Section Two
Video, "The Inside Secrets to Interviewing"
Checklist for Interview, handout eleven
During the Interview, Step 6

Objective One: Lecture

The instructor will explain the organization of a typical interview. The beginning, middle, and end of an interview will be outlined. Additionally, the instructor will explain the group interview process and the difference between a screening interview and secondary interview.

Group Activity

Complete the case study, Instructional Booklet, "Getting a Job" Process Kit for standard discussion on interview performance.

Communication using verbal and non-verbal skills will be demonstrated. "The Business of Oral Communication" video will be viewed before the discussion. Students will participate in a discussion after viewing the video. The teacher should follow the procedure for the discussion as outlined in the teacher's manual for the video.

Objective Two: Individual Activity/Group Activity

To identify difficult interview questions, the teacher should use the "Sample Interview Questions". Students should read the list and select particular questions they would find difficult to answer. They will practice these questions during the "Mock Interview Role Play" activity.

Objective Three: Lecture

The instructor will put special emphasis on establishing the concept that the interview is an "invitation" to come in and discuss a position. The interview is an opportunity for two or more people to come to agreement about what the job is, how it should be done, and the skills necessary to get it done right. It is crucial to the student's future needs that the student understand that the interview is time for them to evaluate the position as well as evaluate the potential employer.

Group Activity

Students will talk about eye contact, posture, assertive skills, and body language. They will compare and contrast the difference of perceptions one will make depending on their ability to perform these skills during the interview. The video, The Business of Oral Communication, "Interviewing, Tape One, Section One should be watched at this time. Students will discuss body language after viewing how it is displayed on the video. Complete workbook exercises using the audiotape, Section Two, for directions.
Objective Four: Group Activity

The student will apply basic skills such as the proper business introduction, handshake, and posture to be used in the interview.

Answers to interview questions will be practiced. Please see the "Role Play" handout for directions. This activity will be used for an evaluation of a student's performance.
AFTER THE INTERVIEW

Step Seven

Overview: The student will know the procedures for leaving a job gracefully; that is, writing a letter of resignation, obtaining a letter of recommendation, and going through an exit interview.

Essential Objectives:

Objective One: Explain the following items: when to consider leaving a job and what to do if fired or laid off from a position.

Objective Two: Identify what could be gained and lost by leaving the present position.

Objective Three: Discuss the purpose of the exit interview.

Objective Four: Develop resignation letter and personal reference letter.

Secondary Objectives:

Identify: People who can be used as future job references.

Supplemental Objectives:

Describe: The ongoing process for career changes.


After the Interview, Step Seven

Objective One: Individual Activity

Reading Assignment: Instructional Booklet, page 38. What To Do If Fired. Have the students answer the questions in the booklet. During the group discussion, allow time for them to review answers with the group. If a role play of a firing situation has not been done, it could be acted out quickly at this time. Review the employment application section, "Reason for Leaving", at this time.

Group Discussion

After reading factors listed in Instructional Booklet, have students discuss why they have left previous positions and what they would do differently when they did leave.

Objective Two: Individual/Group Activity

After discussing how to go about evaluating the pros and cons of leaving a position, this would be a good time for students to identify future career goals.

Objective Three: Group Activity


Objective Four: Individual Activity

Write a letter of resignation and a personal letter of recommendation.
BEGINNING TECHNICAL TYPING

Overview:

Intent is to familiarize students with metric style terminology, technical paragraphs, and technical tables.

Essential Objectives:

Explain: How to change print wheel
Course outline will be used
Operating the platen release

Identify: Use of Metric System and identify metric symbols and terminology. Correct format for Chemical Formulas.

Discuss: Setup for Ruled Table with multiple Column Headings.
Use of Sub and Superscript.

Develop: Unusual skill for operating special functions keys on Adler Electronic typewriter

Secondary Objectives:

Identify: Proofreading techniques to be used for technical typing

Identify: Increased Job opportunities and potential places of employment.

Supplemental Objectives:

Describe: Review of all rules for typing tables and reports.

Describe: Importance of touch typing method for fast and accurate method of producing technical work.

Evaluation: Mailable copy for all assignments using electronic typewriter
Technical Typing Outline

Typing Lesson
Conditioning Practice

Drill

Example of text to be typed

Problems

Easy Problem - First

More Difficult - Second

Timings on easy problem (optional)
OBJECTIVES

By the end of this lesson, you should be able to do the following:

Adler 310 Special Function Keys

a) Use the Index Up/Index Down keys for typing superscript and subscript.
b) Use the repeat key for quick and easy underlining.
c) Use the column key for quick formatting for technical table.
d) Replace the standard print wheel with a technical print wheel.

Recognition of Technical Terms

a) Recognize metric units and abbreviations.
b) Use proofreading techniques for thorough and accurate proofreading.

Typing Skills

a) Keyboard paragraph containing chemical terminology.
b) Format and keyboard four-column table using technical print wheel.
c) Format and keyboard two-column table that includes paragraphs that contain chemical terminology and using subscript and superscript type.
d) Format and keyboard eight-column table multi-column headings and subscript and Greek symbols.
CONDITIONING PRACTICE: Directions: Type drill, single spaced, each line twice. One-inch side margins. Do not correct errors on drill.

hydrogen oxygen sodium natrium isotopes atomic uranium mass; meter nanometer microliter Curie disintegrations charge oral molecular distillates intraperitoneal micromolar intracutaneous centigrade

DRILL FOR MULTI-COLUMN HEADINGS

<table>
<thead>
<tr>
<th>Combination</th>
<th>( Z^c )</th>
<th>( m^d )</th>
<th>Required Resolving Power at m/z 601 for</th>
</tr>
</thead>
<tbody>
<tr>
<td>No.</td>
<td>( Z(1)^e )</td>
<td>( Z(2)^f )</td>
<td>minimum</td>
</tr>
</tbody>
</table>

FOLLOW DIRECTIONS STEP-BY-STEP, TAKE YOUR TIME.

1. You must use an Adler 310 for these assignments.
2. You must clear out all existing settings and use default settings for margins, single spacing, and use elite pitch.
3. For efficiency, use automatic repeat for underscoring. To use, press shift lock, then underscore, then hold down the Repeat key located to the left of the space bar.
4. Use column function key to set tabs for six columns. Typewriter automatically adjusts spacing between columns.
5. Refer to manual for review of use of column key.
6. After setting tabs, tab to column six and key the heading "Required Resolving Power" and return.
7. Tab to column two, center "Combination" over the heading \( Z(1)^e \) manually.*
8. Tab twice and key column heading four, \( Z^c \).
9. Tab once and center heading \( m^d \) over the heading "minimum" manually.
10. Tab once and center the heading "at m/z 601 for" under the heading "Required Resolving Power" manually.
11. Use the express key to return to the left margin. Get ready to underscore. Underscore through column three then tab to column six and underscore to the right margin. Return.
12. Type column heading one, tab; type column heading two, tab; type column heading three, tab; tab; to column five, key \( r=1 \), space six times, key \( r=10 \), space six times, key \( r=100 \), return once.

*If you need a review of centering headings, please see exercise 106D in the Century 21 typing book.
EXPERIMENTAL

Chemical Derivatization

Following Burchill, Herod and Michell (26), N-methylbis(trifluoro-acetamide) and dimethylformamide dimethylacetal were used as selective derivatizing reagents for primary and secondary amines and primary amines, respectively. Reaction conditions reported by these authors were used. Approximately 250 mg of a fraction from a shale-oil distillate (28) was added to 5 ml of each derivatizing reagent and the resulting solutions were heated in sealed vials for 2 hours at 100°C. Removal of excess derivatizing reagents was necessary prior to acquisition of mass spectra.
### METRIC ABBREVIATION TABLE

Units will be in general accordance with the International System (SI) as adopted by the 11th General Conference on Weights and Measures. Periods are not used after abbreviations.

Common metric abbreviations are listed below:

<table>
<thead>
<tr>
<th>Symbol</th>
<th>Abbreviation</th>
<th>Unit</th>
</tr>
</thead>
<tbody>
<tr>
<td>m</td>
<td>meter</td>
<td>parts per million</td>
</tr>
<tr>
<td>cm</td>
<td>centimeter</td>
<td>counts per minute</td>
</tr>
<tr>
<td>mm</td>
<td>millimeter</td>
<td>disintegrations per minute</td>
</tr>
<tr>
<td>nm</td>
<td>nanometer</td>
<td>subcutaneous</td>
</tr>
<tr>
<td>kg</td>
<td>kilogram</td>
<td>intramuscular</td>
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<tr>
<td>g</td>
<td>gram</td>
<td>intraperitoneal</td>
</tr>
<tr>
<td>mg</td>
<td>milligram</td>
<td>intravenous</td>
</tr>
<tr>
<td>ng</td>
<td>nanogram</td>
<td>median lethal dose</td>
</tr>
<tr>
<td>ml</td>
<td>milliliter</td>
<td>median lethal concentration</td>
</tr>
<tr>
<td>mol</td>
<td>mole</td>
<td>minutes</td>
</tr>
<tr>
<td>n</td>
<td>normal</td>
<td>standard deviation</td>
</tr>
<tr>
<td>Ci</td>
<td>Curie</td>
<td>standard error</td>
</tr>
</tbody>
</table>
PROBLEM TWO: Two column table with paragraphs and centered, underlined heading.

Directions: Use a two-inch top margin and one inch side margins. Single space paragraph. Type one rough draft, proofread the rough draft carefully, then type one final copy. The final copy must be in mailable form.

Specific Z Series and Chemical Types

The general formula for the compounds and, hence, ions of present interest is C,H,N, where the symbols and subscripts represent elements and their proportions by weight. Since compounds and ions are made up of isotopically substituted species, the formulas for actual molecules and ions are derived from the relationships shown in eqn. 1. However, the ions

\[
\begin{align*}
    n &= n(^{12}\text{C}) + n(^{13}\text{C}) \\
    x &= x(^{1}\text{H}) + x(^{2}\text{H}) \\
    a &= a(^{14}\text{N}) + a(^{15}\text{N}) \\
    b &= b(^{16}\text{O}) + b(^{17}\text{O}) + b(^{18}\text{O})
\end{align*}
\]

containing the lightest isotopes of these elements will be the most intense because of the ranges in the values of the dependent variables in equn. 1 for components of distillates and the abundances (29) of the isotopes of the elements of present interest. Consequently, molecular ions formed from molecules adhering to the general formula.

\[^{12}\text{C}_{(12)}^{14}\text{N}_{(14)}\]
PROBLEM THREE:

Eight-column table with headings. Arrange attractively with vertical and horizontal centering. Follow directions in drill for headings. This is where your practice will help make you perfect! Notice the columns under the headings different tab settings, so you must center the columns under the headings. TAKE YOUR TIME AND HAVE FUN WITH THIS TYPING CHALLENGE!

MULTI-COLUMN HEADINGS

<table>
<thead>
<tr>
<th>No.</th>
<th>Combination</th>
<th>Z^e</th>
<th>m^e.a. minimum</th>
<th>Required Resolving Power at m/z 601 for</th>
</tr>
</thead>
<tbody>
<tr>
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<td></td>
<td></td>
<td></td>
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<td>.320</td>
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<td>2</td>
<td>Z(N)</td>
<td>-18</td>
<td>0.018</td>
<td>.000</td>
</tr>
<tr>
<td>3</td>
<td>Z(NS)</td>
<td>-18</td>
<td>0.018</td>
<td>.000</td>
</tr>
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<td>4</td>
<td>Z(N)</td>
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<td>.000</td>
</tr>
<tr>
<td>5</td>
<td>Z(N)</td>
<td>-16</td>
<td>0.017</td>
<td>.000</td>
</tr>
</tbody>
</table>

a Homolog of chemical type converted to Schiff base having mass number MN.
b Homolog of underivatized chemical type having mass number MN>
### Table

<table>
<thead>
<tr>
<th>No.</th>
<th>Combination</th>
<th>$AZ^a$</th>
<th>$\text{Abs}^c$</th>
<th>Required Resolving Power at m/z 601 for $x=1$, $x=10$, $x=100$</th>
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</thead>
<tbody>
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<td>-18</td>
<td>0.0187</td>
<td>32,000 37,000 42,000</td>
</tr>
<tr>
<td>2</td>
<td>Z(NO) Z(NO)</td>
<td>-18</td>
<td>0.0187</td>
<td>32,000 37,000 42,000</td>
</tr>
<tr>
<td>3</td>
<td>Z(NO) Z(NS)</td>
<td>-12</td>
<td>0.0187</td>
<td>32,000 37,000 42,000</td>
</tr>
<tr>
<td>4</td>
<td>Z(M4) Z(M3)</td>
<td>-18</td>
<td>0.0187</td>
<td>32,000 37,000 42,000</td>
</tr>
<tr>
<td>5</td>
<td>Z(N) Z(NO)</td>
<td>-6</td>
<td>0.0188</td>
<td>15,000 18,000 20,000</td>
</tr>
<tr>
<td>6</td>
<td>Z(NO) Z(N)</td>
<td>-16</td>
<td>0.0177</td>
<td>36,000 40,000 44,000</td>
</tr>
<tr>
<td>7</td>
<td>Z(N) Z(NS)</td>
<td>-8</td>
<td>0.0133</td>
<td>39,000 46,000 51,000</td>
</tr>
<tr>
<td>8</td>
<td>Z(NS) Z(N)</td>
<td>-28</td>
<td>0.0220</td>
<td>27,000 32,000 35,000</td>
</tr>
<tr>
<td>9</td>
<td>Z(NO) Z(NS)</td>
<td>-6</td>
<td>0.0211</td>
<td>28,000 33,000 37,000</td>
</tr>
<tr>
<td>10</td>
<td>Z(NS) Z(NO)</td>
<td>-16</td>
<td>0.0355</td>
<td>17,000 20,000 22,000</td>
</tr>
</tbody>
</table>

- a Homolog of chemical type converted to Schiff base having having mass number MN.
- b Homolog of underivatised chemical type having mass number MN.
- c $AZ = Z(2) - Z(1)$.
- d Calculated using mass detects in footnote d of Table X
- e The minimum absolute value of MD(U) - MD(D)
Metric Style Guide Worksheet

A. Directions:

Read the Style Guide and answer the following questions. Please write your answers on a separate sheet of paper. Check your answers with the answer key in the back of the booklet.

B. Study Guide Questions for Metric Style Guide

1. Please write the correct symbol and approximate size for the following:

   a. kilometer  
   b. liter  
   c. gram  
   d. kilopascal

2. Write the common prefixes and symbols for the following factors:

   a. \( \frac{1}{100} = 10^{-2} \)
   b. \( 1,000,000 = 10^6 \)

3. The following statements are either true or false. Identify the true statements by writing T. Identify the false statements by writing F. Please make the corrections for the false statements to make them true.

   a. Prefixes, added to a unit name create larger or smaller units by factors that are powers of 100.
   b. The names of all units start with a lower-case letter except at the beginning of a sentence, however, there is one exception.
   c. Symbols of prefixes that mean a million or more are lower case; those less than one million are upper case.
   d. The second syllable of the every prefix is accented.
Metric Style Guide Worksheet Answer Key

1. a. km 0.6 mile  c. g weight of paper clip  
b. L 1 qt. 2 oz.  d. kPa atmospheric pressure is about 100 kPa

2. a. centi       c
   b. mega

3. a. F by powers of 10  
b. T  
c. F More than a million are capitalized, less than a million are lower case.  
d. F The first syllable is.
In most cases, familiarity with the following metric units can be useful:

<table>
<thead>
<tr>
<th>Name</th>
<th>Symbol</th>
<th>Approximate Size</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Length</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>meter</td>
<td>m</td>
<td>39 1/2 inches</td>
</tr>
<tr>
<td>kilometer</td>
<td>km</td>
<td>0.6 miles</td>
</tr>
<tr>
<td>centimeter</td>
<td>cm</td>
<td>width of a paper clip</td>
</tr>
<tr>
<td>millimeter</td>
<td>mm</td>
<td>thickness of paper clip</td>
</tr>
<tr>
<td><strong>Area</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>hectare</td>
<td>ha</td>
<td>2 1/2 acres</td>
</tr>
<tr>
<td><strong>Weight</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>gram</td>
<td>g</td>
<td>weight of a paper clip</td>
</tr>
<tr>
<td>kilogram</td>
<td>kg</td>
<td>2.2 pounds</td>
</tr>
<tr>
<td>metric ton</td>
<td>t</td>
<td>long ton (2240 pounds)</td>
</tr>
<tr>
<td><strong>Volume</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>liter</td>
<td>L</td>
<td>one quart and 2 ounces</td>
</tr>
<tr>
<td>milliliter</td>
<td>mL</td>
<td>1 1/2 teaspoon</td>
</tr>
<tr>
<td><strong>Pressure</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>kilopascal</td>
<td>kPa</td>
<td>atmospheric pressure</td>
</tr>
<tr>
<td></td>
<td></td>
<td>is about 100 kPa</td>
</tr>
</tbody>
</table>

Units of time and electricity will not change.

The Celsius temperature scale should be used, familiar points on which are:

<table>
<thead>
<tr>
<th></th>
<th>°C</th>
<th>°F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Freezing point of water</td>
<td>0</td>
<td>32</td>
</tr>
<tr>
<td>Boiling point of water</td>
<td>100</td>
<td>212</td>
</tr>
<tr>
<td>Normal body temperature</td>
<td>37</td>
<td>98.6</td>
</tr>
<tr>
<td>Comfortable room temperature</td>
<td>20-25</td>
<td>68-77</td>
</tr>
</tbody>
</table>

**Prefixes**

Some of the metric units listed above include prefixes such as kilo, centi, and milli. Prefixes, added to a unit name, create larger or smaller units by factors that are powers of 10. For example, add the prefix kilo, which means a thousand, to the unit gram, to indicate 1000 grams; thus 1000 grams become 1 kilogram. The more common prefixes are shown in Table 1.

**Conversions**

Conversions should follow a rule of reason: don’t include figures that imply more accuracy than justified by the original data. For example, 36 inches would be converted to 91 centimeters, not 91.44 centimeters (36 inches x 2.54 centimeters per inch = 91.44 centimeters), and 40.1 inches would convert to 101.9 centimeters, not 101.854. Table 2 lists many of the more commonly used conversion factors.

**Spelling**

All units and prefixes should be spelled as shown in this guide.

**Capitals**

Units: The names of all units start with a lower-case letter except, of course, at the beginning of the sentence. There is one exception: In “degree Celsius” the unit “degree” is lower case but the modifier “Celsius” is capitalized.

Symbols: Unit symbols are written in lower-case letters except for liter and those units derived from the name of a person (m for meter but W for watt, Pa for pascal, etc.).

Prefixes: Symbols of prefixes that mean a million or more are capitalized and those less than a million are lower case (M for mega, k for kilo).

**Plurals**

Units: Names of units are made plural only when the numerical value that precedes them is more than 1. For example, 0.25 liter or ¼ liter but 250 milliliters. Zero degrees Celsius is an exception to this rule.

Symbols: Symbols for units are never pluralized (250 mm = 250 millimeters).

**Spacing**

A space is left between the number and the symbol to which it refers. For example 7 m, 31.4 kg.

In names or symbols for units having prefixes, no space is left between letters making up the symbol or name. Examples: milligram, mg; kilometer, km.
Period

Do not use a period with metric unit names and symbols except at the end of a sentence.

Decimal Point

The dot or period is used as the decimal point within numbers. In numbers less than one, zero should be written before the decimal point.

Examples: 7.038 g; 0.033 g.

Pronunciation

The pronunciation of the common metric units is well known except for pascal which rhymes with rascal and hectare which rhymes with bare.

Celsius is pronounced sell 'see ws.

The first syllable of every prefix is accented, not the second syllable.

Examples: kilometer as in kilowatt; centimeter as in sentiment.

For More Detail

Approximate conversions for many units are given in Table 2. Some writers will require detailed information on units peculiar to their fields. For example, the British thermal unit, calorie, and therm are replaced by the metric unit, joule. Further information is available in "NBS Guidelines for Use of the Metric System," LC1056, free, from the Metric Information Office, National Bureau of Standards, Washington DC 20234, 301/921-2658. Also useful is the "NBS Metric Kit," (SP410), complete with references, charts, a conversion card, and the history of the metric system, available from the Superintendent of Documents, Government Printing Office, Washington DC 20402; price: $2.

<table>
<thead>
<tr>
<th>TABLE I COMMON PREFIXES FOR METRIC UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Factor</td>
</tr>
<tr>
<td>1 000 000</td>
</tr>
<tr>
<td>1000</td>
</tr>
<tr>
<td>1/100</td>
</tr>
<tr>
<td>1/1000</td>
</tr>
<tr>
<td>1/1 000 000</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>TABLE II METRIC CONVERSION FACTORS (Approximate)</th>
</tr>
</thead>
<tbody>
<tr>
<td>When You Know</td>
</tr>
<tr>
<td>Symbol</td>
</tr>
<tr>
<td>---------</td>
</tr>
</tbody>
</table>

LENGTH

<table>
<thead>
<tr>
<th>Symbol</th>
<th>Number of</th>
<th>Multiply By</th>
<th>To Find</th>
</tr>
</thead>
<tbody>
<tr>
<td>in</td>
<td>inches</td>
<td>2.54</td>
<td>centimeters</td>
</tr>
<tr>
<td>ft</td>
<td>feet</td>
<td>30</td>
<td>centimeters</td>
</tr>
<tr>
<td>yd</td>
<td>yards</td>
<td>0.9</td>
<td>meters</td>
</tr>
<tr>
<td>mi</td>
<td>miles</td>
<td>1.6</td>
<td>kilometers</td>
</tr>
</tbody>
</table>

AREA

<table>
<thead>
<tr>
<th>Symbol</th>
<th>Number of</th>
<th>Multiply By</th>
<th>To Find</th>
</tr>
</thead>
<tbody>
<tr>
<td>in²</td>
<td>square inches</td>
<td>6.5</td>
<td>square centimeters</td>
</tr>
<tr>
<td>ft²</td>
<td>square meters</td>
<td>0.09</td>
<td>square meters</td>
</tr>
<tr>
<td>yd²</td>
<td>square yards</td>
<td>0.8</td>
<td>square meters</td>
</tr>
<tr>
<td>mi²</td>
<td>square miles</td>
<td>2.6</td>
<td>square kilometers</td>
</tr>
<tr>
<td>acres</td>
<td></td>
<td>0.4</td>
<td>hectares</td>
</tr>
</tbody>
</table>

WEIGHT (mass)

<table>
<thead>
<tr>
<th>Symbol</th>
<th>Number of</th>
<th>Multiply By</th>
<th>To Find</th>
</tr>
</thead>
<tbody>
<tr>
<td>oz</td>
<td>ounces</td>
<td>28</td>
<td>grams</td>
</tr>
<tr>
<td>lb</td>
<td>pounds</td>
<td>0.45</td>
<td>kilograms</td>
</tr>
<tr>
<td></td>
<td>short tons</td>
<td>0.9</td>
<td>metric tons</td>
</tr>
</tbody>
</table>

(2000 pounds)

VOLUME

<table>
<thead>
<tr>
<th>Symbol</th>
<th>Number of</th>
<th>Multiply By</th>
<th>To Find</th>
</tr>
</thead>
<tbody>
<tr>
<td>tsp</td>
<td>teaspoons</td>
<td>5</td>
<td>milliliters</td>
</tr>
<tr>
<td>Tbsp</td>
<td>tablespoons</td>
<td>15</td>
<td>milliliters</td>
</tr>
<tr>
<td>fl oz</td>
<td>fluid ounces</td>
<td>16</td>
<td>milliliters</td>
</tr>
<tr>
<td>c</td>
<td>cups</td>
<td>0.24</td>
<td>liters</td>
</tr>
<tr>
<td>pt</td>
<td>pints</td>
<td>0.47</td>
<td>liters</td>
</tr>
<tr>
<td>qt</td>
<td>quarts</td>
<td>0.95</td>
<td>liters</td>
</tr>
<tr>
<td>gal</td>
<td>gallons</td>
<td>3.8</td>
<td>liters</td>
</tr>
<tr>
<td>fl³</td>
<td>cubic feet</td>
<td>0.03</td>
<td>cubic meters</td>
</tr>
<tr>
<td>yd³</td>
<td>cubic yards</td>
<td>0.76</td>
<td>cubic meters</td>
</tr>
</tbody>
</table>

PRESSURE

<table>
<thead>
<tr>
<th>Symbol</th>
<th>Number of</th>
<th>Multiply By</th>
<th>To Find</th>
</tr>
</thead>
<tbody>
<tr>
<td>inHg</td>
<td>inches of mercury</td>
<td>3.4</td>
<td>kilopascals</td>
</tr>
<tr>
<td>psi</td>
<td>pounds per square inch</td>
<td>6.9</td>
<td>kilopascals</td>
</tr>
</tbody>
</table>

TEMPERATURE (exact)

°F degrees Fahrenheit | 5/9 (after subtracting 32) | °C
UNIX OUTLINE

The intent of the UNIX Course is to introduce the student to the following areas: system utilities, vi (Visual Editor), and communication. The course does not include shell programming or advanced instruction on utilities, editors, communication or printing.

The objectives are:

- Operate UNIX System V FACE menu
- Access system utilities using commands
- Understand file structure and directories
- Do text editing using vi
- Communicate with other users using mail/mailx

The materials needed are:

- System V Users Guide
- Handouts 1 through 6
- Fundamentals of the UNIX System Videos, 1 through 4
- Notebook and file folder

Assessments will be completed during each unit as indicated on handouts.
UNIX

Logging On/Password

1. Obtain login and password from instructor.
2. Type in login. Return.
3. Type in Password. Return.
4. Various bits of information will scroll across the screen.
5. At TERM= type 605. Return. These numbers tell the system what type of system is being used.
6. You should now move into the FACE menu.

FACE MENU

At this menu, you are offered seven different items that you may choose.

To use UNIX, select UNIX System by using the down arrow. Highlight UNIX, and return.

To Use WordPerfect

1. The UNIX System is used to get into WordPerfect. Select UNIX. When the UNIX prompt comes on the screen, type wp and return. WordPerfect 4.2 will come up on the screen.

To Use Keyboarding

1. The MS-DOS System is used for Keyboarding. Select MS-DOS. The Keyboarding menu will automatically come up on the screen.

TO EXIT OUT OF SYSTEM

2. At UNIX prompt, type exit.
3. At FACE menu, arrow down to Exit. Highlight Exit. Return.
4. Confirm Exit by striking the F3 key.
5. You will be returned to Login.
FACE Menu

If you don't have time to learn the commands, options, and arguments for operating UNIX, I have good news for you.

The FACE Menu has been loaded on to our system. It is menu driven meaning that you make your selection from a list, hit return, and follow directions as they are given on the screen.

If you would like to learn about operating FACE, please ask your instructor for a demonstration. Please allow about fifteen minutes for instruction and fifteen minutes for practice.

Objectives:

- Access and exit FACE menu
- Use Printer Operations
- Select mail and WordPerfect from Programs
- Access System Administration
- Access UNIX System
- Access MS-DOS and Keyboarding Program
- Use Command Menu and Template

Log in/log out.
Select mail then read and print.
Select WordPerfect.
See what files are in the filecabinet.
See who is logged on to the system.
Use the command menu for displaying, deleting, and printing files.
Accessing the UNIX System

Objectives

Describe basics of UNIX System
Knowledge of System V Basics
Log in and out of the UNIX system
Access the FACE menu
Access UNIX
Access MS-DOS
Access WordPerfect 4 and Mail via programs

Video Assignment

Fundamentals of the UNIX System-Basic Level, Vol.2, Basic User Communications. This may be done before the reading assignment if you prefer.

Watch video, be prepared to take notes and discuss video contents with instructor.

Reading Assignments


Read Chapter 1, UNIX Made Easy textbook. You may practice some of the commands as presented, but please do not attempt 1.6 or 1.8 exercises.

Practice Assignment

1.3.A

Be prepared to review this material more than once as you work through the first unit. UNIX TAKES TIME TO LEARN!
EXERCISE 1.3.A

1. Log in using the logname and password assigned to you by the instructor.

2. What is the TERM= for your terminal?

3. What are the two ways you can access the UNIX system when you are located in the #1 Box of the Face Menu?

4. How do you access MS-DOS when you are located in the #1 Box of the Face Menu?

5. Write the UNIX prompt.

6. Write the commands to exit UNIX.

7. Write the function key you strike to exit from the Face Menu.

8. After logging out, write down what appears on your screen.
UNIX

Answers for 1.3.A

1. user_
   student-

2. 605

3. Type u and return
   Move cursor with down arrow, highlight UNXI System, hit
   return.

4. Select

5. mail

6. ctrl d or type exit

7. F3

8. Welcome to the AT&T 386 UNIX System
   Login:
UNIX

I. Accessing the UNIX System

A. Fundamentals

1. What is an operating system?
2. Logging on: Login and Password
3. The Command Line
4. Basic UNIX Commands

II. What is an Operating System?

B. Role

It is a set of programs controlled in the right sequence.

Input > CPU > Output

It can:
- Schedule and execute commands
- Manage storage
- Input and Output
- Handle Interruptions
- Monitor the System
- Be Integrated

IV. Logging On

A. Terminal Features are checked.
1. Full Duplex
2. ACSII Characters
3. Parity Setting
4. Bard Rate
5. Upper and lower case
6. On-line.

B. Login and Password have been designed with security in mind. Please refer to directions for Logging on.

V. Mail Prompt

After logging on mail prompt will come on the screen. If mail has been sent to you either by the computer or another user, you will have a message that you have mail.

For security purposes, read, write, and execute functions have separate permissions to each file. Permission can be given to yourself, others in a work group, or to the outside. You should check with the System Administrator about permissions.
VI. Logging Off

Two ways: Hold down the ctrl key, strike the d key at the same time. Do it twice.

Type exit.

VII. Command Line

A. Tells the system to perform a task.

Command option argument(s)

B. Argument is a separate word that signified what the command is to be applied to. It must be separated by a space or a tab. Example: mail user1 user2

C. You can have options as to what will be on the screen by typing it in. Options modify the command. Example: UNIX: mail -a or +a (plus or minus signs give you different options. Options can override feature that have been read. Can be used on the same command.

D. Errors: Msil is incorrect and will be called diagnostic output. Backspacing will erase most errors. BE CAREFUL about moving the cursor around the command line. It will FREEZE if movement is backwards then forwards.

VIII. Directory File

A. Think of an upside down tree, the roots would be on the top, that is what the UNIX directory looks like.

B. Whenever you are in a file, you are in a directory.

C. The ls command lists files.

Example: ls:

    bin
    budget
    calendar
    etc.

D. ls -p lists subdirectories

E. cat prints the contents of the file. It is used to examine the contents of files.
Commands for System Utilities in the Shell

Objectives:

Define the terms "command", "options", and "arguments".
Obtain the date and time with the date command.
Print a line on the screen only using the banner command.
Display calendar with the cal command.
Display list of users on the system with the who command.
Use the write command to communicate with another user.
Use the echo command to print arguments on the screen.
Construct pipelines and I/ORedirection.
Use the mesg command to turn on and off permission to write to your terminal.

Video Assignments

"Fundamentals of the UNIX System-Basic Level, Vol. 2, Basic User Communications." Please watch the video again and keep your notes handy for review.

Reading Assignments

Read "Shell Tutorial" in the System V Guide.
Read Chapter 1 in the textbook, UNIX Made Easy for review.

Practice Assignment

Read Handout 2 and complete the following exercises:
General Purpose Commands
Banner
Cal
Echo
Write
Mesg

Evaluation: Complete Exercise 1.4.A

KEEP UP THE GOOD WORK!
EXERCISE 1.4.A

1. Log in at the terminal.
2. Obtain today's date and the current time.
3. Display a list of everyone who is on the system.
4. Identify your own logname, port and login time.
5. Determine your port number.
6. Type a command incorrectly. Use your backspace key to erase the error.
7. Display the yearly calendar for 1990. What day of the week does Christmas fall?
8. Execute the banner command without arguments. What is the message you receive?
9. Execute the banner command with your name as the argument.
10. Write to another student in class. Use the who command to ascertain whether he/she is logged on and has allowed a write permission.
11. Deny other users write permission to your terminal. Have another student try to write to you.
12. The default standard input device for the shell is the.....?
13. The default standard output device is the.....?
14. If time permits, experiment with I/O redirection and pipes. Write down the commands you experimented with and the results you got.
Additional Commands for System Utilities in the Shell

Objectives:

Obtain a list of your files with the ls command
Write and read contents of file with cat command
Print on screen using the pr command
Send output to printer using lp command
See the last part of a file with the tail command
Append to a file using the cat command with output direction
Count lines, words, and characters with wc command
Use the desk calculator with bc command

Video Assignments


If you have gotten this far, you are doing GREAT!

Reading/Practice Assignments

______ Read "Using the File System" in the System V Guide. Practice the commands as they are presented to you.

______ Read Chapter 3 in the UNIX Made Easy textbook. Complete exercise 3-B and 3-C.

Evaluation: Complete Exercise 1.5.A

KEEP UP THE GOOD WORK!!!
FILE STRUCTURE

Objectives

Describe three types of UNIX system files.
Describe the hierarchy for system files.
Locate your current position with the `pwd` command.
Move around the file system with the `cd` command.
Determine a file's type by using the `file` command.
Locate a file by using the `find` command.

Video Assignment


Reading Assignments

Read Chapter 3, Using the File System, System Users Reference Guide. Read about creating directories but please do not do so. Complete exercises that begin with Accessing and Manipulating Files.

Read Chapter 3, UNIX Made Easy, for more information about the file structure. Answer the questions for 3-B and 3-C.

This is a rather complicated topic so be prepared to spend some time on this subject.

Evaluation

Exercise 2.1.B
VI

Objectives

Describe the vi editor
Invoke and exit vi
Understand the command mode and append mode
Move cursor around the screen
Add text to buffer
Delete and change characters
Refresh screen
Create files

Video Assignment

Watch "Fundamentals of the UNIX System-Basic Level, Vol. 4, the vi Screen Editor-Part 1"

Reading Assignments

Read Chapter 6, Screen Editor Tutorial for vi, System Users Reference Guide. Complete all tutorial exercises as presented. You must be logged on and have your notes ready. You will need to review, review, review!!!

Read Chapter 2, UNIX Made Easy, for more practice and review. Answer the questions in Exercise 2-C.

Read Chapter 9, UNIX Made Easy, for learning advanced techniques and additional practice. Please answer the questions in Exercise 9-C and 9-D. These exercises may try your patience at first, SO HANG IN THERE!

Evaluation

Exercise 3.1.A
Exercise 3.2.A
Mail

Objectives

To read mail
Use Mbox
Call-up files
Editing Messages
Forward Messages from Incoming Mail
Saving messages
Sending messages
Responding to a message

Video Assignment

Fundamentals of the UNIX System-Basic Level, Basic User Communications-Mail, Tape 2.

Watch video, be prepared to take notes and discuss video contents with instructor.

Reading Assignment

Read "Communication Tutorial" in the System V User Guide. Practice the commands as they are presented in the tutorial. TAKE YOUR TIME, however, if you find the tutorial a little too difficult at this point, do the textbook assignment first, then go back to the tutorial.

Read Chapter 5, UNIX Made Easy textbook. You must be logged on and in UNIX before attempting to do any drills. Complete the following assignments.

Exercise 5-b, pg. 233
Exercise 5-c, pg. 255

Practice Assignment

Use the Keyboarding File as your message. You will do the following with it: Enter, end, send to user 16, and delete this message. After completing this, you will send it to multiple logins: user 4, 5, and yourself. You will undelete, print, and then delete the message. You may use the textbook and tutorial if you need help. GOOD LUCK!! Turn assignment into instructor when finished, don't forget to proofread!
KEYBOARDING FILE

Directions: You will type, send, and receive this message. In addition, you will save, retrieve, and delete it from your files. You will print a hard copy of it to turn in to your instructor before you delete it from your mailbox.

1. Type the command: mail user16
   Be sure to leave one space between mail and the login.
2. Return.
3. Type this message. Keep your lines short.
   The question you raised about the value of keyboarding skill is one that I am pleased to answer.
   In the near future, nearly everyone will need to know how to operate a keyboard, whether that keyboard is a part of a microcomputer, a computer, an electronic typewriter, or a word processor.
4. Return once.
5. Control d only once. Remember, if you do it twice, you log off.
6. Send to user 16.
7. Delete message.
8. Undelete message and send it to multiple logins. Use the who command to see who is logged on at the time.
9. Print a hard copy of message to default printer and turn in to your instructor.
1. Introduction to WordPerfect


2. WordPerfect Assignments

You will start WordPerfect with orientation with the instructor who will demonstrate logging-in and moving through the FACE menu to WordPerfect 5.0.

You will be required to complete the WordPerfect tutorial textbook exercises chapter by chapter before completing the word processing applications.

After completing the tutorial textbook, the word processing applications book allows you to practice what you have learned about WordPerfect. Each assignment must be turned in to the instructor and you will be given credit for the assignment when it is mailable copy.

3. Job Search Correspondence

You will prepare your own resumes, cover letters, and thank you letters, as well as other personal job search correspondence, using WordPerfect 5.0 on UNIX.

4. Prerequisite

Keyboarding skills, 30 to 35 words per minute.

5. Goal

To introduce the student to UNIX word processing concepts, terminology, and computer operations.
COURSE OUTLINE

WORD PROCESSING I for UNIX

I. Introduction to WordPerfect 5.0

WordPerfect Workbook for UNIX Based Systems
Complete exercises in Fundamentals unit.

II. WordPerfect Assignments

WordPerfect Workbook for UNIX Based Systems
Complete exercises in Formatting, Merging Documents, and Special Applications units.

III. WordPerfect Applications

You will complete the 101 word processing exercises. These exercises give you an opportunity to apply what you have learned about WordPerfect. Each assignment must be turned in to the instructor and you will be given credit for each individual assignment when it is accurate.

IV. Final Test
1. Introduction to WordPerfect

Textbooks:  WordPerfect Workbook for UNIX-Based Systems
           Word Processing Applications in Practice

WordPerfect Tutorial

2. WordPerfect Assignments

You will start WordPerfect with orientation with the instructor who will demonstrate logging-in and moving through the FACE menu to WordPerfect 5.0.

You will be required to complete the WordPerfect tutorial textbook exercises chapter by chapter before completing the word processing applications.

After completing the tutorial textbook, the word processing applications book allows you to practice what you have learned about WordPerfect. Each assignment must be turned in to the instructor and you will be given credit for the assignment when it is mailable copy.

3. Job Search Correspondence

You will prepare your own resume, cover letters, and thank you letters, as well as other personal job search correspondence, using WordPerfect 5.0 on UNIX.
TELEPHONE TECHNIQUES

"Thank you, Please Call Again", complete project as directed. Audiotapes will be required for some exercises. Telephone books are available from the instructor.

View video "Telephone Techniques".

PROFESSIONAL DEVELOPMENT

Reading/Writing Assignment: Dimensions in Professional Development, Southwestern Publishing Co.

Hygiene/Clothing Fundamentals

Read Chapters Four and Five. Complete corresponding study guides.


View videos: "Color Me Beautiful", "Cover Girl", and/or "Eight-Minute Makeover".

Job Visibility

Read Chapter Thirteen. Complete corresponding study guide.

Review Assertive Skills Handout.

FINANCIAL MANAGEMENT

Read Chapter Fourteen. Complete corresponding study guide.

WORDPERFECT TUTORIAL/OFFICE SIMULATION

You will either complete the computerized tutorial for WordPerfect 5.0 or 5.1 or an office simulation project. Please check with your instructor for additional directions.

Evaluation

*Reminder: All videos, tapes, and textbooks that are used must be returned to the instructor immediately when finished.
DIRECTIONS: Check off completed assignments. Turn in study guides, job development exercises, and worksheets when completed. Please return videos, audio tapes, and textbooks daily. These materials will be signed in and out each time they are used. HAVE A GREAT TIME!

JOB DEVELOPMENT

Reading/Writing Assignment: "Dimensions in Professional Development", Southwestern Publishing Co.

Read Chapters One and Ten. Complete corresponding study guides.

Chapter Ten: Write cover letter, resume, and thank you letter in rough draft and final copy form.

Video Assignment: Watch "Do You know What to say in an Interview?" and "Goals". Be prepared to discuss video with your instructor and take notes while viewing.

PROOFREADING

Complete Proofreading Exercise as directed. Please pick up copy from your instructor.

OFFICE PROCEDURES

Photocopying: You will be assigned photocopy projects. You must do two projects. These must be multi-page documents.

Machine Transcription: Job 1, Machine Transcription/Southwestern Publishing, 1979 Word Processing, Introduction to Using the Dictaphone. Type the following as directed on the audiotape.

Practice Paragraph

Five business letters with carbon copies.
I. DESCRIPTION OF COURSE

This Business English class has been designed as an integral component of the VESL Computer Training Program. Through a written assessment, students' English skills will be evaluated. They will be placed in this class providing their mastery of the English language is adequate to allow for success.

Business English will meet for 4.5 hours per week. Attendance will be mandatory, and homework will be given on a regular basis.

II. COURSE GOALS AND OBJECTIVES

A. To develop oral and written English skills.
B. To teach vocabulary and spelling relevant to the data entry worker/clerical workplace.
C. To reinforce English terminology necessary for job search in the business area.
D. To review English grammar necessary for clear expression of written English.
E. To write office-related documents (business letters, memos, etc.).

III. BUSINESS ENGLISH GRAMMAR AND PUNCTUATION REVIEW

A. Identification of complete sentence.
B. Identification of subjects and verbs.
C. Correct use of verb forms.
D. Subject-verb agreement.
E. Identification of nouns and pronouns (singular and plural).
F. Correct use of adjectives and adverbs.
G. Correct word order.
H. Correct prepositional phrase usage.
I. Punctuation and capitalization review.
IV. STUDENT TEXTBOOK BIBLIOGRAPHY


Various Newspaper and Magazine Articles.
CONGRATULATIONS!!!!

You have made it to the second part of Technical Typing. In this section, you will be introduced to the special features of WordPerfect 5.1 that allows you to create equations. As usual, proofread carefully, take your time, and ask for help whenever you need it.

Objectives:

Increase speed on difficult five-minute timing
Learn commonly used Greek symbols for the Greek alphabet
Type simple to complex equations using the Equation Editor
Enter symbols from the Character.set document int
Enter symbols from the Equation Palette
Move from Equation Editor to Character.set document
Make corrections using the editing keys
Use a mouse to make selections in the Equation Editor

Assignments:

Five minute timings
Exercise using Greek Alphabet, Drill One
Creating Equations. Drill Two
Type page of report containing character.set symbols and equation, Problem One

Materials:

WordPerfect 5.1 program
Chapter 22 Handout, "Creating Equations"
Greek Alphabet Handout
Drill
Objectives:

Using the Equation Editor, you will learn how to:

Start the Equation Editor
Move between the Editing and Display Windows
Enter symbols from the Equation Palette
Use a mouse in the Equation Editor
Create an equation in the Editing Window using commands
Learn special terms
Understand Precedence in the Equation Editor
Alter and correct the Equation Display
Use functions in the Equation Editor
Form fractions, square roots, and complex integral expressions
Use diacritical marks
Use matrix commands
Use stack and stackalign features
Vary symbol sizes
Position and size equations
Manage equation files
Print equations created


Directions: Read Chapter 22. Perform the equation drills as outlined in the chapter. Print completed equations from the Equation Editor using the Printscreen function.
Objectives:
Using the Equation Editor, you will learn how to:

Start the Equation Editor
Move between the Editing and Display Windows
Enter symbols from the Equation Palette
Use a mouse in the Equation Editor
Create an equation in the Editing Window using commands
Learn special terms
Understand Precedence in the Equation Editor
Alter and correct the Equation Display
Use functions in the Equation Editor
Form fractions, square roots, and complex integral expressions
Use diacritical marks
Use matrix commands
Use stack and stackalign features
Vary symbol sizes
Position and size equations
Manage equation files
Print equations created


Directions: Read Chapter 22. Perform the equation drills as outlined in the chapter. Print completed equations from the Equation Editor using the Printscreen function.

Drill 22.4
Drill 22.5
Drill 22.6
Drill 22.7
Drill 22.8
Drill 22.9
Drill 22.10
Drill 22.11
Drill 22.12
Drill 22.13
Drill 22.14
Drill 22.15
Drill 22.16
Drill 22.17
Drill 22.18
CONGRATULATIONS!!!!

You have made it to the second part of Technical Typing. In this section, you will be introduced to the special features of WordPerfect 5.1 that allows you to create equations. As usual, proofread carefully, take your time, and ask for help whenever you need it.

Objectives:

Increase speed on difficult five-minute timing
Learn commonly used Greek symbols for the Greek alphabet
Type simple to complex equations using the Equation Editor
Enter symbols from the Character.set document int
Enter symbols from the Equation Palette
Move from Equation Editor to Character.set document
Make corrections using the editing keys
Use a mouse to make selections in the Equation Editor

Assignments:

Five minute timings
Exercise using Greek Alphabet, Drill One
Creating Equations, Drill Two
Type page of report containing character.set symbols and equation, Problem One

Materials:

WordPerfect 5.1 program
Chapter 22 Handout, "Creating Equations"
Greek Alphabet Handout
Drill
This evaluator was invited to spend two days, June 12 and 13, 1989, making an on-site visit to observe and evaluate the Cooperative Demonstration Program (CDP) at Waubonsee Community College in Aurora, Illinois. Through talking with the staff and students and observing the program, the evaluator analyzed how well the program is meeting the needs of both employers and students; the adequacy of personnel and resources; and the quality of the curriculum and instruction.

Meeting Needs of Employers and Students

It appears that this program does an excellent job of coordinating with and meeting the needs of area employers and agencies. The project director and other staff work very closely with referral and placement agencies. They also have established an excellent reputation and relationship with local business and industry. As new companies are surfacing, they are calling the program to seek employees. There is very active networking going on in the community regarding the quality of the program and the quality of the graduates. Those involved in the program work very hard to train students who will become valued employees of a variety of types of businesses in the area. The overall placement rate for this and similar programs at Waubonsee is 98%. Of the ten students who have completed the CDP to date, all ten are employed.
Recommendation: The staff strives to remain responsive to the technological needs of local employers. It appears that they are serving the IBM-based employers very well and now need to prepare to train the students to be proficient with additional equipment such as UNIX which is being utilized by some of the largest companies in the Aurora area.

This project definitely appears to fill the need for vocational training or re-training for those people who "fall between the cracks" as far as eligibility for assistance from other funding sources. The program is totally self-paced and individualized based on each student's needs, skill levels, and employment goals. There is a full range of options to enable students to meet individual objectives. The length of training varies according to the extent of training needed or desired. The open-entry, open-exit structure of the program enables students to begin the program when their schedule permits and to end the program when they have reached their desired level of competency to achieve employment.

Recommendation: Many students need to maintain their current factory jobs while they are in training in order to survive financially. In order to allow more flexibility of scheduling for those people who need to work during the day, it seems that holding classes in the evening would add to the program's capacity to meet the needs of the students. This is being considered and there are approximately 37 people on a waiting list to take evening classes.

Recommendation: In order to assist students to overcome some of their barriers to training and employment, it might be wise to investigate the possibility of offering child care and/or transportation stipends to those students who have need and meet appropriate eligibility criteria.
Curriculum and Instruction

The CDP is the most comprehensive and flexible vocational training program that this evaluator has ever seen. The range of services for these students—from complete assessment upon entering to job internships or permanent job placement upon completion—is extremely extensive. The wide variety of specialized options available to augment the core curriculum is impressive. The CDP is a cost effective and efficient means of meeting the needs of both students and industry since the open-entry, open-exit, self-paced instruction allows each student to learn what they need and desire to learn. It also enables the organization to prepare students with specific skills which are being sought by local industry. The excellent placement record attests to the fact that employers' needs are being met. The individualized and one-on-one approach enables each student to receive the assistance needed (remediation, counseling, tutoring, job-seeking training, self-esteem building, work experience, etc.) to reinforce classroom activities.

Recommendation: To continue to meet the office technology needs of local industry, the organization needs to investigate adding segments to the program such as electronic mail, electronic shorthand, desktop publishing, and additional hardware and software being implemented by local employers and for which they are seeking trained employees.

Personnel and Resources

Dealing with a program as individualized and flexible as the CDP requires a special group of people to administer and instruct the program. The staff that this evaluator met and dealt with is extremely dedicated, flexible, and responsive to individual student needs. They get to know each student personally and academically and treat each student professionally and with respect. The student's knowledge, self-esteem, and employability is enhanced through each encounter with the staff.
**Association for Information and Image Management**

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301/587-8202

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Recommendation: A strong component of this program is the on-going counseling and personal contact with students. The Recruitor/Advisor position originally written into this grant will be an excellent addition to the staff to handle recruitment, assessment, attendance, and to assist students with academic problems. However, this evaluator feels that one of the major strengths of the CDP is the on-going personal contact that the project director maintains with each student and the level of trust that develops from this contact. This needs to continue to be a part of the program since it seems to be what "ties the whole program together." The project director needs to be available to assist students with overcoming their individual barriers to their education and employment.

As for resources of the CDP, the fully equipped computer labs, attractive business-like environment, and adequate training space add up to a training environment which is very conducive to preparing students to successfully make the transition to a business setting. The downtown Aurora location is accessible for clientele being served because of the central location and access to public transportation. The textbooks and other training materials provide opportunities for students to improve skills as well as develop appropriate work attitudes and behaviors.

Recommendation: Again, this evaluator feels it is important that the CDP continue to maintain their reputation for being in the forefront of the field of office technology by remaining current and up to date with their equipment and software so that it continues to match that of surrounding industry.

Conclusion

Altogether, this evaluator feels that the CDP is an excellent program, with a fine staff, successfully meeting its objectives of preparing students
to step into the business world with very marketable skills in the field of office technology.

Already, in the first six months, the CDP has become fully institutionalized with the cooperation of Economic Development, technical and vocational programs, and JTPA programs working together to help students meet their education and career goals.

The CDP is receiving excellent support from the local community, has a vast network of employers, and has received excellent publicity.

The project director has been invited to present information about the program and describe its success at the national American Vocational Association conference in Orlando in December, 1989.

In conclusion, the CDP appears to be a strong, high quality, and professional program in which the organization should take great pride.

Donna Willard
Second Careers Coordinator
Great Oaks Joint Vocational School District
June 21, 1989
The purpose of this on-site evaluation was to follow up on the June, 1989 evaluation as the current CDP grant comes to a close. Through observations and conversations with staff, students, and employers, this evaluator was able to determine the extent to which recommendations from the previous evaluation have been implemented.

In general, it appears that the administrators of the current CDP grant have done an excellent job of implementing these recommendations. This implementation has been accomplished through either integrating suggested changes into the current grant or incorporating changes into the new CDP grant which will begin July 1, 1990.

These recommendations/changes fell into the categories of: meeting needs of employers and students; adequacy of personnel and resources; and quality of curriculum and instruction.

Meeting Needs of Employers and Students

In order to remain responsive to the growing needs of local employers for well trained employees, it was recommended that the program continue to upgrade its technological capabilities. This has been very successfully accomplished through the addition of computer hardware and software systems that are compatible with those being utilized by existing and projected employers within the community. These additions include UNIX,
Employers indicate that the program continues to meet their demands for employees who can easily be assimilated into their electronic environment in today's workplace.

The staff continues to research and keep current with the technological needs and trends of employers and to meet these needs through updated training and technology.

Because many of the people who might benefit from this program find it imperative to be employed during the day, it was suggested that this program be made available in the evening to meet the needs of this population. The evening program is now in place and approximately 25 percent of the program participants are attending classes at night. A total of 20 hours of evening class hours are available per week, and students must commit to attending 12 hours a week. This flexibility of scheduling allows employed students to gain skills which will make them more employable at higher wages in the technological job market.

Two of the most common barriers to successful training and employment for participants are child care and transportation costs and problems. It was suggested that some solution to these problems be investigated. In the new CDP grant, provision has been made for covering child care fees at the campus child care facility if the student demonstrates need. Also, bus tokens will be made available to those project participants with transportation problems.

Adequacy of Personnel and Resources

The recommendation was made that the Recruiter/Advisor position written into the grant would be an excellent addition to the program.
This position has been filled. As a result, the scope of attention the individual student receives has been broadened and expanded. The on-going personal contact that both the project director and the recruiter/advisor maintain with each student continues to be a major strength of the program. These staff members keep a close eye on the progress and problems of each individual student and are available to assist when crises or barriers to success occur. Through referrals and assistance from a large network of community resources, the staff is able to help students solve problems which may stand in the way of their receiving full benefit from the program.

The resources and materials utilized by this program are excellent. It was recommended that the CDP continue to maintain their reputation for being in the forefront of the office technology field. The additions and enhancements that have been made in equipment and training materials have contributed to the maintenance of a training environment which enables students to successfully make the transition to the work setting.

**Curriculum and Instruction**

In order to continue to meet the technological needs of local industry, it was recommended that the organization investigate incorporating additional segments into the program. Many additions have been made and are currently in place in the curriculum. The staff has been extremely flexible and dedicated in its efforts to keep the curriculum as up to date as possible. They continue to strive to meet the present and future employment needs of employers. Some of the segments which have been updated include the UNIX, OS-2, and addition of Word Perfect 5.1. More graphics have been incorporated within the Word Perfect 5.0 to give the students experience with the concept of desktop publishing. Programs and projects
are now available for students to utilize electronic mail in their training activities. More Lotus training is being incorporated into the program.

I feel it is important to point out that the staff not only strives to give the students excellent technical skills but also teaches them those personal skills which make them successful in the work environment. Not only are students of this program hired at a very successful rate (98 percent), but they are retained, promoted, and considered as valuable employees by their employers.

Conclusion

It appears that the CDP project has very successfully achieved its original objectives during the 18-month project period.

They have served at least 200 women and/or minorities that did not meet eligibility requirements for previously funded State and Federal programs. They have provided training for these people which has led to office employment.

Through careful assessment of each incoming participant, they have been able to offer remediation and referral to other programs if needed and to also offer a variety of training options within the CDP based on individual skills, goals, and training time available.

They have offered each participant an individualized program of instruction. The flexibility of the self-paced, open-entry/open-exit, and core curriculum plus options format has enabled the program to meet each student's needs.

The success of the work experience/placement segment of this program is certainly evidenced by the eagerness of local employers to hire students
from the program. The students are well prepared for the workplace because of the excellence of the technology and curriculum as well as the dedicated interest the staff takes in assisting participants to learn, develop, and achieve their individual goals.

Award of the new CDP grant to Waubonsee has enabled them to further upgrade the outstanding existing program. They will continue and enhance their successful efforts toward training disadvantaged and displaced workers for technical careers in the offices of the surrounding communities.

Donna Willard  
Second Careers Coordinator  
Great Oaks Joint Vocational School District  
June 27, 1990