DOCUMENT RESUME

ED 292 964 CE 049 891

TITLE	The Admissions Process: Administrative Handbook. Interventions Based upon the Study of Adult Educational Development. Educational Development Task No. 1: Adults Making the Commitment to Return to School.
INSTITUTION	Appalachia Educational Lab., Charleston, W. Va.
SPONS AGENCY	National Inst. of Education (ED), Washington, DC
PUB DATE	Jul 85
NOTE	275p.; A product of the Lifelong Learning Program. For related documents, see CE 049 890-895.
PUB TYPE	Guides - Non-Classroom Use (055) -- Computer Programs (101)
EDRS PRICE	MF01/PC11 Plus Postage.
DESCRIPTORS	*Admission (School); *Admissions Counseling; *Adult Counseling; Adult Students; Career Education; Higher Education; Management Information Systems; Program Development; Program Implementation; *Reentry Students; *Resource Centers; Student Placement

ABSTRACT

This handbook contains six resource materials addressing major aspects of the admissions process for adults deciding to return to school that involve direct administrative interaction and leadership. Information is first provided for the Admissions Management Information Tracking System, a microcomputer system that tracks prospective students through the admissions process and makes it possible to provide followup assistance for those having difficulty. Second, guidelines are provided for the validation and interpretation of tests used in academic advising and placement of adult learners. Third, information is presented on the use of a toll-free telephone service so that prospective adult students can call to ask questions and talk with institutional representatives about personal concerns and questions. Fourth, the concept of setting up on-campus information booths is discussed. Fifth, procedures are provided for identifying and, when necessary, rewriting admissions documents to reading levels suitable for new students. Sixth, a manual gives specific directions for educational resources managers to plan, install, operate, update, and maintain an educational planning resource center, plus directions on how to provide adults with particular reference to selection of courses and majors. Each major section of the document is followed by one or more appendixes pertaining to some aspect of the process described in that section. (YLB)

The Admissions Process: Administrative Handbook

Interventions Based Upon the Study of Adult Educational Development: Adults Making the Commitment to Return to School

Appalachia Educational Laboratory

July 1985
Lifelong Learning Program

THE ADMISSIONS PROCESS: ADMINISTRATIVE HANDBOOK

Educational Development Task #1: Adults Making the Commitment to Return to School

July 1985

Walter W. Adams, Project Director

Lifelong Learning Program
Appalachia Educational Laboratory
Post Office Box 1348
Charleston, West Virginia 25325

The project presented or reported herein was performed pursuant to one or more contracts and/or grants from the National Institute of Education, U.S. Department of Education. However, the opinions expressed herein do not necessarily reflect the position or policy of the Appalachia Educational Laboratory or the National Institute of Education, and no official endorsement by the Appalachia Educational Laboratory or the National Institute of Education should be inferred.

TABLE OF CONTENTS

TABLE OF CONTENTS (Continued)

TABLE OF CONTENTS (Continued)

TABLE OF CONTENTS (Continued)

TABLE OF CONTENTS (Continued)

TABLE OF CONTENTS (Continued)

ACKNOWLEDGEMENTS

The Appalachia Educational Laboratory (AEL) Lifelong Learning Program (LLP) staff would like to express their sincere gratitude to the administrative staff of both research sites who gave considerable portions of their time and their full cooperation during all phases of R & D for this project. These people are: at Ashland Community College (ACC), Robert Goodpaster, President, William Vice, Associate Director for Instruction, and Carl Lively, Assistant Director for Student Development; at Southwest Virginia Community College (SVCC), Charles King, President, Harold VanHook, Dean of Instruction, Armand Opitz, Dean of Student Services, and Donald Smith, Director of Admissions. In addition, particular thanks goes to the staff at both research sites for their help in providing assistance and information during the research phase and to the division and department heads and staff who served as advisory group members.

Grateful acknowledgement is extended to Stephen Hamilton, Associate Professor of Education, Department of Human Development and Family Studies, Cornell University, for his expert guidance while serving as the project consultant for Educational Development Task #1.

Special recognition is extended to program consultants Eugene Wysong, University of Toledo, for the initial development of the Validation of Placement Tests intervention and to Sandra Barker, West Virginia College of Graduate Studies, for assistance in finalizing this intervention; and Ryan Todd of Elizabethtown, Kentucky, for the initial development of the Admissions Management Information Tracking System and to Todd Strohmenger, AEL staff, for work in completing this intervention.

Special gratitude is also extended to the LLP project staff for their work in planning, organizing, and conducting the R & D activities necessary to the development of the products. Staff includes David Winefordner, Director of the Division of Career Guidance; Phyllis Stowers, Associate Educational Development Specialist; and Kimberly Cowley, Division Secretary.

Appreciation is also extended for the advisory assistance to the LLP by the Consortium Group. Members include: Hocking Technical College, Nelsonville, Ohio--John Light, President, and Steven Miller, Director of Counseling; Parkersburg Community College, Parkersburg, West Virginia--Eldon Miller, President, Jeff Barnes, Director of Counseling, and Tim Beardsley, Counselor; Southern West Virginia Community College, Williamson, West Virginia--Gregory Adkins, President, Jerry Hardin, Director of Research, and Glen Prichard, Director of Student Services; Washington Technical College, Marietta, Ohio--Donald Neff, President, and Gloria

Norris, Coordinator for Counseling and Career Placement; and Wytheville Community College, Wytheville, Virginia--William Snyder, President, and Ron Hash, Coordinator for Admissions and Records.

Walter W. Adams

Walter W. Adams, Project Director
Lifelong Learning Program

INTRODUCTION

In early 1980, the National Institute of Education directed the Appalachia Educational Laboratory (AEL) to conduct a Needs Assessment in the seven states served by the Laboratory. The purpose of this assessment was to have the people of the region identify what they felt were the most important educational problems facing them today so future R & D work could be directed to meet those needs.

As a result of this Needs Assessment process, AEL conducted research and development on lifelong learning.

The Lifelong Learning Program (LLP) research was concerned with identifying those factors that facilitate and those that impede adults in entering into and successfully completing postsecondary education programs. It was also concerned with helping postsecondary institutions make more effective use of resources and create more effective conditions for successful adult learning through development and validation of interventions designed to enhance the facilitating and moderate the effect of the impeding factors.

Five educational development tasks form the research framework. These tasks are: (1) making a commitment to return to school, (2) managing learning, (3) developing occupational competence, (4) planning for employment, and (5) becoming employed. Each task is sequential and involves the following R & D stages: context analysis, problem investigation and specification, intervention design, pilot test and revision, field test and product finalization, and first level of dissemination in consortium institutions, with dissemination to other institutions in the AEL Region and nationally as resources permit.

The potential impact of the LLP will give adults more control over the planning and management of their learning, help institutional staff understand the learning process from an adult motivational point of view, and provide intervention products and processes as a direct means to implement changes.

During the first phase of the LLP a research plan was developed, and public postsecondary institutions in the AEL Region providing vocational and technical training for adults were identified, reviewed, and surveyed with respect to the research problem. Seven schools were visited, two of which were selected as research sites. An in-depth study of each of the two research sites was made to develop background information and understanding of each of the institutions in which subsequent R & D activities were to be conducted.

LLP research sites were: Ashland Community College, Ashland, Kentucky; and Southwest Virginia Community College, Richlands, Virginia. Five additional sites were invited to form a consortium that served in a review and advisory capacity and provided the first level of dissemination. These sites were: Hocking Technical College, Nelsonville, Ohio; Parkersburg Community College, Parkersburg, West Virginia; Southern West Virginia Community College, Logan, West Virginia; Washington Technical College, Marietta, Ohio; and Wytheville Community College, Wytheville, Virginia.

Task #1 involved the study of adults as they formulate the commitment to return to school. This task begins with the initial consideration of returning to school, continues throughout the admissions process, and concludes with being accepted and starting classes.

The basic question that guided the research and development for task #1 was:

> What factors facilitate and what factors impede adults in making a commitment to return to school?

The research focused on adults who completed, and those who did not complete, the admissions process at each research site. The sample studied was selected from the total population of adults that met the following criteria: (1) 20 years of age or older, (2) interrupted educational experience, (3) no prior postsecondary, and (4) enrolled in at least two courses for five or more credit hours. The problem identification stage of R & D, focusing on the admissions process, was conducted at each research site to identify important areas to be included in the research. Also, instrument development and interviewer training for task #1 research was accomplished during this phase.

Research on identifying critical factors affecting adults in making the commitment to return to school was completed during the 1982-83 school year and is reported in the Lifelong Learning Program Technical Report #1. This research involved a study of adults at the Ashland and Southwest Virginia Community Colleges.

Research findings identified 93 impeding factors and 101 facilitating factors that were grouped into six categories as shown in Table 1 on page 4.

Table 1

Relationship of Categories of Facilitating and Impeding Factors Affecting Adults Making a Commitment to Return to School

Facilitating Factor Categories	Impeding Factor Categories
Employment related motivators	
Financial assistance and improvement	Financial difficulties
Institutional information, services, and offerings	Lack of information and services
Institutional characteristics	Confusion/unfamiliarity with institutional processes
Personal motivators Encouragement from others	Apprehensions about self Handling multiple responsibilities Time management concerns

Interventions for Changing Critical Factors

The basic question that guided the research and development of interventions for Educational Development Task #1 were:

> What intervention(s) can be developed and used to enhance those factors that facilitate and to moderate the influence of those factors that impede adults in making a commitment to return to school?

This research question addresses the process of identifying, developing, and validating interventions to enhance the effect of the facilitating factors and moderate the effect of the impeding factors on adults in formulating a commitment to return to school. This question was considered at the Intervention Planning Meeting (IPM) held in July 1983 with key representatives of the research site, the program consultant, and AEL project staff. The purpose of this meeting was to review the research findings and to identify the most promising ways of assisting adults in

successfully completing task #1. As a result of this meeting, a wide range of recommendations for interventions was made and special follow-up meetings were scheduled at each research site. At these meetings: (1) the critical factors were reviewed in order to base the final recommendations for interventions on the findings for task #1; (2) each recommendation made at the IPM was discussed and evaluated; and (3) the recommendations that were most appropriate for each school were identified. The site meetings involved two rounds of discussion. This was to allow LLP staff an opportunity to "broker" the refinement of recommendations between both institutions to arrive at as many interventions as possible that could and would be used by both schools. The list of areas for the preparation of intervention resource materials agreed upon is as follows.

The Admissions Process: Administrative Handbook

Admissions Management Information Tracking System
Validation of Placement Tests
Toll-Free Telephone Access Number
Information Booth
Reading Level Analysis of Admissions Documents
Educational Planning Resource Center

The Admissions Process: Staff Development Handbook

Staff Training Packages:
Research Findings
Academic Advising and Counseling Staff
Adult Commitment
Educational Planning Resource Center
Admissions Office and Support Staff

The Admissions Process: Audiovisual Information Development Guide

Application Process
Academic Advising Process
Registration Process

Educational Planning Course

Instructor's Guide and Student Handbooks

The product design, pilot testing, and initial revision of these resource materials were completed and field tested in preparation for final revision and dissemination. Field test validation involved use of a post test evaluation design using qualitative methodology to assess the effects of the resource materials in producing positive changes in the critical factors.

This handbook contains six of the 15 interventions identified above. They are described as follows.

The Admissions Process: Administrative Handbook

There were several major aspects of the admissions process that involved direct administrative interaction and leadership. These involved the institution knowing who was in the admissions process and at what step; increasing the potential for adult learning with respect to admissions and placement testing and test interpretation; lack of student development services and resources to promote learning with respect to the career aspects of educational planning; materials with inappropriate reading levels; and inadequate services provided for adults making an initial contact with the institution. The following resource materials address these areas of concern.

- Admissions Management Information Tracking System (ADMITS). A microcomputer system that tracks prospective students through the admissions process and makes it possible to provide follow-up assistance for those having difficulty.

- Validation of Placement Tests. Provides guidelines for local validation of placement instruments and for the development and use of interpretative materials to help new students understand their academic strengths and weaknesses.

- Toll-Free Telephone Access Number. Provides prospective students with a convenient means of responding to recruitment initiatives, asking questions, and talking with institutional representatives.

- Information Booth. Provides prospective students with information and other assistance during periods such as registration so as to free admissions office staff for other tasks.

- Reading Level Analysis of Admissions Documents. Provides procedures for identifying and, when necessary, rewriting admissions documents to reading levels suitable for new students.

- Educational Planning Resource Center. Provides resources for student services staff and academic advisors in helping new students in career exploration and planning and supports the Educational Planning Course.

These interventions were each pilot tested at one or both research sites during the spring of the 1983-84 school year and field tested during the 1984-85 spring semester. Validation reports may be found in the LLP Technical Report #1.

ADMISSIONS MANAGEMENT INFORMATION TRACKING SYSTEM

Introduction

The Admissions Management Information Tracking System (ADMITS) addresses problems schools have in not knowing or being able to find out easily who prospective students are or where they are in the admissions process. ADMITS provides information that will enable institutions to take the initiative in following-up and providing help and assistance to adults at critical steps during the admissions process. The ADMITS program is being developed to run on the IBM PC using the dBase II software and ADMITS program diskette.

The objective of the ADMITS program is to set up a comprehensive admissions data management system to:

- Increase institutional effectiveness in responding to prospective adult student inquiries regarding educational offerings and requirements.
- Facilitate adult learning with regard to developing a commitment to return to school by making the admissions process a positive learning experience for adults, with particular reference to enhancing the facilitating factors and moderating the effect of the impeding factors involving personal motivation and apprehension as well as institutional information and services.
- Provide admissions and counseling staff with timely information relative to the concerns and progress of individual adults at each stage of the admissions process.
- Increase staff capability of providing relevant information and encouragement to prospective adult students.

The ADMITS system is to be designed to accommodate the following.

- Operation by admissions clerical staff in both entering data and generating reports on a daily or as needed basis.

- Recording identifying information on individual students.

- Recording the progress of individuals at each step of the admissions process including the date of each transaction.

- Using descriptors or codes to record various types of activities and the range of adult responses to each step of the admissions process.

- Providing online (CRT) and hard copy reports on the progress of individuals and groups including: individual summary reports, group status reports at each step of the admissions process, and individualized letters to prospective students with mailing information at key points where institutional initiative is appropriate.

The dBase II and programmed software will allow admissions staff to generate reports at any time to answer the following types of questions.

- How many prospective students are in the admissions process?

- How many prospective students are at each step of the admissions process?

  - inquired and received application materials,
  - submitted application,
  - have completed application file,
  - applied for financial aid,
  - received financial aid,
  - applied under veteran's status,
  - applied under special conditions or for special programs (i.e., JTPA, etc.),
  - admitted,
  - applied by major,
  - assigned an advisor, and
  - are registered.

- What are the names and addresses of prospective students to receive application materials?

- Who (name, address, and phone) has received application materials and has not responded for x days or weeks?

- Who (name, address, and phone) has an incomplete application file? What items are missing?

- Who has a complete application file and has not had a career planning interview?
- Who has been admitted and has not had academic advising?
- Who has been admitted and has not registered?
- Who are the applicants by major and academic advisor?
- Who has completed the application process and can be deleted from file? (Should be automatically added to PMS through registration.)

Hardware and Software Needed

The ADMITS program has been written for use on the IBM PC, IBM XT, or compatible microcomputers. Floppy disk storage will accommodate only 175 student records in addition to the required program files. A 10 megabyte hard disk will provide space for approximately 5,000 students. The following is a list of specific equipment suggested.

- Computer with 128 K RAM minimum.
- PC DOS 2.0 or later.
- Two double-sided floppy disk drives--
  OR
- One hard disk (10 M recommended) installed in the microcomputer. At least one floppy disk is also required. An external disk is workable but the installation program provided works only with an on-board disk. The user must copy the ADMITS program to the external disk according to the directions provided with such a disk.
- A monitor. A monochrome monitor provides the clearest image, but a color monitor is also usable.
- An 80 column printer.

The ADMITS program uses the off-the-shelf software titled dBase II by Ashton-Tate.* The user MUST own a copy of that program in order to avoid copyright infringement. Although the installation disks provided by AEL contain the system files for dBase II, the intent is to facilitate installation of the system--not to provide illegal copies of the software to users. AEL will not knowingly provide the ADMITS program to institutions that do not purchase dBase II through normal commercial channels. See Appendix A for procurement of the installation disks.

How to Install the ADMITS Program

The ADMITS program may be installed on either two double-sided floppy disks or a hard disk. Storage on the floppy disks is limited to about 175 students. In addition, the program runs much slower than on a hard disk. Although users may want to experiment with the program by running examples on the floppy version, a hard disk is recommended.

Two installation disks are available; one for installation on the floppy disks and one for installation on a hard disk. Select the following section that applies to the type of disk you are going to use.

Installation on Floppy Disks

You must have the ADMITS master marked FLOPPY and two blank disks ready for the installation. The blanks do not need to be formatted because the installation program will do it for you. Follow these steps.

---

*Purchase through independent distributors or contact Ashton-Tate Publishing Group, 10150 W. Jefferson Boulevard, Culver City, California 90230.

1. Insert the ADMITS master called FLOPPY in Drive A (left or top) and close the door. If the A> prompt is not displayed, turn on the computer and follow the usual start-up procedure to get the A> prompt.

2. Type the word FLOPPY and press [return]. The computer will then proceed to prepare the two disks you will need to run the ADMITS program. Follow the directions and respond to the prompts on the screen. The following is a summary of what happens during the installation program.

   a. You will be prompted to insert a blank disk in Drive B (bottom or right drive). Do so and press any key as directed. The disk will then be prepared for receiving programs and data by being formatted.

   b. After the disk has been formatted, you will be asked if you want to format another. Respond N to this question.

   c. The programs which operate the ADMITS program will be copied on the system disk being prepared in Drive B. The names of the five command files, the 14 program files, and the eight format files will appear on the screen as they are copied.

   d. You will then be prompted to remove the disk and label it ADMITS System. Do so and press any key to continue.

   e. You will be directed to insert another blank disk in Drive B to prepare the Data Disk for the ADMITS program. Do so and press any key as directed.

   f. The Data Disk will be formatted and you will be asked if you want to format another. Respond N to this question.

   g. The eight data files and the six index files will be copied onto the Data Disk you are preparing.

   h. You will then be prompted to remove the disk and label it Data Disk. The installation of the ADMITS program onto floppy disks has been completed.

3. Press any key after the installation procedures and you will be returned to the computer systems A> prompt. You are then ready to use the ADMITS program.

4. Check the installation program by inserting the new ADMITS System Disk in Drive A. Type DIR to see the contents of the disk. You should have 27 programs installed on the disk. Then insert the ADMITS Data Disk into Drive A. Type DIR to see the contents of the disk. You should have 14 programs installed on the disk.

Installation on a Hard Disk

You must have the ADMITS Master marked HARD in order to install the ADMITS program on a hard disk. You must also be sure that the computer operating system is PC DOS 2.0 or later. This allows you to take advantage of the subdirectory structure of the hard disk. Do NOT prepare a subdirectory for the ADMITS program. The installation program will prepare one for you. Be sure that you do not have a subdirectory titled ADMITS. Follow these steps.

1. Insert the ADMITS Master called HARD in Drive A (the top drive if you have two floppy disk drives). If the C> prompt is displayed, press A and [return] to make the A drive the active one. The A> prompt should then appear. If you have not turned on the computer, do so with the ADMITS program in Drive A and respond to the date and time prompts. The A> prompt will then appear.

2. Type the word HARD and press [return]. The computer will then proceed to prepare a subdirectory and install the ADMITS program in it. The installation is completely automatic. The following is a summary of what happens during the installation.

   a. A subdirectory called ADMITS will be created on your hard disk.

   b. The names of the five command files, the 14 program files, the eight format files, the eight data files, and the six index files will appear as they are copied onto your hard disk.

   c. You will be prompted that the installation program is complete.

3. Remove the floppy disk from Drive A and press any key. You will then receive the computer system A> prompt. You are then ready to use the ADMITS program which has been installed on your hard disk.

4. Check the installation of the program on your hard disk. Type C: to activate your hard disk. Then type CD\ADMITS to change to the ADMITS subdirectory (note that the slash mark between CD and ADMITS is a reverse slash). Then type DIR to see the contents of that subdirectory. You should have a total of 42 files listed.

Starting the Program

After the ADMITS program has been installed in your system using either the HARD or FLOPPY installation disk, it is ready to run. In order that you may begin entering student records immediately, three "dummy" records have already been entered. These records bear student names of a, b, and c and may be removed from the files using the DELETE option after you have entered your own student records into the system.

The procedure for start-up using the hard disk differs from that using the floppy disks. Read the following section that matches your system.

Start-up Using Floppy Disks

You will need both the ADMITS System Disk and the ADMITS Data Disk created by the installation program. Follow these steps.

1. Insert the ADMITS System Disk in Drive A and close the drive door.
2. If the A> prompt is not already displayed, turn on the computer and respond to the date and time prompts and the A> prompt will appear.
3. Insert the ADMITS Data Disk in Drive B and close the drive door.
4. Type the words DBASE MENU and press [return]. The ADMITS menu screen will appear and you may begin operation of the system. The section of this manual regarding operation of the ADMITS program provides step-by-step procedures for using the program.

Start-up Using a Hard Disk

If you used the HARD version of the installation program, the ADMITS program is in a subdirectory titled ADMITS and is ready to run. Follow these steps.

1. Be sure the C> prompt appears on the screen. If the A> prompt appears, type C: and [return] to activate the hard disk. If the computer is not on, turn it on and respond to the date and time questions to get the C> prompt.

2. Type CD\ADMITS to change to the ADMITS subdirectory of the hard disk.

3. Type the words DBASE MENU and press [return]. The ADMITS menu screen will appear and you may begin operation of the system. The section of this manual regarding operation of the ADMITS program provides step by step procedures for using the program.

Operation of the ADMITS Program

The ADMITS program is entirely menu-driven. That is, all functions of the system are displayed on the menu that appears after start-up. If that menu is not on the screen, follow the instructions in the section titled Starting the Program on page 15.

Although all procedures for each function are detailed in the following sections, some general procedures for operating the program are in order. In most cases, it is not necessary to press the [return] key to activate a response or menu selection. Rather, a "beep" indicates that the computer has accepted your entry and is taking action. However, if the computer does not act upon your selection, you should press [return]. Also, when you have completed creating or editing a record, you should "write" to record to file by entering [control] W. This assures that your changes or additions have been recorded. You will then respond to the record number (#) request by entering a [return] to go to the menu screen. Finally, the most important suggestion is that you read all prompts and information on the screen before responding. Most operator errors result from "assuming" that a particular action is required rather than reading the directions on the screen.

Adding or Appending Records

There are actually five different record files which contain information about each student. When you append (add) a student to the system, the computer creates a record in each of these files. They are: the Skeleton or master record, the Academic record for academic information, the Register record to track receipt of transcripts and other items needed for student registration, the Correspondence record which keeps information about correspondence between the student and the institution, and the Applied record which includes the detailed information recorded on the student application form. Complete the following steps to add a student to the system.

1. Press the 1 key to select menu item 1 - APPEND RECORD(S). A box will appear asking for the name of the student. Type in the student's LAST NAME, FIRST NAME, and press [return]. The computer will then check the records to see if the student has already been entered into the system.

2. If a record with a similar name is in the system, that record will appear. If it is identical to the record you planned to enter, you may make any changes necessary because the computer is in the edit mode. To return to the main menu, press [return].

3. If a blank record appears, make the appropriate entries in the blanks. Move from one blank to another using the arrow keys at the right side of the keyboard.

NOTE: It is recommended that you use upper case letters for the NAME field. All others should be in upper and lower case letters. The MAIL field is the name in the form that you want to appear on mailing labels. The following fields are preset to receive information in the proper form and do not require the use of the [return] key to advance to the next field in the record: SSN, PHONE (includes area code), BIRTHDAY (month, date, year), HIGH SCHOOL GRAD. (graduation) DATE, PREVIOUS STUDENT (Y/N), VETERAN (Y/N), TRANSFER STUDENT (Y/N), and RECEIVED (date of first student contact).

4. After completing all blanks in the new record, another blank will appear on the screen. Continue to complete records for all students you want to enter into the system during the present session.

5. When you have entered the last student for the present session, press the [return] key instead of information for the NAME field.

6. When the computer asks if you are finished appending, respond with a Y to return to the main menu. If you respond with a N, another blank will appear.

Deleting Records

The process of deleting student records from the system requires that records are removed from all five files. In addition, each file has to be reindexed in order that the remaining records may be found quickly. This process takes more time than any of the other menu options. Therefore, you should plan your work to remove large blocks of records at once to save time. Complete the following steps to remove student records from the ADMITS system.

1. Press the 2 key to select menu item 2 - DELETE RECORDING(S).

2. You will be asked to enter the operator code. This is a secret code to protect the system from unauthorized access to the records. If an incorrect code is entered, access is denied and the program returns to the main menu. The code provided with the system is AEL to help you get started. Read the section titled Adapting the ADMITS Program to Specific Institutions on page 26 for help in using your own codes. To begin, type AEL and press [return] to delete records.

3. You will be asked to enter the name of the student records. Remember to use all capital letters and use LAST NAME, FIRST NAME. If the name is incorrect or not found, the program will return to the main menu and you will have to try again.

4. The screen will display the social security number of the student to confirm that the correct record has been found. Press [return] to confirm that the correct record has been found. If the record is incorrect, press N to enter another student name to be deleted.

5. If the record is confirmed as correct for deletion, you will be asked if you want to store the records on a floppy disk. This procedure would provide a permanent record of all deletions in case you have need for them later. If this is desirable, press [return] and follow directions that will then appear. If you do not wish to save the record on a floppy disk, press N.

6. You will be asked if you want to pack the files. This means that the records will be purged from the files and the indexes rebuilt. This is a time-consuming procedure and should be responded with N until all records to be deleted have been identified. You may even quit the computer session and return later to mark other records for deletion and pack the files. Enter a Y if you want to pack the files. The main menu will reappear when the records are purged and the indexes rebuilt.

Recording Student Contacts and Responses

This option allows you to record dates and specifics regarding student contacts. Several contacts common to most institutions have been identified and built into the ADMITS program. However, there is provision for locally important contacts to be recorded. Complete the following steps to record contacts.

1. Press the 3 key to select menu item 3 - RECORD CONTACT(S)/ RESPONSE(S). A submenu will appear listing four options.

   a. 1 - RECEIVED APPLICATION - to record the date that an application has been received from an individual.

   b. 2 - COMPLETED ORIENTATION - to record the date that individual completed the orientation program.

   c. 3 - COMPLETED INTERVIEW - to record the date that individual completed an interview.

   d. 4 - RECEIVED RESPONSE FROM CONTACT - to record responses to other contacts identified by your institution as important in the admitting process.

2. Select the type of contact/response you want to record and press the appropriate numbered key. Read and follow the directions as they appear on the screen. The following is a summary of what happens with each selection.

   a. 1 - RECEIVED APPLICATION - A blank for entering the individual's name (LAST NAME, FIRST NAME) will appear. Complete it and press [return].

      1. The computer will search the files and display the social security number of the record it finds to verify that the correct record has been found. It if is correct, press [return] to accept it. If it is incorrect, enter N and the name blank will appear again.

2. When you confirm that the correct record has been found, you will be asked for the date (MO/DA/YR) the application was received. Enter it in the correct form and the name blank will appear so you can record receipt of other application forms.

3. When you are finished recording receipt of application forms, press [return] when the name blank appears and you will be returned to the main menu.

b. 2 - COMPLETED ORIENTATION - A blank for entering the individual's name (LAST NAME, FIRST NAME) will appear. Complete it and press [return].

1. The computer will search the files and display the social security number of the record it finds to verify that the correct record has been found. It if is correct, press [return] to accept it. If it is incorrect, enter N and the name blank will appear again.

2. When you confirm that the correct record has been found, you will be asked for the date (MO/DA/YR) the orientation was completed. Enter it in the correct form and the name blank will appear so you can record the dates for the other individuals.

3. When you are finished recording orientation dates, press [return] when the name blank appears and you will be returned to the main menu.

c. 3 - COMPLETED INTERVIEW - A blank for entering the individual's name (LAST NAME, FIRST NAME) will appear. Complete it and press [return].

1. The computer will search the files and display the social security number of the record it finds to verify that the correct record has been found. If it is correct, press [return] to accept it. If it is incorrect, enter N and the name blank will appear again.

2. When you confirm that the correct record has been found, you will be asked for the date (MO/DA/YR) the interview was completed. Enter it in the correct form and the name blank will appear so you can record the dates for other individuals.

3. When you are finished recording interview dates, press [return] when the name blank appears and you will be returned to the main menu.

d. 4 - RECEIVED RESPONSE FROM CONTACT - A blank for entering the individual's name (LAST NAME, FIRST NAME) will appear. Complete it and press [return].

1. The computer will search the files and display the social security number of the record it finds to verify that the correct record has been found. If it is correct, press [return] to accept it. If it is incorrect, enter N and the name blank will appear again.

2. When you confirm that the correct record has been found, you will be asked for the date (MO/DA/YR) the orientation was completed. Enter it in the correct form.

3. You will then be asked to indicate the type of response. ADMITS program developers assume that your institution will formalize contacts and responses that are locally important. The response requested here should identify the contact/response that the individual has completed. Type that identifier and the name blank will appear so you can record the dates for other individuals.

4. When you are finished recording response dates and types, press [return] when the name blank appears and you will be returned to the main menu.

Sending a Prepared Welcome Letter to Contacts

This is one of several proposed options to allow users to correspond with prospective students at the various steps of admissions. The printing of standard letters, the preparation and printing of special letters to selected persons, and the preparation of mailing labels are all included in the present version of the ADMITS program. Later versions will include options to print specialized lists, search for students who have not responded within a given timeframe, and conduct analyses of data within the files. In the meantime, the existing option provides a sample of the way the computer can facilitate communications tasks.

Press the 4 key to select menu item 4 - AIM-Admission Interactions Menu. Read and follow the directions as they appear on the screen. The following is a summary of what happens as you proceed.

1. The Admissions Interaction Menu will appear. Press the 1 key to select option 1 - PRINT Specific Materials To Be Mailed.

2. Another menu will appear. Press the A key to select A WELCOME LETTER.

3. You will be asked if you wish to compose your own personal letter. You will usually use the prepared letter; press [return] to accept the default response (N). A later section of this manual discusses how you may prepare and print a special letter.

4. A menu will appear with options regarding the recipients of the letters. Descriptions of each option follow.

   a. If you select 1 SEND TO ALL WHO HAVE APPLIED, the computer will search the files for all who have been entered into the system, but who have not received a welcome letter.

   b. If you select 2 SEND TO A SPECIFIC INDIVIDUAL, you will be asked to name that individual. If you make this selection, you will be asked for another name when the first letter has been printed.

5. You will then be asked to prepare the printer by checking the location of the paper or inserting letterhead paper. Strike any key when the printer is ready and the first letter will be typed.

6. The printer will stop when the letter has been printed and you must strike a key each time you have prepared or checked the printer. If you choose to send a letter to an individual, you are asked to enter another name before preparing the printer again. If you have no other names to enter, press [return] and the program will return to the main menu.

7. When all letters have been printed, you will be asked if you want to print labels. To print labels, you must insert the blank labels into the printer and then press any key to continue. The labels will then be printed.

Composing and Sending Original Letters

This option is a choice within the main menu option 4 - AIM-Admissions Interaction Menu. It allows you to compose your own welcome letter and

send it to individuals who have not received one. You may also store the new letter and use it at a later date.

Press the 4 key to select menu item 4 - AID-Admission Interactions Menu. Read and follow the directions as they appear on the screen. The following is a summary of what happens as you proceed.

1. The Admissions Interaction Menu will appear. Press the 1 key to select option 1 - PRINT Specific Materials To Be Mailed.

2. Another menu will appear. Press the A key to select A WELCOME LETTER.

3. You will be asked if you wish to compose your own personal letter. Press Y to prepare your own letter or use a letter other than the standard letter.

4. A menu will appear with options regarding the recipients of the letters. Descriptions of each option follow.

   a. If you select 1 SEND TO ALL WHO HAVE APPLIED, the computer will search the files for all who have been entered into the system, but who have not received a welcome letter.

   b. If you select 2 SEND TO A SPECIFIC INDIVIDUAL, you will be asked to name that individual. If you make this selection, you will be asked for another name.

5. The screen for composing the body of your new letter will appear. It is important to note that this program is not a word processor. Rather it is a routine that lets you prepare lines that will be printed as the body of the letter. YOU MUST PRESS [RETURN] AT THE END OF EACH LINE. Press [return] to insert a blank line between paragraphs. The left margin is set. The right margin must be kept within the highlighted area. Use the space bar to indent paragraphs. Compose your letter. Remember that the salutation and close cannot be changed with this option. You are creating only the body of the letter.

6. When you have completed your letter, place an X on a line by itself. Press [return] and the letter will be saved on the disk.

7. A box will appear for the name of the letter you have just composed. Enter a name of no more than eight characters with no spaces. Select a name that will be easy to remember. Press [return] and the name will be saved with the letter.

8. A box will appear asking for the name of the letter you wish to send. Enter the name of the letter you just created and press [return].

9. You will then be asked to prepare the printer by checking the location of the paper or inserting letterhead paper. Strike any key when the printer is ready and the first letter will be typed.

10. The printer will stop when the letter has been printed and you must strike a key each time you have prepared or checked the printer. If you choose to send a letter to an individual, you are asked to enter another name before preparing the printer again. If you have no other names to enter, press [return] and the program will return to the main menu.

Sending a Letter You Composed and Stored Earlier

This is not a specific menu item, but can be accomplished by following a very simple procedure. Complete steps 1 through 4 for Composing and Sending an Original Letter (the preceding section). Then do the following.

1. When the screen appears for composing the letter, enter an X and press [return]. The X will be stored as a one-line letter.

2. When you are asked to name the letter, enter another X and press [return]. This will store a letter named X with a single character as body. The next time you use this procedure, the X will be overwritten with another X and you use very little memory.

3. When asked for the name of the letter you wish to send, enter the name of the previously composed and stored letter that you want to use and press [return].

4. Continue with steps 9 and 10 as discussed in the previous section.

Editing or Viewing Records

This option allows you to edit or view any of the records in any of the five files: the Skeleton (master), the Application, the Academic, the Correspondence, and the Registration files. Complete the following steps to change or examine a particular record in one of these files.

1. Press the 5 key to select menu item 5 - UPDATE/VIEW RECORD(S) or FILE.

2. When asked to enter an access code, the program is protecting the files from intruders and pranksters. Only those individuals who know the code can enter the files and change records. The program is provided with the code AEL to allow you to try the program. Ways of changing or adapting the code may be found elsewhere in this manual. Type in AEL.

3. When you have entered the code correctly, the screen will show that you have gained access. If you make an error in typing the code the computer will let you know in obvious ways that the code is not acceptable. You are also returned to the main menu when the code is faulty. You may then try again.

4. You are then asked if you want to view an entire file or a specific record.

   a. If you select 1 - ENTIRE FILE, you will be given a menu of the five files from which you select. When you enter the number of your choice, the first record in that file will be displayed.

   b. If you select 2 - SPECIFIC RECORD, you will be given the option of locating records using 1 - NAME OF STUDY or 2 - SOCIAL SECURITY #. When you have entered the number of your choice, a box will appear asking for the name or social security number for the record you are seeking. When you have responded, you will be given a menu of the five files from which you must select. When you enter the number of your choice, the record you have selected will be displayed.

5. When the record appears, you may make necessary changes using the [return] key to move from field to field. The [UP] and [DOWN] arrow keys will also move you from line to line. The [RIGHT] and [LEFT] arrow keys move you horizontally within a field. The [PgUp] and [PgDn] keys move you to the next record forward [PgDn] or back [PgUp]. When the last field is reached, the next [return] will move you to the next record in the file. This is the procedure you use to view the entire file (or several adjacent records). You may also leave the record before reaching the last field by holding down the [control] key and pressing W. This "writes" the changes into the record.

6. When you have finished editing/viewing, you must hold down the [control] key and press W to "write" the record back into the file (if you have not done so in step 5 above).

7. You will be asked for the next record number. Ignore this question and press [return] to return to the main menu.

Adapting the ADMITS Program to Specific Institutions

If you have run the trial programs, you saw that the program has been developed without reference to a particular institution. You must change certain parts of the program code so that the menu on the screen and the letters printed by the program will bear the name of your institution. You may also want to revise the standard letter included in the program or change the access code to the directions you need to change the command files which drive the ADMITS program. You do not need to be an experienced programmer to complete these tasks successfully.

It is recommended that you complete the following tutorial to help you learn how to manipulate the dBase II command files before you attempt to adapt the program to your institution. However, if you are an experienced dBase II programmer, you should go directly to the sections detailing the changes that should be made. Experienced programmers may also want to refer to Appendix B which contains the command files for the program.

Tutorial for Working with dBase II Command Files

You may recall that the ADMITS program is started by typing the words DBASE MENU and pressing the [return] key when the A> prompt is on the computer screen. To access the command files when the A> prompt is showing, you type only the word DBASE and then press the [return] key. When the dBase II program is loaded, a dot (.) prompt will appear. If you have the ADMITS Program Menu on the screen, you may select R on the menu to exit the program and receive the dot (.) prompt needed to revise the command files. Complete the following steps to learn how to call and view the command files.

1. To call a command file to the screen, you type MODIFY COMMAND followed by the name of the file you want to change. Type the words MODIFY COMMAND MENU and the first screen of the Menu Files will appear. Note that the file name (menu.prg) appears at the top along with the number of the screen. You do not need to understand each of the commands in order to make the needed changes in the files. You need only follow the instructions very carefully.

Note: Be careful that you do not touch any key except as directed while viewing or changing the files. An unwanted letter or number in the file would cause it to "bomb" when it was run. However, such action would not be a tradegy. You will learn how to correct such errors later.

2. Notice that the top line of the screen is highlighted. This is the line cursor for the dBase II program. Any keystroke will change the command contained on the line upon which this cursor appears. Press the [down arrow] key and the line cursor will move down a line. You may move it up a line by pressing the [up arrow] key. You may also hold either arrow key down and the cursor will move rapidly in tnat direction. Experiment by moving the line cursor.

Note: If a number is printed on the screen and the line cursor does not move, press the [num lock] key at the top of the number pad on the keyboard. Then press the direction key desired. You will remove the numbers later.

3. The blinking underline is the character cursor. Use the [right arrow] and [left arrow] keys to control that cursor. Move the character cursor several times to see how it works.

4. The words *MENU COMMAND FILE in line 4 are not necessary for the program to run. Move the line cursor to that line to prepare for removal of those words.

5. Use the [right arrow] key to move the character cursor to the asterisk (*) in that line.

6. While holding down the [control] key tap the G and notice how the asterisk disappears and the rest of the words move in to fill the space. Continue the procedure until all of the words are removed.

7. Press [return] and notice that the line cursor moves down a line and the character cursor returns to the beginning of the line. You have just discovered that you can use the [return] to move the line cursor down. Press return several times to place the cursor on line 17 which says SET COLOR TO 112,31.

8. Move the character cursor to the space after the R in COLOR. Hold down the [control] key and press the [backspace] key (large arrow pointing left) and notice that the R was removed and that the remaining characters filled in the space. You have just discovered another way to erase portions of the command files. Continue the procedure until the word COLOR is removed. Remove extra spaces using [control] [backspace] or add spaces using [control] G so that line reads SET to 112,31.

9. We need to replace the word COLOR so that the program will run properly. Move the cursors so that the character cursor is on the T in TO.

10. While holding down the [control] key tap V and note that the word INSERT appears at the top of the screen. This means that the computer is ready to insert characters and words into the line. Enter COLOR and notice how the remainder of the line moves over to make room. Remove or add spaces so that the line reads SET COLOR TO 112,31 (no period in the command). When you finish, press [return] and notice that the word INSERT disappears from the screen. The insert mode lasts only for the line from which it was called.

11. Turn to screen #2 of the Menu Command File by holding down the [down arrow] key. If the computer "beeps" release the key and wait until the line cursor stops. If screen #2 has not appeared, tap the [arrow] key until it does appear. You can turn to the next page in the same way. However, you should use care in moving the line cursor to the top of any screen. If you pass the top line, the previous half page will appear and you will not be able to return to the top of the next page. This is not a disaster, however. The beginning of each screen is labeled so if you have portions of two screens showing, you still can locate the needed command lines for modification. Move the line cursor up past the top line to see what happens.

12. Move the line cursor to the second line of screen #2. Move the character cursor to the 6 in the first 186. Type the number 7 and notice that the new number simply replaces the old. This is a very simple way to change text in a command file.

13. When you finish examining or modifying a command file, you may either write the changes into the file or escape the modifying mode and leave the file unchanged. Hold down the [control] key while pressing the W if you want to "write" the changes to the files. Hold down [control] and press Q if you want to "quit" examining the command file and do not want to write the changes to the file. Since you may have accidently changed a portion of this program during the tutorial, use the [control] Q approach. When the computer asks ABORTING MODIFY (Y/N) press Y if you want to leave the command file or press N to continue working with it.

The dot (.) prompt will appear when the command file is either written to the file or the modifying is aborted. If you are finished working with the ADMITS program, type QUIT and [return] to get the A> prompt. You can then remove the disks and load other programs or shut the computer off. If you would like to do the tutorial again, leave the dot (.) prompt on the screen and begin with step one.

14. When you have finished with the tutorial, review the list of commands which follows. It summarizes what you have learned and can be used as a reference as you adapt the ADMITS program to your institution.

    a. MODIFY COMMAND (filename) - calls the command file to the screen.

    b. [up arrow] - moves line cursor up.

    c. [down arrow] - moves line cursor down.

    d. [return] - moves line cursor down.

    e. [right arrow] - moves character cursor to the right.

    f. [left arrow] - moves character cursor to the left.

    g. [control] G - removes character under cursor.

    h. [control] [backspace] - removes character to left of cursor.

    i. [control] V - puts computer into INSERT mode to add characters under cursor.

    j. [control] W - "writes" changes to the disk to save them.

    k. [control] Q - "quits" editing of command file without saving the changes.

Putting the Name of Your Institution into the Menu

The menu that appears on the screen when you start the ADMITS program lists OURNAME COMMUNITY COLLEGE as the institution. The following instructions will help you change the program to list your own institution.

1. When the dot (.) prompt appears on the screen, call the menu file by typing MODIFY COMMAND MENU and pressing the [return] key.

2. Turn to screen #2 by pressing the [down arrow] until it appears. Locate the row of asterisks (*) with the words "Institution Name" in the center. The line immediately below that line contains the command to print OURNAME in the menu. Move the line cursor to that line.

3. Move the character cursor to the O in OURNAME. Use the [control] and G combination to remove the letters of that name. The cursor should be on the quotation marks at the end of the name.

4. Use the [control] and V combination to enter the INSERT mode. Then type the name of your institution. Be sure that the name is enclosed in quotation marks.

5. Use the [control] W combination to write the change to disk so that the name of your institution will appear on the menu every time the ADMITS program is run.

Adapting the Standard Welcome Letter

If you ran some of the sample programs, you noticed that the standard welcome letter had a fictitious return address, signer, and initials. The body of the letter could be improved. In addition, you may want to design the letter for use with institutional stationery with letterhead. Several changes must be made in the ADMITS program to provide a quality welcome letter for your prospective students.

Examine the sample of the standard welcome letter in Appendix C. Note the four parts that may need changing: (1) the return address, (2) the body of the letter, (3) the signature, and (4) the typist initials. A draft of the body of the letter you wish to insert should be prepared before you attempt to modify the ADMITS program. You should also decide if you will use institution letterhead paper and identify the names and initials to be used in the letter. When you have completed these tasks you are ready to proceed with the instructions which follow.

1. With the dot (.) prompt on the screen, call the welcome1 command file by typing MODIFY COMMAND WELCOME1 and pressing the [return] key. Screen #1 of the command file will appear on the screen.

2. Locate the line of asterisks (*) with the words "Return Address" in the center. The inside address commands are on the next three lines. Move the line cursor to the line which includes "UNIVERSITY OF WHATEVER."

3. If you are going to use letterhead stationery, you will erase all three lines. Do this by holding down the [control] key and tapping Y to erase the entire line containing "UNIVERSITY OF WHATEVER." Move the cursor to the next two lines using [control] Y to erase each line. If you do this, skip to step 7. If you are not using letterhead, leave these lines intact and go directly to step 4.

4. If you are associated with a major university, move the character cursor to the U in "UNIVERSITY OF WHATEVER." Type the name of your university over the existing name. Be sure that the name is contained within quotes when you finish. Use [control] and G to remove any letters left over from the original name. Then move the line cursor to the next line.

   If you are not associated with a university, erase the line by holding down the [control] key and tapping Y. Then move the line cursor to the next line.

5. Move the character cursor to the O in "Ourname." Type the name of your institution over the existing name. Be sure that the name is contained within quotes when you finish. Use [control] and G to remove any letters left over from the original name. Then move the line cursor to the next line.

6. Move the character cursor to the O in "Ourname." Type the city, state, and zip code over the existing address. Be sure that the name is contained within quotes when you finish. Use [control] and G to remove any letters left over from the original address.

7. Locate the line of asterisks which signal the beginning of the body of the letter. The commands for each line of the letter immediately follow that line. Each command includes a number to identify the line on the page followed by the location on that line and the text to be printed. Move the line cursor to the first line of the body.

8. Move the cursor to the first character in the text. Type the first line of the text of your draft letter over the existing text. Be sure to keep the text within the quotation marks. Do not start a word at the end of the line unless there is room to complete it before the quotation mark. Use the [spacebar] to remove original text that may remain before the quotation mark at the end of the line.

Note: If you used [control] and G to remove text, then the closing quotation marks would be moved and it would be difficult to determine the length of the line if you wanted to change the text later.

If you wanted to have the text to exceed 16 lines, move the line cursor to the bottom of the screen and on to screen #2. Place the cursor on the line with the word "Sincerely" on it. While holding [control] tap N. This inserts a line just above the cursor. Insert as many lines as you need using this process.

If your text contains fewer than the 16 lines, remove the extra text lines by placing the line cursor on each extra line and use [control] and Y to remove each line.

You must prepare a command line for each additional line of text you wish to add. Refer to the following pattern when designing your additional line commands. Be sure to observe all spaces and lack of spaces among the characters as you type. Line up the closing quotes with those already showing for lines 35 and 36 so that your lines will leave a right margin.

```
@ 37,10 say '-------- your text ----------------------'
@ 38,10 say '-------- your text ----------------------'
@ 39,10 say '-------- your text ----------------------'
```

9. Locate the row of asterisks identifying the lines which include the signature lines. Move the line cursor to the line immediately below it. Move the character cursor to the D in Dr. Type the name of the individual who is going to sign the welcome letters. Remove any letters showing from the old name using [control] and G. (It makes no difference that the closing quotes move to fill the spaces.) Be sure the name is enclosed in quotation marks.

10. Move the cursor to the next line and change the title of the signer if necessary. Use the process described in step 9.

11. Move the cursor to the next line and change the initials to fit those of the typist and signer. Use the process described in step 9.

12. The location of all three lines of the complimentary close must be changed if the body of the letter is different than the original six lines. If a change is required, note the first number in the last line of text (now 36). Then change the first number in the Sincerely, Name, Title, and Initials lines to reflect the difference between the original 36 and that used for the last text line. In the example below, assume that the last line of text is 38 rather than the original 36. Two is added to the first number lines as shown.

```
OLD   @ 38,10 SAY 'Sincerely,'
NEW   @ 40,10 SAY 'Sincerely,'
```

```
OLD   @ 41,40 SAY 'Dr. John Doe'
NEW   @ 43,40 SAY 'Dr. John Doe'

OLD   @ 42,40 SAY 'President'
NEW   @ 44,40 SAY 'President'

OLD   @ 43,10 SAY 'asa aft'
NEW   @ 45,10 SAY 'asa aft'
```

Adapting the Form for Letters You Compose

The ADMITS program gives you the option of using the standard welcome letter or composing your own. When you compose your own, the return address, the signature, and the typist initials are automatically entered into your letter. You must make the same changes in those items as you did with the standard welcome letter. Although the process is similar to adapting the standard letter, you should complete the following steps carefully.

1. With the dot (.) prompt on the screen, call the composed command file by typing MODIFY COMMAND COMPOSED and pressing the [return] key. Screen #1 of the command file will appear on the screen.

2. Locate the line of asterisks (*) with the words "Return Address" in the center. The inside address commands are on the next three lines. Move the line cursor to the line which includes "UNIVERSITY OF WHATEVER."

3. If you are going to use letterhead stationery, you will erase all three lines. Do this by holding down the [control] key and tapping Y to erase the entire line containing UNIVERSITY OF WHATEVER. Move the cursor to the next two lines using [control] Y to erase each line. If you do this, skip to step 7. If you are not using letterhead, leave these lines intact and go directly to step 4.

4. If you are associated with a major university, move the character cursor to the U in UNIVERSITY OF WHATEVER. Type the name of your university over the existing name. Be sure that the name is contained within quotes when you finish. Use [control] and G to remove any letters left over from the original name. Then move the line cursor to the next line.

   If you are not associated with a university, erase the line by holding down the [control] key and tapping Y. Then move the line cursor to the next line.

5. Move the character cursor to the O in Ourname. Type the name of your institution over the existing name. Be sure that the name is contained within quotes when you finish. Use [control] and G to remove any letters left over from the original name. Then move the line cursor to the next line.

6. Move the character cursor to the O in Ourname. Type the city, state, and zip code over the existing address. Be sure that the name is contained within quotes when you finish. Use [control] and G to remove any letters left over from the original address.

7. Use the [down arrow] key to move to screen #4. Locate the row of asterisks identifying the lines which include the signature lines. Move the line cursor to the line immediately below it. Move the character cursor to the D in Dr. Type the name of the individual who is going to sign the welcome letters. Remove any letters showing from the old name using [control] and G. (It makes no difference that the closing quotes move to fill the spaces.) Be sure the name is enclosed in quotation marks.

8. Move the cursor to the next line and change the title of the signer if necessary. Use the process described in step 7.

9. Move the cursor to the next line and change the initials to fit those of the typist and signer. Use the process described in step 7.

Changing the Access Code

The records in the ADMITS program are protected from unauthorized persons by requiring the user to input a secret code in order to edit or delete records. The original code provided is AEL, the initials of the Appalachia Educational Laboratory. This simple and easy-to-remember code was used to facilitate retention and use while the program is being installed and the procedures explored. However, each institution should identify a code of their own choosing and adapt the EDITVIEW and DELEMENU files accordingly. Complete the following steps to install new access codes.

1. With the dot (.) prompt on the screen, call the Editview Command File by typing MODIFY COMMAND EDITVIEW and pressing the [return] key. Screen #1 of the command file will appear on the screen.

2. Locate the line of asterisks (*) with the words "Access Code" in the center. Move the line cursor to the next line which reads IF OC='AEL'.OR.OC='ael'. Replace the characters within the quotes with a code of up to five characters. If you want the computer to accept either upper or lower case letters, you must use the form IF OC=' '.OR.OC=' ' in order for access to be granted. If you want to demand only upper or lower as a way of identifying proper users, you may eliminate the "or" portion and use the form IF OC=' ' and leave out the last portion of the original command line. Remember to use [control] and W to write the changes to the disk.

3. With the dot (.) prompt on the screen, call the Delemenu Command File by typing MODIFY COMMAND DELEMENU and pressing the [return] key. Screen #1 of the command file will appear on the screen.

4. Locate the line of asterisks (*) which locates the command line to be changed. Use the same procedures as in step 2. Store the change using [control] and W.

Appendix A:

Procurement of Installation Disks

PROCUREMENT OF INSTALLATION DISKS

The ADMITS program uses the off-the-shelf software titled dBase II by Ashton-Tate. The user MUST own a copy of that program in order to avoid copyright infringement. Although the installation disks provided by AEL contain the system files for dBase II, the intent is to facilitate installation of the system--not to provide illegal copies of the software to users. AEL will not knowingly provide the ADMITS program to institutions that do not purchase dBase II through normal commercial channels. To obtain the installation disks write to: Lifelong Learning Program, Appalachia Educational Laboratory, Post Office Box 1348, Charleston, West Virginia 25325.

Appendix B:

Command Files for ADMITS Program

PROGRAM FILES DIRECTORY

```
A>dir b:*.prg

 Volume in drive B has no label
 Directory of  B:\

COMPOSEL PRG      3072   6-20-85   3:14p
MENU     PRG      3072   6-17-85   8:47a
EDITVIEW PRG     11776   6-20-85   2:15p
MATERIAL PRG      8704   6-20-85   2:22p
COMPOSED PRG      2048   6-20-85   2:34p
WELCOMEL PRG      2048   6-17-85  10:14a
AIM      PRG      5120   6-20-85   4:38p
APPEMENU PRG      3072   6-20-85   2:50p
CONTACTR PRG      8704   6-20-85   3:05p
LABELS   PRG       512   6-20-85   3:18p
DELEMENU PRG     13824   6-20-85   3:55p
       11 File(s)     175104 bytes free
```

```
* COMPOSEL.PRG FILE ************ Screen # 1 ***********************************
SET TALK OFF
ERASE
SET COLOR TO 112,15
@ 01,07 SAY 'MARGIN          TYPE IN COMPLETE LINE & PRESS ENTER!          MARGI;
N'
SET COLOR TO 112,9
@ 02,00 SAY '123456789'+CHR(31)+'                    TYPE A "X" TO QUIT!       ;
            '+CHR(31)+'1234567890'
SET COLOR TO 112,7
STORE 1 TO L
DO WHILE L<22
 STORE '                                                              ' TO ;
LINE
 DO CASE
  CASE L=1
   @ L+2,08 GET LINE
   READ
   STORE LINE TO LINE01
  CASE L=2
   @ L+2,08 GET LINE
   READ
   STORE LINE TO LINE02

******************************** Screen # 2 ***********************************
  CASE L=3
   @ L+2,08 GET LINE
   READ
   STORE LINE TO LINE03
  CASE L=4
   @ L+2,08 GET LINE
   READ
   STORE LINE TO LINE04
  CASE L=5
   @ L+2,08 GET LINE
   READ
   STORE LINE TO LINE05
  CASE L=6
   @ L+2,08 GET LINE
   READ
   STORE LINE TO LINE06
  CASE L=7
   @ L+2,08 GET LINE
   READ
   STORE LINE TO LINE07
  CASE L=8
   @ L+2,08 GET LINE

******************************** Screen # 3 ***********************************
   READ
   STORE LINE TO LINE08
  CASE L=9
   @ L+2,08 GET LINE
   READ
   STORE LINE TO LINE09
  CASE L=10
   @ L+2,08 GET LINE
   READ
   STORE LINE TO LINE10
  CASE L=11
   @ L+2,08 GET LINE
   READ
   STORE LINE TO LINE11
  CASE L=12
   @ L+2,08 GET LINE
   READ
   STORE LINE TO LINE12
  CASE L=13
   @ L+2,08 GET LINE
   READ
   STORE LINE TO LINE13
```

```
******************************** Screen # 4 ****************************************
  CASE L=14
   @ L+2,08 GET LINE
   READ
   STORE LINE TO LINE14
  CASE L=15
   @ L+2,08 GET LINE
   READ
   STORE LINE TO LINE15
  CASE L=16
   @ L+2,08 GET LINE
   READ
   STORE LINE TO LINE16
  CASE L=17
   @ L+2,08 GET LINE
   READ
   STORE LINE TO LINE17
  CASE L=18
   @ L+2,08 GET LINE
   READ
   STORE LINE TO LINE18
  CASE L=19
   @ L+3,10 SAY 'YOU HAVE THREE LINES LEFT INCLUDING THIS ONE '+CHR(024)+'.'

****************************** Screen # 5 ****************************************
   @ L+2,08 GET LINE
   READ
   STORE LINE TO LINE19
  CASE L=20
   @ L+3,10 SAY 'YOU HAVE TWO LINES LEFT INCLUDING THIS ONE '+CHR(024)+'.'
   @ L+2,08 GET LINE
   READ
   STORE LINE TO LINE20
  CASE L=21
   @ L+2,08 GET LINE
   READ
   STORE LINE TO LINE21
 ENDCASE
 IF !($(LINE,1,1))='X'
  STORE L-1 TO QL
  STORE 21 TO L
 ELSE
 ENDIF
 STORE L+1 TO L
ENDDO
ERASE
STORE '        ' TO FILENAME

******************************** Screen # 6 ****************************************
@ 10,25 SAY 'LETTER NAME-->' GET FILENAME PICTURE 'XXXXXXXX'
READ
SAVE TO &FILENAME
RETURN
SET TALK ON
```

```
* menu.prg ***************** Screen # 1 ****************************************
DO WHILE T
SET LINKAGE OFF
SET ECHO OFF            *MENU COMMAND FILE
SET TALK OFF
SET FORMAT TO SCREEN
SET PRINT OFF
ERASE
SET COLOR TO 112,30
STORE CHR(205) TO A
@ 01,11 SAY CHR(201)+A+A+A+A+A+A+A+A+A+A+A+CHR(203)+A+A+A+A+A+A+A+A+A+A+A+A+A+A+A+A
@ 01,38 SAY A+A+A+A+A+A+A+A+A+A+A+A+A+A+A+A+A+A+A+A+A+A+A+A+A+A+CHR(203)+A+A+A+A+A+A+A+A
@ 01,68 SAY A+A+CHR(187)
@ 02,11 SAY CHR(186)+"           "+CHR(186)
@ 02,59 SAY CHR(186)+"           "+CHR(186)
@ 02,23 SAY "          ADMITS MASTER MENU          "
SET COLOR TO 112,31
@ 02,13 SAY DATE()
@ 02,60 SAY "REV.  5.85"
SET COLOR TO 112,30
@ 03,11 SAY CHR(204)+A+A+A+A+A+A+A+A+A+A+A+CHR(206)+A+A+A+A+A+A+A+A+A+A+A+A+A+A+A+A
@ 03,38 SAY A+A+A+A+A+A+A+A+A+A+A+A+A+A+A+A+A+A+A+A+A+A+A+A+A+A+CHR(206)+A+A+A+A+A+A+A+A
@ 03,68 SAY A+A+CHR(185)

************************* Screen # 2 ***************************************
@ 04,11 SAY CHR(186)+"           "+CHR(186)
@ 04,59 SAY CHR(186)+"           "+CHR(186)
@ 05,11 SAY CHR(186)+"           "+CHR(186)
@ 05,59 SAY CHR(186)+"           "+CHR(186)
@ 06,11 SAY CHR(186)+"           "+CHR(186)
@ 06,59 SAY CHR(186)+"           "+CHR(186)
@ 07,11 SAY CHR(186)+"           "+CHR(186)
@ 07,59 SAY CHR(186)+"           "+CHR(186)
@ 08,11 SAY CHR(186)+"           "+CHR(186)
@ 08,59 SAY CHR(186)+"           "+CHR(186)
@ 09,11 SAY CHR(186)+"           "+CHR(186)
@ 09,59 SAY CHR(186)+"           "+CHR(186)
@ 10,11 SAY CHR(186)+"           "+CHR(186)
@ 10,59 SAY CHR(186)+"           "+CHR(186)
@ 11,11 SAY CHR(200)+A+A+A+A+A+A+A+A+A+A+A+CHR(202)+A+A+A+A+A+A+A+A+A+A+A+A+A+A+A+A
@ 11,38 SAY A+A+A+A+A+A+A+A+A+A+A+A+A+A+A+A+A+A+A+A+A+A+A+A+A+A+CHR(202)+A+A+A+A+A+A+A+A
@ 11,68 SAY A+A+CHR(188)
SET COLOR TO 112,78
@ 04,23 SAY " 1 APPEND RECORD(S)                "
@ 05,23 SAY " 2 DELETE RECORD(S)                "
********************************** Institution Name ****************************
@ 06,13 SAY "OURNAME"

******************************** Screen # 3 ************************************
@ 06,23 SAY " 3 RECORD CONTACT(S)/RESPONSE(S)    "
@ 06,62 SAY "ADMITS"
@ 07,12 SAY "COMMUNITY"
@ 07,23 SAY " 4 AIM-Admission Interactions Menu  "
@ 07,61 SAY "TRACKING"
@ 08,13 SAY "COLLEGE"
@ 08,23 SAY " 5 UPDATE/VIEW RECORD(S) or FILE    "
@ 08,62 SAY "SYSTEM"
@ 09,23 SAY "                                    "
@ 10,23 SAY " R RETURN TO (DOS)                  "
SET COLOR TO 112,7
WAIT TO SELECTION
@ 11,00 SAY '           '
DO CASE
 CASE SELECTION="1"
  DO APPEMENU
  LOOP
 CASE SELECTION="2"

  DO DELEMENUTO SCREEN
  LOOP
 CASE SELECTION="3"
```

```
********************************* Screen # 4 ***********************************
  DO CONTACTR
  LOOP
 CASE SELECTION="4"
  SET COLOR TO 112,143
  @ 07,24 SAY '4 AIM-Admission Interactions Menu'
  SET COLOR TO 112,15
  DO AIM
  LOOP
 CASE SELECTION="5"
  DO EDITVIEW
  LOOP
 CASE SELECTION="R".OR.SELECTION="r"
```

```
* editview.prg ************** Screen # 1 ***************************************
DO WHILE T
USE C:SKELETON INDEX SKELINDX
SET COLOR TO 112,15
@ 08,24 SAY '5 UPDATE/VIEW RECORD(S) or FILE'
SET COLOR TO 112,15
@ 11,40 SAY CHR(209)
STORE CHR(205) TO B
STORE CHR(196) TO A
@ 12,12 SAY CHR(218)+A+A+A+A+A+A+A+A+A+A+A+A+A+A+A+A+A+A+A+A+A+A+A+A+A+A+A+A+A+A+A
@ 12,40 SAY CHR(217)
@ 13,01 SAY CHR(201)+B+B+B+B+B+B+B+B+B+B+B+CHR(207)+B+B+B+B+B+B+B+B+B+B+CHR(187)
SET COLOR TO 0,15
@ 14,01 SAY CHR(186)+'                              '+CHR(186)
@ 15,01 SAY CHR(200)+B+B+B+B+B+B+B+B+B+B+B+B+B+B+B+B+B+B+B+B+B+B+B+B+CHR(188)
SET INTENSITY ON
STORE '      ' TO C1
SET COLOR TO 0,78
@ 14,03 SAY '                    '
@ 14,03 SAY 'ACCESS CODE->'
SET COLOR TO 0,0
@ 14,16 GET C1
READ

****************************** Screen # 2 ***************************************
****************************** Access Code **************************************
IF C1='AEL '.OR.C1='ael '
 SET COLOR TO 112,36
 @ 14,02 SAY '   ACCESS GRANTED!    '
 SET COLOR TO 112,15
ELSE
 SET COLOR TO 112,78
 @ 14,02 SAY '   ACCESS DENIED!     '
 @ 14,75 SAY CHR(7)+CHR(7)+CHR(7)
 STORE 0 TO CNT
 DO WHILE CNT<60
  STORE CNT+1 TO CNT
 ENDDO
 SET COLOR TO 112,7
 RETURN
ENDIF
SET COLOR TO 112,15
@ 15,12 SAY CHR(209)
@ 16,01 SAY CHR(218)+A+A+A+A+A+A+A+A+A+A+CHR(193)+A+A+A+A+A+A+A+A+A+A+CHR(191)
@ 17,01 SAY CHR(179)+'                              '+CHR(179)
@ 18,01 SAY CHR(179)+'                              '+CHR(179)
@ 19,01 SAY CHR(179)+'                              '+CHR(179)

****************************** Screen # 3 ***************************************
* 20,01 SAY CHR(179)+'                              '+CHR(179)
@ 21,01 SAY CHR(179)+'                              '+CHR(179)
@ 22,01 SAY CHR(179)+'                              '+CHR(179)
@ 23,01 SAY CHR(192)+A+A+A+A+A+A+A+A+A+A+A+A+A+A+A+A+A+A+A+A+A+A+A+A+CHR(217)
SET COLOR TO 78,78
STORE ' ' TO C2
@ 17,02 SAY '       EDIT/VIEW       '
@ 18,02 SAY ' 1 ENTIRE FILE         '
@ 19,02 SAY ' 2 SPECIFIC RECORD     '
@ 20,02 SAY ' R EXIT                '
@ 21,02 SAY '                       '
@ 22,02 SAY '                       '
@ 22,02 SAY ' SELECTION-->' GET C2
SET COLOR TO 64,78
READ
IF !(C2)='R'
 RETURN
ENDIF
DO CASE
 CASE C2='1'
  SET COLOR TO 112,15
  @ 19,23 SAY CHR(195)+CHR(217)
```

```
********************************** Screen # 4 **********************************
  @ 18,24 SAY CHR(179)
  @ 17,24 SAY CHR(179)
  @ 16,24 SAY CHR(179)
  @ 15,24 SAY CHR(179)
  @ 14,24 SAY CHR(179)
  @ 13,24 SAY CHR(218)+A+A+A+A+A+A+A+A+A+A+A+A+A+A+A+A+A+A+A+A+A+A+A+A+A+A+A+A+A
  @ 13,53 SAY A+A+A+A+A+A+A+A+A+A+A+A+A+A+CHR(191)
  @ 14,55 SAY CHR(218)+A+A+A+A+A+A+A+A+A+A+CHR(193)+A+A+A+A+A+A+A+A+A+A+A+A
  @ 14,78 SAY CHR(191)
  @ 15,55 SAY CHR(179)+'                          '+CHR(179)
  @ 16,55 SAY CHR(179)+'                          '+CHR(179)
  @ 17,55 SAY CHR(179)+'                          '+CHR(179)
  @ 18,55 SAY CHR(179)+'                          '+CHR(179)
  @ 19,55 SAY CHR(179)+'                          '+CHR(179)
  @ 20,55 SAY CHR(179)+'                          '+CHR(179)
  @ 21,55 SAY CHR(179)+'                          '+CHR(179)
  @ 22,55 SAY CHR(179)+'                          '+CHR(179)
  @ 23,55 SAY CHR(192)+A+A+A+A+A+A+A+A+A+A+A+A+A+A+A+A+A+A+A+A+A+A+A+A+A+CHR(217)
  SET COLOR TO 64,78
  @ 15,56 SAY ' 1 SKELETON FILE       '
  @ 16,56 SAY ' 2 APPLICATION FILE    '
  @ 17,56 SAY ' 3 ACADEMIC FILE       '

********************************** Screen # 5 **********************************
  @ 18,56 SAY ' 4 CORRESPONDENCE FILE'
  @ 19,56 SAY ' 5 REGISTRATION FILE  '.
  @ 20,56 SAY ' R EXIT               '
  @ 21,56 SAY '                      '
  STORE ' ' TO C3
  @ 22,56 SAY '                      '
  @ 22,56 SAY 'SELECTION-->' GET C3
  READ
  IF !(C3)='R'
   RETURN
  ENDIF
  SET COLOR TO 64,78
  DO CASE
   CASE C3='1'
    SET FORMAT TO SKELETON.FRM
    USE SKELETON INDEX SKELINDX
    EDIT #
    EDIT
    SET FORMAT TO SCREEN
    RETURN
   CASE C3='2'
    SET FORMAT TO APPLIED.FRM

********************************** Screen # 6 **********************************
    USE APPLIED INDEX APPLINDX
    EDIT #
    EDIT
    SET FORMAT TO SCREEN
    RETURN
   CASE C3='3'
    SET FORMAT TO ACADEMIC.FRM
    USE
    USE ACADEMIC INDEX ACADINDX
    SELECT SECONDARY
    USE SKELETON INDEX SKELINDX
    SELECT PRIMARY
    EDIT #
    EDIT
    SET FORMAT TO SCREEN
    RETURN
   CASE C3='4'
    SET FORMAT TO CORRESPD.FRM
    USE CORRESPD INDEX CORRINDX
    EDIT #
    EDIT
    SET FORMAT TO SCREEN
```

```
********************************* Screen # 7 ************************************
    RETURN
   CASE C3='5'
    SET FORMAT TO REGISTER.FRM
    USE REGISTER INDEX REGIINDX
    EDIT $
    EDIT
    SET FORMAT TO SCREEN
    RETURN
   CASE !(C3)='X'
    SET FORMAT TO SCREEN
    RETURN
   OTHERWISE
    LOOP
  ENDCASE
 CASE C2='2'
  SET COLOR TO 112,15
  @ 19,23 SAY CHR(195)+CHR(217)
  @ 18,24 SAY CHR(179)
  @ 17,24 SAY CHR(179)
  @ 16,24 SAY CHR(218)+A+A+A+CHR(180)+'                              '+CHR(179)
  @ 15,28 SAY CHR(179)+'                              '+CHR(179)
  @ 17,28 SAY CHR(179)+'                              '+CHR(179)

********************************* Screen # 8 ************************************
  @ 14,28 SAY CHR(179)+'                              '+CHR(179)
  @ 18,28 SAY CHR(179)+'                              '+CHR(179)
  @ 19,28 SAY CHR(179)+'                              '+CHR(179)
  @ 13,28 SAY CHR(218)+A+A+A+A+A+A+A+A+A+A+A+A+A+A+A+A+A+A+A+A+A+A+A+A+A+A+CHR(191)
  @ 20,28 SAY CHR(192)+A+A+A+A+A+A+A+A+A+A+A+A+A+A+A+A+A+A+A+A+A+A+A+A+A+A+CHR(217)
  SET COLOR TO 15,112
  @ 14,29 SAY ' LOCATE RECORD USING...'
  @ 15,29 SAY ' 1 NAME OF STUDENT     '
  @ 16,29 SAY ' 2 SOCIAL SECURITY #   '
  @ 17,29 SAY ' X EXIT                '
  @ 18,29 SAY '                       '
  @ 19,29 SAY '                       '
  STORE ' ' TO C4
  @ 19,29 SAY ' SELECTION-->' GET C4
  SET COLOR TO 112,15
  READ
  IF !(C4)='X'
   RETURN
  ENDIF
  @ 20,40 SAY CHR(194)
  @ 21,28 SAY CHR(218)+A+A+A+A+A+A+A+A+A+A+A+A+CHR(193)+A+A+A+A+A+A+A+A+A+A+A
  @ 21,52 SAY CHR(191)

********************************* Screen # 9 ************************************
  @ 22,28 SAY CHR(179)+'                              '+CHR(179)
  @ 23,28 SAY CHR(192)+A+A+A+A+A+A+A+A+A+A+A+A+A+A+A+A+A+A+A+A+A+A+A+A+A+A+CHR(217)
  DO CASE
   CASE C4='1'
    USE SKELETON INDEX SKELINDX
    STORE '                    ' TO SNAME
    STORE 1 TO XX
    DO WHILE XX=1
    @ 22,29 SAY 'NAME' GET SNAME
    READ
    STORE TRIM(SNAME) TO SNAME
    FIND &SNAME
    STORE # TO RCDN
    SAVE TO MEMORYF ALL LIKE RCDN
    IF #=0
     SET COLOR TO 112,15
     @ 22,52 SAY CHR(195)+CHR(182)+'                                '+CHR(186)
     STORE CHR(205) TO B
     @ 21,53 SAY CHR(201)+B+B+B+B+B+B+B+B+B+B+B+B+B+B+B+B+B+B+B+B+B+B+B+B+B+B+B+B
     @ 21,79 SAY CHR(187)
     @ 23,53 SAY CHR(200)+B+B+B+B+B+B+B+B+B+B+B+B+B+B+B+B+B+B+B+B+B+B+B+B+B+B+B+B
     @ 23,79 SAY CHR(188)
```

```
******************************** Screen # 10 ****************************************
     SET COLOR TO 112,143
     @ 23,79 SAY CHR(7)
     @ 22,55 SAY 'UNABLE TO LOCATE RECORD'
     SET COLOR TO 112,15
     STORE 0 TO CNT
     DO WHILE CNT<50
      STORE CNT+1 TO CNT
     ENDDO
     @ 22,52 SAY CHR(179)
     @ 21,53 SAY '                          '
     @ 22,53 SAY '                          '
     @ 23,53 SAY '                          '
     @ 23,80 SAY CHR(7)
     STORE '                  ' TO SNAME
     LOOP
    ELSE
     STORE 2 TO XX
    ENDIF
    ENDDO
    SET EXACT OFF
   CASE C4='2'
    USE SKELETON INDEX SSN
```

```
******************************** Screen # 11 ***************************************
    STORE '           ' TO SSSN
    STORE 1 TO XX
    DO WHILE XX=1
    @ 22,29 SAY 'SSN-->' GET SSSN PICTURE '999-99-9999'
    READ
    FIND &SSSN
    STORE # TO RCDN
    SAVE TO MEMORYF ALL LIKE RCDN
    IF #=0
     SET COLOR TO 112,15
     @ 22,52 SAY CHR(195)+CHR(182)+'                          '+CHR(186)
     STORE CHR(205) TO B
     @ 21,53 SAY CHR(201)+B+B+B+B+B+B+B+B+B+B+B+B+B+B+B+B+B+B+B+B+B+B+B+B+B
     @ 21,79 SAY CHR(187)
     @ 23,53 SAY CHR(200)+B+B+B+B+B+B+B+B+B+B+B+B+B+B+B+B+B+B+B+B+B+B+B+B+B
     @ 23,79 SAY CHR(188)
     SET COLOR TO 112,143
     @ 23,79 SAY CHR(7)
     @ 22,55 SAY 'UNABLE TO LOCATE RECORD'
     SET COLOR TO 112,15
     STORE 0 TO CNT
     DO WHILE CNT<50
```

```
******************************** Screen # 12 ****************************************
      STORE CNT+1 TO CNT
     ENDDO
     @ 22,52 SAY CHR(179)
     @ 21,53 SAY '                          '
     @ 22,53 SAY '                          '
     @ 23,53 SAY '                          '
     STORE '           ' TO SSSN
     LOOP
    ELSE
     STORE 2 TO XX
    ENDIF
    ENDDO
   CASE !(C4)='R'
    SET LINKAGE OFF
    RETURN
   OTHERWISE
    SET LINKAGE OFF
    RETURN
  ENDCASE
  SET COLOR TO 112,15
  @ 22,52 SAY CHR(195)+CHR(217)
  @ 21,53 SAY CHR(179)
```

```
********************************* Screen # 13 ************************************
  @ 20,53 SAY CHR(179)
  @ 19,53 SAY CHR(179)
  @ 18,53 SAY CHR(179)
  @ 17,53 SAY CHR(179)
  @ 16,53 SAY CHR(179)
  @ 15,53 SAY CHR(179)
  @ 14,53 SAY CHR(179)
  @ 13,53 SAY CHR(218)+A+A+A+A+A+A+A+A+A+A+A+A+A+CHR(191)
  @ 14,55 SAY CHR(218)+A+A+A+A+A+A+A+A+A+A+A+CHR(193)+A+A+A+A+A+A+A+A+A+A+A
  @ 14,78 SAY CHR(191)
  @ 15,55 SAY CHR(179)+'                          '+CHR(179)
  @ 16,55 SAY CHR(179)+'                          '+CHR(179)
  @ 17,55 SAY CHR(179)+'                          '+CHR(179)
  @ 18,55 SAY CHR(179)+'                          '+CHR(179)
  @ 19,55 SAY CHR(179)+'                          '+CHR(179)
  @ 20,55 SAY CHR(179)+'                          '+CHR(179)
  @ 21,55 SAY CHR(179)+'                          '+CHR(179)
  @ 22,55 SAY CHR(179)+'                          '+CHR(179)
  @ 23,55 SAY CHR(192)+A+A+A+A+A+A+A+A+A+A+A+A+A+A+A+A+A+A+A+A+A+A+A+A+A+CHR(217)
  SET COLOR TO 15,112
  @ 15,56 SAY ' 1 SKELETON FILE      '
  @ 16,56 SAY ' 2 APPLICATION FILE   '

********************************* Screen # 14 ************************************
  @ 17,56 SAY ' 3 ACADEMIC FILE      '
  @ 18,56 SAY ' 4 CORRESPONDENCE FILE'
  @ 19,56 SAY ' 5 REGISTRATION FILE  '
  @ 20,56 SAY ' X EXIT               '
  @ 21,56 SAY '                      '
  @ 22,56 SAY '                      '
  STORE ' ' TO C3
  @ 22,56 SAY ' SELECTION-->' GET C3
  SET COLOR TO 112,15
  READ
  STORE 'T' TO T
  RESTORE FROM MEMORYF ADDITIVE
  SET LINKAGE OFF
  DO CASE
   CASE C3='1'
    USE SKELETON INDEX SKELINDX
    SET FORMAT TO SKELETON.FRM
    RESTORE FROM MEMORYF ADDITIVE
    GOTO RCDN
    EDIT RCDN
    EDIT
    RETURN

********************************* Screen # 15 ************************************
   CASE C3='2'
    USE APPLIED INDEX APPLINDX
    SET FORMAT TO APPLIED.FRM
    GOTO RCDN
    EDIT RCDN
    EDIT
    RETURN
   CASE C3='3'
    USE ACADEMIC INDEX ACADINDX
    SET FORMAT TO ACADEMIC.FRM
    GOTO RCDN
    EDIT RCDN
    EDIT
    RETURN
   CASE C3='4'
    USE CORRESPD INDEX CORRINDX
    SET FORMAT TO CORRESPD.FRM
    GOTO RCDN
    EDIT RCDN
    EDIT
    RETURN
   CASE C3='5'
```

```
********************************* Screen # 16 ************************************
    USE REGISTER INDEX REGIINDX
    SET FORMAT TO REGISTER.FRM
    GOTO RCDN
    EDIT RCDN
    EDIT
    RETURN
   OTHERWISE
    RETURN
  ENDCASE
  OTHERWISE
   RETURN
ENDCASE
ENDDO
ENDDO
RETURN
```

```
* Material.prg ********** *** Screen # 1 ****************************************
ERASE
SET COLOR TO 112,15
@ 00,15 SAY CHR(179)
STORE CHR(205) TO A
@ 01,00 SAY CHR(201)+A+A+A+A+A+A+A+A+A+A+A+A+A+A+A+A+A+A+CHR(207)+A+A+A+A+A+A+A+A+A+A+A
@ 01,27 SAY A+A+A+CHR(187)
STORE 2 TO X
DO WHILE X<8
 @ X,00 SAY CHR(186)+'                                    '+CHR(186)
 STORE X+1 TO X
ENDDO
@ 8,00 SAY CHR(204)+A+A+A+A+A+A+A+A+A+A+A+A+A+A+A+A+A+A+A+A+A+A+A+A+A+A+A+A+A+A+A+A
@ 8,30 SAY CHR(185)
@ 8,00 SAY CHR(200)+A+A+A+A+A+A+A+A+A+A+A+A+A+A+A+A+A+A+A+A+A+A+A+A+A+A+A+A+A+A+A+A
@ 8,30 SAY CHR(188)
SET COLOR TO 112,7
@ 02,02 SAY 'A WELCOME LETTER'
*@ 03,02 SAY 'B CAREER PLANNING LETTER'
*@ 04,02 SAY 'C PRE-ADMISSION LETTER'
*@ 05,02 SAY 'D DEAN'S LETTER'
*@ 06,02 SAY 'E NON-COMPLETE APPLICATION'
*@ 07,02 SAY 'F PAST-DUE TRANSCRIPTS'

********************************** Screen # 2 ****************************************
*@ 08,02 SAY "G NO ACT OR CPP SCORE REC'D"
*@ 09,02 SAY 'H PAST-DUE HEALTH RECORD'
*@ 10,02 SAY 'J PAST-DUE FINANCIAL AID'
*@ 11,02 SAY 'K PAST-DUE FEE1'
*@ 12,02 SAY 'L PAST-DUE FEE2'
*@ 13,02 SAY 'M ORIENTATION NOTIFICATION'
*@ 14,02 SAY 'N'
*@ 15,02 SAY 'P'
*@ 16,02 SAY 'Q'
*@ 17,02 SAY 'R'
*@ 18,02 SAY 'S'
@ 4,02 SAY 'Z RETURN TO MASTER MENU'
STORE ' ' TO C1
SET COLOR TO 112,15
@ 10,02 SAY 'SELECTION-->'GET C1 PICTURE 'X'
READ
STORE !(C1) TO C1
SET COLOR TO 112,7
@ 10,02 SAY 'SELECTION-->:'+C1+':'
IF C1='Z'
 RETURN
ELSE

******************************** Screen # 3 ****************************************
ENDIF
SET COLOR TO 112,15
DO CASE
 CASE C1='A'
  @ 02,02 SAY 'A WELCOME LETTER'+CHR(7)
 CASE C1='B'
  @ 03,02 SAY 'B CAREER PLANNING LETTER'+CHR(7)
 CASE C1='C'
  @ 04,02 SAY 'C PRE-ADMISSION LETTER'+CHR(7)
 CASE C1='D'
  @ 05,02 SAY 'D DEAN'S LETTER'+CHR(7)
 CASE C1='E'
  @ 06,02 SAY 'E NON-COMPLETE APPLICATION'+CHR(7)
 CASE C1='F'
  @ 07,02 SAY 'F PAST-DUE TRANSCRIPTS'
 CASE C1='G'
  @ 08,02 SAY "G NO ACT OR CPP SCORE REC'D"+CHR(7)
 CASE C1='H'
  @ 09,02 SAY 'H PAST-DUE HEALTH RECORD'+CHR(7)
 CASE C1='J'
  @ 10,02 SAY 'J PAST-DUE FINANCIAL AID'+CHR(7)
 CASE C1='K'
```

```
************************** Screen # 4 ***************************************
  @ 11,02 SAY 'K PAST-DUE FEE1'+CHR(7)
 CASE C1='L'
  @ 12,02 SAY 'L PAST-DUE FEE2'+CHR(7)
 CASE C1='M'
  @ 13,02 SAY 'M ORIENTATION NOTIFICATON'+CHR(7)
 CASE C1='N'
  @ 14,02 SAY 'N                         '+CHR(7)
 CASE C1='P'
  @ 15,02 SAY 'P                         '+CHR(7)
 CASE C1='Q'
  @ 16,02 SAY 'Q                         '+CHR(7)
 CASE C1='R'
  @ 17,02 SAY 'R                         '+CHR(7)
 CASE C1='S'
@ 18,02 SAY 'S                        '+CHR(7)
 CASE C1='T'
  RETURN
 OTHERWISE
  @ 23,60 SAY CHP(7)+CHR(7)+CHR(7)+CHR(7)+CHR(7)
ENDCASE
SET COLOR TO 112,15
@ 05,30 SAY CHR(204)+A+CHR(185)+'                                              '+ HR(186)

************************** Screen # 5 ***************************************
@ 03,32 SAY CHR(201)+A+A+A+A+A+A+A+A+A+A+A+A+A+A+A+A+A+A+A+A+A+A+A+A+A+A+A+A+A;
+A+A+A+A+A+A+CHR(187)
@ 04,32 SAY CHR(186)+'                                         '+CHR(186)
@ 06,32 SAY CHR(186)+'                                         '+CHR(186)
@ 07,32 SAY CHR(200)+A+A+A+A+A+A+A+A+A+A+A+A+A+A+A+A+A+A+A+A+A+A+A+A+A+A+A+A+A;
+A+A+A+A+A+A+CHR(188)
SET COLOR TO 112,7
@ 04,34 SAY 'DO YOU WISH TO COMPOSE YOUR OWN'
@ 05,34 SAY 'PERSONAL LETTER? (Y/N)'
SET COLOR TO 112,15
STORE 'N' TO LSEL
@ 06,34 SAY 'SELECTION-->' GET LSEL
READ
STORE !(LSEL) TO LSEL
SET COLOR TO 112,7
@ 06,34 SAY 'SELECTION-->:'+LSEL+':'
SET COLOR TO 112,15
@ 07,50 SAY CHR(203)                                                  '+CHR(186)
@ 08,32 SAY CHR(201)+A+A+A+A+A+A+A+A+A+A+A+A+A+A+A+A+A+CHR(202)+A+A+A+A+A+A+A+;
A+A+A+A+A+A+A+A+A+A+CHR(187)
@ 09,32 SAY CHR(186)+'                                         '+CHR(186)
@ 10,32 SAY CHR(186)+'                                         '+CHR(186)

************************** Screen # 6 ***************************************
@ 11,32 SAY CHR(186)+'                                         '+CHR(186)
@ 12,32 SAY CHR(186)+'                                         '+CHR(186)
@ 13,32 SAY CHR(186)+'                                         '+CHR(186)
@ 14,32 SAY CHR(200)+A+A+A+A+A+A+A+A+A+A+A+A+A+A+A+A+A+A+A+A+A+A+A+A+A+A+A+A+A;
+A+A+A+A+A+A+CHR(188)
SET COLOR TO 112,7
@ 09,34 SAY '1 SEND TO ALL WHO HAVE APPLIED.'
@ 10,34 SAY '2 SEND TO A SPECIFIC INDIVIDUAL.'
@ 11,34 SAY 'R RETURN TO AIM MENU.'
STORE ' ' TO SEL
SET COLOR TO 112,15
@ 13,34 SAY 'SELECTION-->' GET SEL
READ
IF !(SEL)='R'
 RETURN
ENDIF
SET COLOR TO 112,7
@ 13,34 SAY 'SELECTION-->:'+SEL+':'
IF LSEL='Y'
 DO COMPOSEL
ELSE
ENDIF
```

```
********************************* Screen # 7 ************************************
DO CASE
 CASE C1='A'
  DO CASE
   CASE SEL='1'
    ERASE
    IF !(LSEL)='N'
    ELSE
     STORE '         ' TO LETTER
     @ 10,10 SAY 'Name of welcome letter you want to send?----->' GET LETTER PI;
CTURE 'AXXXXXXX'
     READ
    ENDIF
    USE CORRESPD
    SET EJECT OFF
    GOTO TOP
    DO WHILE .NOT. EOF
     SET PRINT OFF
     IF $(WELCOMESNT,1,2)='  '
      SET COLOR TO 112,143
      ERASE
      @ 19,34 SAY 'PREPARE THE PRINTER'+CHR(7)
      SET COLOR TO 112,15

********************************* Screen # 8 ************************************
      @ 22,34 SAY 'PRESS ANY KEY WHEN READY!'
      WAIT TO READY
      @ 23,00 SAY '          '
      @ 19,34 SAY '                    '
      @ 22,34 SAY '                         '
      STORE # TO RCDN
      SET PRINT ON
      SET FORMAT TO PRINT
      IF LSEL='Y'
       RESTORE FROM &LETTER ADDITIVE
       DO COMPOSED
       SET PRINT OFF
       SET FORMAT TO SCREEN
      ELSE
       DO WELCOMELTR
       SET PRINT OFF
       SET FORMAT TO SCREEN
      ENDIF
      GOTO RCDN
     ELSE
     ENDIF
     REPLACE WELCOMESNT WITH DATE()

********************************* Screen # 9 ************************************
     SKIP
    ENDDO
   CASE SEL='2'
    SET FORMAT TO SCREEN
    SET PRINT OFF
    SET COLOR TO 112,15
    ERASE
    USE SKELETON INDEX SKELINDX
    STORE 'G' TO STOP
    STORE '                              ' TO SNAME
    DO WHILE STOP='G'
     @ 10,10 SAY 'Receipient of welcome letter?----->' GET SNAME
     READ
     IF SNAME='  '
      STORE 'S' TO STOP
      ERASE
      RETURN
     ELSE
     ENDIF
     STORE TRIM(SNAME) TO SNAME
     FIND &SNAME
     STORE # TO RCDN
```

```
********************************** Screen # 10 ***********************************
      STORE SSN TO DSSN
      SKIP
      IF .NOT. EOF
       GOTO RCDN
       SET PRINT OFF
       @ 12,33 SAY 'SSN--->'
       @ 12,40 SAY DSSN USING '999-99-9999'
       STORE 'Y' TO VERIFY
       @ 12,57 SAY 'VERIFY (Y/N)' GET VERIFY
       READ
       IF !(VERIFY)<>'Y'.AND.!(VERIFY)<>'N'
        RETURN
       ELSE
        IF !(VERIFY)='Y'
         DO CASE
          CASE LSEL='Y'
           STORE '         ' TO LETTER
           ERASE
           @ 10,10 SAY 'Name of welcome let er you want to send? -->' GET LETTE;
R PICTURE 'AXXXXXXX'
           READ
           RESTORE FROM &LETTER ADDITIVE

********************************** Screen # 11 ***********************************
           SET PRINT ON
           DO COMPOSED
           REPLACE WELCOMESNT WITH DATE()
           SET PRINT OFF
           SET FORMAT TO SCREEN
          CASE LSEL='N'
           SET PRINT ON
           DO WELCOMELTR
           REPLACE WELCOMESNT WITH DATE()
           SET PRINT OFF
           SET FORMAT TO SCREEN
         ENDCASE
        ELSE
        ENDIF
       ENDIF
      ELSE
      ENDIF
      @ 10,10 SAY '                                                              '
      @ 12,10 SAY '                                                              '
      STORE '                              ' TO SNAME
     ENDDO
    CASE SEL='R'

**********************************Screen # 12 ***********************************
     RETURN
    OTHERWISE
     LOOP
   ENDCASE
   STORE 'WELCOMESNT' TO FLD
  CASE C1='2'
   RETURN
  OTHERWISE
   @ 23,79 SAY CHR(7)+CHR(7)+CHR(7)
   RETURN
ENDCASE
SET PRINT OFF
STORE ' ' TO SEL
ERASE
SET FORMAT TO SCREEN
@ 09,10 SAY CHR(7)
@ 10,27 SAY 'PRINT MAILING LABEL(S) NOW?->' GET SEL
READ
IF !(SEL)='Y'
USE CORRESPD
 STORE 1 TO RCDN
 STORE 1 TO R
```

```
****************************** Screen # 13 ************************************
 SET PRINT ON
 DO CASE
  CASE !(C1)='A'
   DO WHILE .NOT. EOF
    IF WELCOMESNT=DATE()
     DO LABELS
    ELSE
    ENDIF
    SKIP
    STORE # TO RCDN
   ENDDO
  CASE C1='B'
 ENDCASE.
 RETURN
```

```
* composed.prg ************** Screen # 1 ************************************
USE SKELETON
GOTO RCDN
SET FORMAT TO PRINT
@ 07,40 SAY DATE() USING '99/99/99'
************************** Return Address ***************************************
@ 10,10 SAY 'UNIVERSITY OF HOMESTATE'
@ 11,10 SAY 'Ourname Community College'
@ 12,10 SAY 'Ourname, Ourstate 41159'
@ 15,10 SAY MAIL USING 'XXXXXXXXXXXXXXXXXXXXXXXX'
@ 16,10 SAY STREET USING 'XXXXXXXXXXXXXXXXXXXXXXXXX'
@ 17,10 SAY CSZIP USING 'XXXXXXXXXXXXXXXXXXXXXXXX'
@ 19,10 SAY 'Dear '
STORE TRIM(MAIL) TO F
STORE F+',' TO F
@ 19,15 SAY F
RESTORE FROM &FILENAME ADDITIVE
STORE 1 TO R
DO WHILE R<(QL+1)
 DO CASE
  CASE R=1
   STORE LINE01 TO LINE
  CASE R=2

***************************** Screen # 2 ****************************************
   STORE LINE02 TO LINE
  CASE R=3
   STORE LINE03 TO LINE
  CASE R=4
   STORE LINE04 TO LINE
  CASE R=5
   STORE LINE05 TO LINE
  CASE R=6
   STORE LINE06 TO LINE
  CASE R=7
   STORE LINE07 TO LINE
  CASE R=8
   STORE LINE08 TO LINE
  CASE R=9
   STORE LINE09 TO LINE
  CASE R=10
   STORE LINE10 TO LINE
  CASE R=11
   STORE LINE11 TO LINE
  CASE R=12
   STORE LINE12 TO LINE
  CASE R=13

***************************** Screen # 3 ****************************************
   STORE LINE13 TO LINE
  CASE R=14
   STORE LINE14 TO LINE
  CASE R=15
   STORE LINE15 TO LINE
  CASE R=16
   STORE LINE16 TO LINE
  CASE R=17
   STORE LINE17 TO LINE
  CASE R=18
   STORE LINE18 TO LINE
  CASE R=19
   STORE LINE19 TO LINE
  CASE R=20
   STORE LINE20 TO LINE
  CASE R=21
   STORE LINE21 TO LINE
 ENDCASE
 @ R+20,10 SAY LINE
 STORE R+1 TO R
ENDDO
@ R+23,40 SAY 'Sincerely,'
```

```
*****************************Screen # 4 ****************************************
*************************** Name of Signer **************************************
@ R+27,40 SAY 'Dr. John Doe'
@ R+28,40 SAY 'President'
@ R+30,10 SAY 'asa aft'
@ R+31,10 SAY ' '
EJECT
USE CORRESPD
RETURN
```

```
* welcomel.prg ********** Screen # 1 ************************************
USE B:SKELETON
SET PRINT ON
GOTO RCDN
@ 07,40 SAY DATE() USING '99/99/99'
******************************* Return Address ***************************
@ 10,10 SAY 'UNIVERSITY OF WHATEVER'
@ 11,10 SAY 'Ourname Community College'
@ 12,10 SAY 'Ourname, Ourstate 41101'
@ 15,10 SAY MAIL USING 'XXXXXXXXXXXXXXXXXXXXXXXXX'
@ 16,10 SAY STREET USING 'XXXXXXXXXXXXXXXXXXXXXXXXX'
@ 17,10 SAY CSZIP USING 'XXXXXXXXXXXXXXXXXXXXXXXXX'
@ 19,10 SAY 'Dear '
STORE TRIM (MAIL) TO F
STORE F+',' TO F
@ 19,15 SAY F
******************************* Body of Standard Letter ******************
@ 21,16 SAY 'We are pleased to know that you are interested in          '
@ 22,10 SAY 'attending Ourname Community College. We are sending        '
@ 23,10 SAY 'you an application which needs to be returned as soon      '
@ 24,10 SAY 'as possible to avoid the last minute rush during the       '
@ 25,10 SAY 'week of registration.                                      '
@ 26,10 SAY '                                                          '


****************************** Screen # 2 ********** ********************
@ 27,10 SAY 'If you have any questions or concerns about the            '
@ 28,10 SAY 'application form or about starting school, please call     '
@ 29,10 SAY 'the Student Services Office.                               '
@ 30,10 SAY '                                                          '
STORE TRIM($(MAIL,1,@(' ',MAIL))) TO G
@ 31,10 SAY G+'Please don't delay too long. The application             '
@ 32,10 SAY 'for many programs are considered on a first-come first-    '
@ 33,10 SAY 'served basis.                                              '
@ 34,10 SAY '                                                          '
@ 35,10 SAY 'We are looking forward to your joining us here at Ourname  '
@ 36,10 SAY 'Community College.
@ 38,40 SAY 'Sincerely,'
****************************** Name of Signer **************************
@ 41,40 SAY 'Dr. John Doe'
@ 42,40 SAY 'President'
@ 43,10 SAY 'asa aft'
EJECT
USE B:CORRESPD
RETURN
```

```
* AIM.PRG FILE ************ Screen # 1 ****************************************
SET COLOR TO 112,15
@ 11,40 SAY CHR(209)
STORE 12 TO X
DO WHILE X<24
 @ X,40 SAY CHR(179)
 STORE X+1 TO X
ENDDO
ERASE
@ 00,40 SAY CHR(179)
STORE CHR(186) TO B
STORE CHR(205) TO A
@ 01,09 SAY CHR(201)+A+A+A+A+A+A+A+A+A+A+A+A+A+A+A+A+A+A+A+A+A+A+A+A+A+A+A+A+A+A+A+A
@ 01,39 SAY A+CHR(207)+A+A+A+A+A+A+A+A+A+A+A+A+A+A+A+A+A+A+A+A+A+A+A+A+A+A+A+A+A+A+A
@ 01,68 SAY A+A+A+CHR(187)
@ 02,09 SAY B+'                                                                '+B
@ 03,09 SAY CHR(204)+A+A+A+A+A+A+A+A+A+A+A+A+A+A+A+A+A+A+A+A+A+A+A+A+A+A+A+A+A+A+A+A+A
@ 03,39 SAY A+A+A+A+A+A+A+A+A+A+A+A+A+A+A+A+A+A+A+A+A+A+A+A+A+A+A+A+A+A+A+A+A+A+A+A+A
@ 03,71 SAY CHR(185)
STORE 4 TO X
DO WHILE X<8
 @ X,9 SAY B+'                                                                  '+B
 STORE X+1 TO X

**************************** Screen # 2 ****************************************
ENDDO
@ 8,09 SAY CHR(200)+A+A+A+A+A+A+A+A+A+A+A+A+A+A+A+A+A+A+A+A+A+A+A+A+A+A+A+A+A+A+A+A+A
@ 8,39 SAY A+A+A+A+A+A+A+A+A+A+A+A+A+A+A+A+A+A+A+A+A+A+A+A+A+A+A+A+A+A+A+A+A+A+A+A+A
@ 8,71 SAY CHR(188)
@ 02,26 SAY 'A          I            M'
SET COLOR TO 112,7
@ 02,27 SAY 'dmission'
@ 02,37 SAY 'nteractions'
@ 02,50 SAY 'end'
@ 04,11 SAY '1 PRINT Specific Materials To Be Mailed'
*@ 05,11 SAY '2 RUN    Statistical Analysis Program'
*@ 06,11 SAY '3 LIST   Names/Addresses/Phone Needing Application Materials'
*@ 07,11 SAY '4        Receipients Of 3 Who Have Not Responded In 14 Days'
*@ 08,11 SAY '5        ADMITS With Completed Application & No Interview'
*@ 09,11 SAY '6        ADMITS Who Have Not Received Academic Advising'
*@ 10,11 SAY '7        Accepted ADMITS Who Have Not Registered'
*@ 11,11 SAY '8        ADMITS By Major And Advisor'
*@ 12,11 SAY '9        ADMITS Who Have Completed The Admissions Process'
*@ 13,11 SAY 'A'
*@ 14,11 SAY 'B'
*@ 15,11 SAY 'C'
*@ 16,11 SAY 'D'

**************************** Screen # 3 ****************************************
*@ 17,11 SAY 'E'
*@ 18,11 SAY 'F'
*@ 19,11 SAY 'G'
@ 6,11 SAY 'R RETURN TO MASTER MENU'
@ 10,70 SAY ' '
WAIT TO SEL
IF !(SEL)='R'
 RETURN
ELSE
ENDIF
IF SEL<>'1'
 STORE 'Y' TO SEL2
 SET COLOR TO 120,15
 @ 21,40 SAY 'HARDCOPY OF '+SEL2+' (Y/N)'
 @ 21,62 GET SEL2
 READ
ELSE
ENDIF
SET COLOR TO 112,15
DO CASE
 CASE SEL='1'
  @ 04,11 SAY '1 PRINT Specific Materials To Be Mailed'
```

```
*****************************.** Screen # 4 ****************************************
  STORE 0 TO X
  DO WHILE X<20
   STORE X+1 TO X
  ENDDO
  DO MATERIAL
  RETURN
 CASE SEL='2'
  @ 05,11 SAY '2 RUN   Statistical Analysis Program'


  ERASE
 CASE SEL='3'
  @ 06,11 SAY '3 LIST  Names/Addresses/Phone Needing Application Materials'
  ERASE
  STORE 0 TO X
  DO CASE
   CASE SEL2='N'
    USE REGISTER
    SELECT SECONDARY
    USE APPLIED
    SET COLOR TO 112,15

***************************** Screen # 5 ****************************************
    DO WHILE.NOT.EOF
     IF $(P.APPLICSENT,1,2)='  '
     ? S.NAME+' '+S.STREETPRES+' '+S.CSZIP
     ELSE
     ENDIF
     SKIP
     STORE X+1 TO X
     IF X=22
      WAIT
      STORE 0 TO X
     ELSE
     ENDIF
    ENDDO
   CASE SEL2='Y'
    SELECT SECONDARY
    USE APPLIED INDEX APPLINDX
    SELECT PRIMARY
    USE REGISTER INDEX REGIINDX
    ERASE
    @ 09,10 SAY CHR(7)
    @ 10,26 SAY 'SET PRINTER AND HIT ANY KEY!'
    WAIT

****************************** Screen 6 ****************************************
    SET FORMAT TO PRINT
    SET EJECT OFF
    REPORT FORM NEEDAPPL TO PRINT FOR $(P.APPLICSENT,1,2)='  '
    RETURN
    STORE ' ' TO SELX
    SET FORMAT TO SCREEN
    ERASE
    @ 10,10 SAY 'ARE YOU SENDING THE MATERIAL OUT TODAY?-->' GET SELX
    READ
    IF !(SELX)='Y'
     REPLACE ALL P.APPLICSENT
    ELSE
     ERASE
     @ 10,15 SAY 'I ASSUME THAT THE APPLICATIONS ARE NOT BEING SENT TODAY!'
     STORE 0 TO X
     DO WHILE X<50
      STORE X+1 TO X
     ENDDO
    ENDIF
  OTHERWISE
 ENDCASE
CASE SEL='4'
```

```
********************************** Screen # 7 ************************************
  @ 07,11 SAY '4        Receipients Of 3 Who Have Not Responded In 14 Days'

 CASE SEL='5'
  @ 08,11 SAY '5        ADMITS With Completed Application & No Interview'

 CASE SEL='6'
  @ 09,11 SAY '6        ADMITS Who Have Not Received Academic Advising'

 CASE SEL='7'
  @ 10,11 SAY '7        Accepted ADMITS Who Have Not Registered'

 CASE SEL='8'
  @ 11,11 SAY '8        ADMITS By Major And Advisor'

 CASE SEL='9'
  @ 12,11 SAY '9        ADMITS Who Have Completed The Admissions Process'

 CASE SEL='A'.OR.SEL='a'


 CASE SEL='B'.OR.SEL='b'

********************************** Screen # 8 ************************************
 CASE SEL='C'.OR.SEL='c'


 CASE SEL='D'.OR.SEL='d'


 CASE SEL='E'.OR.SEL='e'


 CASE SEL='F'.OR.SEL='f'


 CASE SEL='G'.OR.SEL='g'


 CASE SEL='R'.OR.SEL='r'
  @ 21,11 SAY 'R RETURN TO MASTER MENU'

 OTHERWISE

********************************** Screen # 9 ************************************
ENDCASE
@ 00,79 SAY CHR(7)
WAIT
RETURN
```

```
* APPEMENU.PRG FILE ************* Screen # 1 ***********************************
USE SKELETON INDEX SKELINDX
STORE '                              ' TO ANAME
SET FORMAT TO SCREEN
SET COLOR TO 112,15
@ 11,00 SAY '                                '
@ 04,24 SAY '1 APPEND RECORD(S)'
@ 11,40 SAY CHR(209)
@ 12,40 SAY CHR(179)
STORE CHR(196) TO B
STORE CHR(193) TO G
STORE 1 TO XFLAG
DO WHILE XFLAG=1
@ 13,17 SAY CHR(218)+B+B+B+B+B+B+B+B+B+B+B+B+B+B+B+B+B+B+B+B+B+B+B+B+B+G+B+B+B+B+B+B
@ 13,47 SAY B+B+B+B+B+B+B+B+B+B+B+B+B+B+B+B+B+B+B+CHR(191)
@ 14,17 SAY CHR(179)+"                                                                "+CHR(179)
@ 15,17 SAY CHR(192)+B+B+B+B+B+B+B+B+B+B+B+B+B+B+B+B+B+B+B+B+B+B+B+B+B+B+B+B+B+B+B+B+B
@ 15,47 SAY B+B+B+B+B+B+B+B+B+B+B+B+B+B+B+B+B+B+B+CHR(217)
STORE CHR(205) TO B
SET EXACT OFF
@ 13,00 SAY '  '
STORE "'"+'                    '+CHR(179)+'NAME OF STUDENT'+"'"+" TO ANAME" TO FF
ACCEPT &FF

*******************************Screen # 2 ***************************************
USE SKELETON INDEX SKELINDX
FIND &ANAME
STORE # TO RCDN
SET FORMAT TO SKELETON.FRM
SKIP
IF EOF
 USE
 USE TEMPHOLD
 APPEND
 ACCEPT 'ARE YOU FINISHED APPENDING?(Y/N)--->' TO YN
 IF YN='Y'.OR.YN='y'
  SET COLOR TO 112,120
  ERASE
  STORE CHR(205) TO A
  @ 09,32 SAY CHR(201)+A+A+A+A+A+A+A+A+A+A+A+A+A+A+A+A+A+A+A+CHR(187)
  @ 10,32 SAY CHR(186)+'                    '+CHR(186)
  @ 11,32 SAY CHR(200)+A+A+A+A+A+A+A+A+A+A+A+A+A+A+A+A+A+A+A+CHR(188)
  SET COLOR TO 112,143
  @ 10,33 SAY ' Please wait... '
  SET COLOR TO 112,15
  @ 22,00 SAY 'Appending record(s) to SKELETON.DBF file...              '
  USE SKELETON INDEX SKELINDX

********************************** Screen # 3 ***********************************
  APPEND FROM TEMPHOLD
  @ 22,00 SAY 'Reindexing record(s) in SSN.NDX file...                  '
  USE SKELETON INDEX SSN
  REINDEX
  SELECT SECONDARY
  @ 22,00 SAY 'Appending record(s) to APPLIED.DBF file...               '
  USE APPLIED INDEX APPLINDX
  APPEND FROM TEMPHOLD
  REPLACE S.STREETPRES WITH P.STREET,S.PHONEPRES WITH PHONE
  REPLACE S.HSGRADDATE WITH VAL($(P.HSGRADDATE,7,2))
  SELECT SECONDARY
  @ 22,00 SAY 'Appending record(s) to ACADEMIC.DBF file...              '
  USE ACADEMIC INDEX ACADINDX
  APPEND FROM TEMPHOLD
  REPLACE S.CARRIED WITH P.STREET+P.CSZIP+P.SSN+P.BIRTH+STR(P.COUNTYCODE,4)+ST;
R(P.HSSTATECOD,4)
  @ 22,00 SAY 'Appending record(s) to CORRESPD.DBF file...              '
  USE CORRESPD INDEX CORRINDX
  APPEND FROM TEMPHOLD
  @ 22,00 SAY 'Appending record(s) to REGISTER.DBF file...              '
  USE REGISTER INDEX REG1INDX
  APPEND FROM TEMPHOLD
```

```
********************************* Screen # 4 ************************************
  USE SKELETON INDEX SKELINDX
  USE TEMPHOLD
  @ 22,00 SAY 'Deleting all records from the TEMPHOLD.DBF...
  DELETE ALL
  PACK
  USE SKELETON INDEX SKELINDX
  ERASE
 ELSE
  ERASE
  LOOP
 ENDIF
 STORE 0 TO XFLAG
ELSE
 GOTO RCDN
 EDIT #
 EDIT
 RETURN
ENDIF
ENDDO
RETURN
```

```
* CONTACTR.PRG FILE ************ Screen # 1 **********************************
SET COLOR TO 112,15
@ 06,24 SAY '3 RECORD CONTACT(S)/RESPONSE(S)'
@ 11,40 SAY CHR(209)
@ 12,40 SAY CHR(217)
STORE CHR(196) TO B
@ 12,21 SAY CHR(218)+B+B+B+B+B+B+B+B+B+B+B+B+B+B+B+B+B+B
@ 13,05 SAY CHR(218)+B+B+B+B+B+B+B+B+B+B+B+B+B+B+B+B+CHR(193)+B+B+B+B+B+B+B+B
@ 13,30 SAY B+B+B+B+B+B+B+B+CHR(191)
@ 14,05 SAY CHR(179)+'                                         '+CHR(179)
@ 15,05 SAY CHR(179)+'                                         '+CHR(179)
@ 16,05 SAY CHR(179)+'                                         '+CHR(179)
@ 17,05 SAY CHR(179)+'                                         '+CHR(179)
@ 18,05 SAY CHR(179)+'                                         '+CHR(179)
@ 19,05 SAY CHR(179)+'                                         '+CHR(179)
@ 20,05 SAY CHR(179)+'                                         '+CHR(179)
@ 21,05 SAY CHR(179)+'                                         '+CHR(179)
@ 22,05 SAY CHR(192)+B+B+B+B+B+B+B+B+B+B+B+B+B+B+B+B+B+B+B+B+B+B+B+B+B+B+B+B+B+B+B+B+B+B
@ 22,35 SAY B+B+B+CHR(217)
SET COLOR TO 112,7
@ 14,06 SAY '1 RECEIVED APPLICATION'
@ 15,06 SAY '2 COMPLETED ORIENTATION'
@ 16,06 SAY '3 COMPLETED INTERVIEW'

******************************** Screen # 2 **********************************
@ 17,06 SAY '4 RECEIVED RESPONSE FROM CONTACT'
@ 18,06 SAY '5                                '
@ 19,06 SAY '6                                '
@ 21,06 SAY 'R RETURN TO MASTER MENU          '
@ 22,78 SAY ' '
WAIT TO C1
@ 23,00 SAY '          '
IF C1='R'.OR.C1='r'
 RETURN
ELSE
ENDIF
SET COLOR TO 112,15
@ 17,38 SAY CHR(195)+B+B+CHR(180)
@ 17,75 SAY CHR(179)
@ 16,41 SAY CHR(179)+'                                 '+CHR(179)
@ 18,41 SAY CHR(179)+'                                 '+CHR(179)
@ 15,41 SAY CHR(179)+'                                 '+CHR(179)
@ 19,41 SAY CHR(179)+'                                 '+CHR(179)
STORE CHR(205) TO C
@ 14,41 SAY CHR(213)+C+C+C+C+C+C+C+C+C+C+C+C+C+C+C+C+C+C+C+C+C+C+C+C+C+C+C+C+C
@ 14,71 SAY C+C+C+C+CHR(184)
@ 20,41 SAY CHR(212)+C+C+C+C+C+C+C+C+C+C+C+C+C+C+C+C+C+C+C+C+C+C+C+C+C+C+C+C+C

****************************** Screen # 3 ************************************
@ 20,71 SAY C+C+C+C+CHR(190)
DO WHILE T
 @ 15,42 SAY '                             '
 @ 16,42 SAY '                             '
 @ 17,42 SAY '                             '
 @ 18,42 SAY '                             '
 @ 19,42 SAY '                             '
 @ 20,58 SAY CHR(205)
 @ 21,40 SAY '                                 '
 @ 22,40 SAY '                                 '
 @ 23,40 SAY '                                 '
 SET COLOR TO 112,15
 @ 15,42 SAY 'ACTION: '
 @ 17,42 SAY 'NAME->'
 @ 18,42 SAY 'SSN-->:                      '
 STORE '                          ' TO RCNAME
 STORE ' ' TO SEL
 STORE '          ' TO DOR
 DO CASE
  CASE C1='1'
   @ 14,06 SAY '1 RECEIVED APPLICATION'
   SET COLOR TO 112,1
```

```
********************************** Screen # 4 *********************************
   @ 15,50 SAY 'RECEIVED APPLICATION'
  CASE C1='2'
   @ 15,06 SAY '2 COMPLETED ORIENTATION'
   SET COLOR TO 112,1
   @ 15,50 SAY 'COMPLETED ORIENTATION'
  CASE C1='3'
   @ 16,06 SAY '3 COMPLETED INTERVIEW'
   SET COLOR TO 112,1
   @ 15,50 SAY 'COMPLETED INTERVIEW'
  CASE C1='4'
   @ 17,06 SAY '4 RECEIVED RESPONSE FROM CONTACT'
   SET COLOR TO 112,1
   @ 15,50 SAY 'RECEIVED CONTACT RESPONSE'
  CASE C1='5'
   RETURN
  CASE C1='6'
   RETURN
  OTHERWISE
   RETURN
 ENDCASE
 SET COLOR TO 112,7
 @ 17,48 GET RCNAME

*************************** Screen # 5 ****************************************
 READ
 IF RCNAME=' '
  STORE 'F' TO T
  RETURN
 ELSE
 ENDIF
 USE SKELETON INDEX SKELINDX
 FIND &RCNAME
 IF *
  @ 19,42 SAY 'Record has been deleted!'+chr(7)+chr(7)+chr(7)+chr(7)+chr(7)
  SET COLOR TO 112,15
  LOOP
 ELSE
 ENDIF
 STORE SSN TO RCSSN
 STORE # TO RCDN
 SKIP
 IF .NOT. EOF
  @ 18,49 SAY RCSSN
  SET COLOR TO 112,15
  STORE 'Y' TO SEL
  @ 18,65 SAY 'VERIFY ' GET SEL

******************************** Screen # 6 ***********************************
 SET COLOR TO 112,7
 READ
 IF !(SEL)='Y'
  SET COLOR TO 112,15
  IF C1='1'
   USE REGISTER INDEX REGIINDX
   GOTO RCDN
   @ 19,42 SAY 'DATE RECEIVED-->' GET APPLICRET PICTURE '99/99/99'
   READ
   SET COLOR TO 112,15
   LOOP
  ELSE
   IF C1='2'
    USE ACADEMIC INDEX ACADINDX
    GOTO RCDN
    @ 19,42 SAY 'DATE OF ORIENTATION->'GET ORIENTSECT PICTURE '99/99/99-X'
    READ
    SET COLOR TO 112,143
    @ 22,42 SAY ' UPDATING RECORD-PLEASE WAIT! '
    SET COLOR TO 112,15
    LOOP
   ELSE
```

```
********************************* Screen # 7 ************************************
     IF C1='3'
      USE CORRESPD INDEX CORRINDX
      GOTO RCDN
      @ 19,42 SAY 'DATE INTERVIEWED-->' GET INTERVIEW1 PICTURE '99/99/99'
      READ
      SET COLOR TO 112,15
      LOOP
     ELSE
      IF C1='4'
       USE CORRESPD INDEX CORRINDX
       GOTO RCDN
       @ 17,75 SAY CHR(195)+B+B+B
       @ 17,00 SAY B+B+B+B+B+CHR(180)
       SET COLOR TO 112,7
       @ 14,06 SAY '                                        '
       @ 15,06 SAY "1 REC'D RESPONSE FROM CONTACT1  "
       @ 16,06 SAY "2 REC'D RESPONSE FROM CONTACT2  "
       @ 17,06 SAY "3 REC'D RESPONSE FROM CONTACT3  "
       @ 18,06 SAY '                                        '
       @ 19,06 SAY '                                        '
       @ 21,06 SAY '                                        '
       SET COLOR TO 112,15

*********************************** Screen # 8 ************************************
       @ 20,05 SAY CHR(195)+B+B+B+B+B+B+B+B+B+B+B+B+B+B+B+B+B+B+B+B+B+B+B+B+B+B+B+B+B+B+B
       @ 20,32 SAY B+B+B+B+B+B+B+CHR(180)
       SET COLOR TO 112,15
       STORE ' ' TO SEL1
       @ 21,06 SAY 'SELECTION--->' GET SEL1
       READ
       DO CASE
        CASE SEL1='1'
         @ 21,06 SAY 'DATE OF CONTACT '+SEL1+'-->'
         @ 21,26 GET FCONTACT PICTURE '99/99/99'
         READ
         @ 21,06 SAY '                                        '
         @ 21,06 SAY 'TYPE OF RESPONSE-->' GET CONTACT1T PICTURE 'XXXXXXXXXX'
         READ
        CASE SEL1='2'
         @ 21,06 SAY 'DATE OF CONTACT '+SEL1+'-->'
         @ 21,26 GET SCONTACT PICTURE '99/99/99'
         READ
         @ 21,06 SAY '                                        '
         @ 21,06 SAY 'TYPE OF RESPONSE-->' GET CONTACT2T PICTURE 'XXXXXXXXXX'
         READ
        CASE SEL1='3'

*********************************** Screen # 9 ************************************
         @ 21,06 SAY 'DATE OF CONTACT '+SEL1+'-->'
         @ 21,26 GET TCONTACT PICTURE '99/99/99'
         READ
         @ 21,06 SAY '                                        '
         @ 21,06 SAY 'TYPE OF RESPONSE-->' GET CONTACT3T PICTURE 'XXXXXXXXXX'
         READ
        OTHERWISE
         LOOP
       ENDCASE
       SET COLOR TO 112,7
       @ 14,06 SAY '1 RECEIVED APPLICATION          '
       @ 15,06 SAY '2 COMPLETED ORIENTATION         '
       @ 16,06 SAY '3 COMPLETED INTERVIEW           '
       @ 17,06 SAY '4 RECEIVED RESPONSE FROM CONTACT'
       @ 18,06 SAY '5                               '
       @ 19,06 SAY '6                               '
       @ 21,06 SAY 'R RETURN TO MASTER MENU         '
       SET COLOR TO 112,15
       @ 17,75 SAY CHR(179)+'    '
       @ 17,00 SAY '     '+CHR(179)
       SET COLOR TO 112,15
       LOOP
```

```
********************************* Screen # 10 ************************************
      ENDIF
     ENDIF
    ENDIF
   ENDIF
   STORE 'F' TO T
   RETURN
  ELSE
   LOOP
  ENDIF
 ELSE
  SET COLOR TO 112,15
  @ 20,58 SAY CHR(209)
  @ 21,48 SAY CHR(218)+B+B+B+B+B+B+B+B+B+CHR(193)+B+B+B+B+B+B+B+B+B+CHR(191)
  @ 22,48 SAY CHR(179)+'                          '+CHR(179)
  @ 23,48 SAY CHR(192)+B+B+B+B+B+B+B+B+B+B+B+B+B+B+B+B+B+B+B+CHR(217)
  @ 23,79 SAY CHR(7)
  SET COLOR TO 112,143
  @ 22,50 SAY 'RECORD NOT FOUND'
  SET COLOR TO 112,15
  STORE 0 TO CNT
  DO WHILE CNT<75
   STORE CNT+1 TO CNT

********************************* Screen # 11 ************************************
  ENDDO
  IF RCNAME=' '
   STORE 'F' TO T
   RETURN
  ELSE
   LOOP
  ENDIF
  RETURN
 ENDIF
ENDDO
RETURN
```

```
* LABELS.PRG FILE ********** Screen # 1 ****************************************
SET FORMAT TO PRINT
USE SKELETON
GOTO RCDN
 @ R,05 SAY MAIL USING 'XXXXXXXXXXXXXXXXXXXXXXXX'
 STORE R+1 TO R
 @ R,05 SAY STREET USING 'XXXXXXXXXXXXXXXXXXXXXXXX'
 STORE R+1 TO R
 @ R,05 SAY CSZIP USING 'XXXXXXXXXXXXXXXXXXXXXXXX'
 STORE R+1 TO R
 @ R,05 SAY '
 STORE R+6 TO R
SET FORHAT TO SCREEN
USE CORRESPD
GOTO RCDN
RETURN
```

```
* DELEMENU.PRG FILE ********** Screen # 1 ************************************
USE
SET LINKAGE OFF
SET EXACT OFF
SET DELETE ON
SET COLOR TO 112,15
STORE CHR(196) TO B
STORE CHR(179) TO A
@ 05,24 SAY '2 DELETE RECORD(S)'
SET COLOR TO 112,15
@ 11,40 SAY CHR(209)
@ 12,40 SAY CHR(179)
@ 13,29 SAY CHR(218)+B+B+B+B+B+B+B+B+B+B+B+CHR(193)+B+B+B+B+B+B+B+B+B+B+B
@ 13,52 SAY CHR(191)
@ 14,29 SAY A+'                          '+A
@ 15,29 SAY CHR(192)+B+B+B+B+B+B+B+B+B+B+B+B+B+B+B+B+B+B+B+B+B+B+B+CHR(217)
SET COLOR TO 0,07
STORE '      ' TO OC
@ 14,31 SAY 'OPERATOR CODE-' GET OC
READ
********************************** Access Code ************************************
IF OC='AEL'.OR.OC='ael'
 SET COLOR TO 15,112

********************************** Screen # 2 ************************************
 @ 14,30 SAY '    ACCESS GRANTED    '
 SET COLOR TO 112,15
ELSE
 SET COLOR TO 112,15
 @ 15,40 SAY CHR(194)
 SET COLOR TO 112,15
 @ 15,00 SAY CHR(7)
 @ 16,29 SAY CHR(218)+B+B+B+B+B+B+B+B+B+B+B+CHR(193)+B+B+B+B+B+B+B+B+B+B+B
 @ 16,52 SAY CHR(191)
 @ 17,29 SAY A+'                          '+A
 @ 18,29 SAY A+'                          '+A
 @ 19,29 SAY A+'                          '+A
 @ 20,29 SAY CHR(192)+B+B+B+B+B+B+B+B+B+B+B+B+B+B+B+B+B+B+B+B+B+B+B+CHR(217)
 SET COLOR TO 15,112
 @ 17,30 SAY 'You Are Not Authorized'
 @ 18,30 SAY 'To Delete Records From'
 @ 19,30 SAY 'Admissions Files!!!!!!'
 STORE 0 TO CNT
 DO WHILE CNT<75
  STORE CNT+1 TO CNT
 ENDDO
 SET COLOR TO 112,15

********************************** Screen # 3 ************************************
 STORE 12 TO R
 @ 11,40 SAY CHR(205)
 DO WHILE CNT<23
  @ R,20 SAY '                                                    '
 ENDDO
 RETURN
ENDIF
SET COLOR TO 112,15
@ 15,40 SAY CHR(194)
@ 16,23 SAY CHR(218)+B+B+B+B+B+B+B+B+B+B+B+B+B+B+B+B+B+CHR(193)+B+B+B+B+B+B+B+B+B+B+B
@ 16,50 SAY B+B+B+B+B+B+B+B+CHR(191)
@ 17,23 SAY A+'                                        '+A
@ 18,23 SAY CHR(192)+B+B+B+B+B+B+B+B+B+B+B+B+B+B+B+B+B+B+B+B+B+B+B+B+B+B+B+B+B+B+B
@ 18,53 SAY B+B+B+B+B+CHR(217)
DO WHILE T
 STORE '                          ' TO DNAME
 @ 17,25 SAY 'NAME->' GET DNAME
 READ
 IF DNAME='  '
  RETURN
 ELSE
 ENDIF
```

```
****************************** Screen # 4 ******************************************
 USE SKELETON INDEX SKELINDX
 FIND &DNAME
 STORE # TO RCDN
 STORE SSN TO DSSN
 SKIP
 IF .NOT. EOF
  @ 17,58 SAY CHR(195)+CHR(180)
  @ 16,59 SAY CHR(218)+B+B+B+B+B+B+B+B+B+B+B+B+B+B+B+B+B+B+CHR(191)
  @ 17,60 SAY '                    .'+A
  @ 18,59 SAY CHR(192)+B+B+B+B+B+B+B+B+B+B+B+B+B+B+B+B+B+B+CHR(217)
  SET COLOR TO 112,7
  @ 17,61 SAY 'SSN: '
  SET COLOR TO 112,9
  @ 17,66 SAY DSSN
  SET COLOR TO 112,15
  @ 18,68 SAY CHR(194)
  @ 19,59 SAY CHR(218)+B+B+B+B+B+B+B+B+CHR(193)+B+B+B+B+B+B+B+B+CHR(191)
  @ 20,59 SAY A+'                 '+A
  @ 21,59 SAY CHR(192)+B+B+B+B+B+B+B+B+B+B+B+B+B+B+B+B+B+B+CHR(217)
  SET COLOR TO 112,143
  @ 20,61 SAY 'CONFIRM'
  STORE 'Y' TO SEL

****************************** Screen # 5 ****************************************
  SET COLOR TO 112,7
  @ 20,69 SAY '(Y/N) ' GET SEL
  READ
  SET COLOR TO 112,15
  IF SEL='Y'.OR.SEL='y'
   @ 18,68 SAY B
   @ 19,59 SAY '                    '
   @ 20,59 SAY '                    '
   @ 21,59 SAY '                    '
   @ 18,40 SAY CHR(194)
   @ 19,23 SAY CHR(218)+B+B+B+B+B+B+B+B+B+B+B+B+B+B+B+B+CHR(193)+B+B+B+B+B+B+B
   @ 19,48 SAY B+B+B+B+B+B+B+B+B+B+CHR(191)
   @ 20,23 SAY A+'                                       '+A
   @ 21,23 SAY CHR(192)+B+B+B+B+B+B+B+B+B+B+B+B+B+B+B+B+B+B+B+B+B+B+B+B+B+B+B+B+B
   @ 21,52 SAY B+B+B+B+B+B+CHR(217)
   STORE ' ' TO SEL
   SET COLOR TO 112,7
   @ 20,25 SAY 'STORE RECORD ON FLOPPY (Y/N)->' GET SEL
   READ
   IF SEL='Y'.OR.SEL='y'
    SET COLOR TO 112,15
    @ 20,25 SAY '                                  '

**************************** Screen # 6 ******************************************
    STORE ' ' TO SEL
    SET COLOR TO 112,7
    @ 20,27 SAY 'STORAGE FILE IS IN DRIVE->' GET SEL
    READ
    @ 20,27 SAY 'Press any key when ready.... '
    @ 22,00 SAY ' '
     AIT
    @ 23,00 SAY '                 '
    @ 20,27 SAY 'Processing your selection..
    SET COLOR TO 112,15
    @ 18,40 SAY CHR(196)
    SET COLOR TO 112,7
  * REMARK CHECK TO SEE IF FILES ARE ON STORAGE DISK BEFORE APPENDING.
    STORE (SEL+':'+'SKELETON') TO F
    IF FILE(F)
    ELSE
  @ 22,00 SAY 'Copying SKELETON.DBF file structure to floppy storage disk... '
     USE SKELETON
     COPY STRUCTURE TO &F
    ENDIF
    STORE (SEL+':'+'APPLIED') TO F
    IF FILE(F)
```

```
************************** Screen # 7 ***************************************
    ELSE
  @ 22,00 SAY 'Copying APPLIED.DBF file structure to floppy storage disk.....'
    USE APPLIED
    COPY STRUCTURE TO &F
   ENDIF
   STORE (SEL+':'+'ACADEMIC') TO F
   IF FILE(F)
   ELSE
  @ 22,00 SAY 'Copying ACADEMIC.DBF file structure to floppy storage disk....'
    USE ACADEMIC
    COPY STRUCTURE TO &F
   ENDIF
   DO CASE
    CASE SEL='A'.OR.SEL='a'
     USE A:SKELETON
  @ 22,00 SAY 'Transporting SKELETON.DBF record(s) to floppy diskette.......'
     APPEND FROM C:SKELETON FOR NAME=DNAME
     USE A:APPLIED
  @ 27,00 SAY 'Transporting APPLIED.DBF record(s) to floppy diskette.........'
     APPEND FROM C:APPLIED FOR NAME=DNAME
     USE A:ACADEMIC
  @ 22,00 SAY 'Transporting ACADEMIC.DBF record(s) to floppy diskette........'

**************************** Screen # 8 ***************************************
     APPEND FROM C:ACADEMIC FOR NAME=DNAME
    CASE SEL='B'.OR.SEL='b'
     USE B:SKELETON
  @ 22,00 SAY 'Transporting SKELETON.DBF record(s) to floppy diskette........'
     APPEND FROM C:SKELETON FOR NAME=DNAME
     USE B:APPLIED
  @ 22,00 SAY 'Transporting APPLIED.DBF record(s) to floppy diskette.........'
     APPEND FROM C:APPLIED FOR NAME=DNAME
     USE B:ACADEMIC
  @ 22,00 SAY 'Transporting ACADEMIC.DBF record(s) to floppy diskette........'
     APPEND FROM C:ACADEMIC FOR NAME=DNAME
    OTHERWISE
     USE SEL:SKELETON
     APPEND FROM C:SKELETON FOR NAME=DNAME
     USE SEL:APPLIED
     APPEND FROM C:APPLIED FOR NAME=DNAME
     USE SEL:ACADEMIC
     APPEND FROM C:ACADEMIC FOR NAME=DNAME
   ENDCASE
   ERASE
   SET COLOR TO 112,15
   @ 10,19 SAY 'REMOVE FLOPPY DISK IN DRIVE '+'['+SEL+']'+' AND STORE'

**************************** Screen # 9 ***************************************
   @ 12,20 SAY 'WHILE CURRENT FILES ARE BEING PURGED!'
   STORE ' ' TO SEL
   @ 00,78 SAY CHR(7)
   @ 15,22 SAY 'PACK ALL FILES NOW (Y/N)----->' GET SEL
   READ
   STORE !(SEL) TO SEL
   @ 22,20 SAY '
   USE C:SKELETON
   GOTO TOP
   @ 22,20 SAY 'Deleting record(s) from SKELETON.DBF file...'
   DELETE FOR #=RCDN
   IF SEL='Y'
    @ 22,20 SAY 'Purging deleted record(s) from SKELETON.DBF file...    '
    PACK
   ENDIF
   USE C:SKELETON INDEX SKELINDX
   @ 22,20 SAY 'Reindexing SKELETON.DBF file alphabetically...          '
   REINDEX
   USE C:SKELETON INDEX SSN
   @ 22,20 SAY 'Reindexing SKELETON.DBFk file by Social Security Number...'
   REINDEX
   SET DELETE OFF
```

```
********************************* Screen # 10 ***********************************
    USE APPLIED
    GOTO TOP
    @ 22,20 SAY 'Deleting record(s) from APPLIED.DBF file...          '
    DELETE FOR #=RCDN
    IF SEL='Y'
     @ 22,20 SAY 'Purging deleted record(s) from APPLIED.DBF file...  '
     PACK
    ENDIF
    USE C:APPLIED INDEX APPLINDX
    @ 22,20 SAY 'Reindexing APPLIED.DBF file alphabetically...        '
    REINDEX
    USE ACADEMIC
    GOTO TOP
    @ 22,20 SAY 'Deleting record from ACADEMIC.DBF file...            '
    DELETE FOR #=RCDN
    IF SEL='Y'
     @ 22,20 SAY 'Purging deleted record(s) from ACADEMIC.DBF file...  '
     PACK
    ENDIF
    USE C:ACADEMIC INDEX ACADINDX
    @ 22,20 SAY 'Reindexing ACADEMIC.DBF file alphabetically...       '
    REINDEX

********************************* Screen # 11 ***********************************
    USE C:ACADEMIC
    USE CORRESPD
    GOTO TOP
    @ 22,20 SAY 'Deleting record from CORRESPD.DBF file...            '
    DELETE FOR #=RCDN
    IF SEL='Y'
     @ 22,20 SAY 'Purging deleted record(s) from CORRESPD.DBF file...  '
     PACK
    ENDIF
    USE C:CORRESPD INDEX CORRINDX
    @ 22,20 SAY 'Reindexing CORRESPD.DBF file alphabetically...       '
    REINDEX
    USE REGISTER
    GOTO TOP
    @ 22,20 SAY 'Deleting record from REGISTER.DBF file...            '
    DELETE FOR #=RCDN
    IF SEL='Y'
     @ 22,00 SAY 'Purging deleted record(s) from REGISTER.DBF file...  '
     PACK
    ENDIF
    USE C:REGISTER INDEX REGIINDX
    @ 22,20 SAY 'Reindexing REGISTER.DBF file alphabetically...       '

********************************Screen # 12 ***********************************
    REINDEX
    SET COLOR TO 112,15
    @ 22,00 SAY '                                                              ;
    SET DELETE OFF
    RETURN
   ELSE
    SET DELETE OFF
    SET COLOR TO 15,15
    STORE ' ' TO SEL1
    @ 20,25 SAY 'PACK FILES NOW (Y/N)---------->' GET SEL1
    READ
    STORE !(SEL1) TO SEL1
    SET COLOR TO 112,15
    @ 20,58 SAY CHR(195)
    SET COLOR TO 112,15
    STORE CHR(205) TO C
    @ 20,59 SAY CHR(182)+'                    '+CHR(186)
    @ 19,59 SAY CHR(201)+C+C+C+C+C+C+C+C+C+C+C+C+C+C+C+C+C+C+C+C+CHR(187)
    @ 21,59 SAY CHR(200)+C+C+C+C+C+C+C+C+C+C+C+C+C+C+C+C+C+C+C+C+CHR(188)
    SET COLOR TO 112,248
    @ 20,60 SAY ' Deleting record(s)'
```

```
****************************** Screen # 13 ***************************************
    @ 22,00 SAY CHR(7)
    SET COLOR TO 112,15
    USE SKELETON
    GOTO TOP
    DELETE FOR #=RCDN
    IF SEL1='Y'
     @ 22,20 SAY 'Purging deleted record(s) from SKELETON.DBF file...      '
     PACK
     USE SKELETON INDEX SKELINDX
     @ 22,20 SAY 'Reindexing SKELETON.DBF file alphabetically.....      '
     REINDEX
     USE SKELETON INDEX SSN
     @ 22,20 SAY 'Reindexing SKELETON.DBF file by Social Security Number...'
     REINDEX
    ELSE
    ENDIF
    @ 22,20 SAY 'Deleting record(s) from APPLIED.DBF file...              '
    USE C:APPLIED
    GOTO TOP
    DELETE FOR #=RCDN
    IF SEL1='Y'
     @ 22,20 SAY 'Purging deleted record(s) from APPLIED.DBF file...      '

****************************** Screen # 14 ***************************************
     PACK
     USE APPLIED INDEX APPLINDX
     @ 22,20 SAY 'Reindexing APPLIED.DBF file alphabetically.....      '
     REINDEX
    ELSE
    ENDIF
    @ 22,20 SAY 'Deleting record(s) from ACADEMIC.DBF file...             '
    USE C:ACADEMIC
    GOTO TOP
    DELETE FOR #=RCDN
    IF SEL1='Y'
     @ 22,20 SAY 'Purging deleted record(s) from ACADEMIC.DBF file...     '
     PACK
     USE ACADEMIC INDEX ACADINDX
     @ 22,20 SAY 'Reindexing ACADEMIC.DBF file alphabetically.....      '
     REINDEX
    ELSE
    ENDIF
    @ 22,20 SAY 'Deleting record(s) from CORRESPD.DBF file...             '
    USE C:CORRESPD
    GOTO TOP
    DELETE FOR #=RCDN

****************************** Screen # 15 ***************************************
    IF SEL1='Y'
     @ 22,20 SAY 'Purging deleted record(s) from CORRESPD.DBF file...     '
     PACK
     USE CORRESPD INDEX CORRINDX
     @ 22,20 SAY 'Reindexing CORRESPD.DBF file alphabetically.....      '
     REINDEX
    ELSE
    ENDIF
    @ 22,20 SAY 'Deleting record(s) from REGISTER.DBF file...             '
    USE C:REGISTER
    GOTO TOP
    DELETE FOR #=RCDN
    IF SEL1='Y'
     @ 22,20 SAY 'Purging deleted record(s) from REGISTER.DBF file...     '
     PACK
     USE REGISTER INDEX REGIINDX
     @ 22,20 SAY 'Reindexing REGISTER.DBF file alphabetically.....      '
     REINDEX
    ELSE
    ENDIF
    @ 15,20 SAY '                                                        '
    SET COLOR TO 112,15
```

```
********************************* Screen # 16 ************************************
    @ 18,40 SAY B
    @ 16,59 SAY '                    '
    @ 17,58 SAY A+'                    '
    @ 18,59 SAY '                    '
    @ 19,23 SAY '                                                          '
    @ 20,23 SAY '                                                          '
    @ 21,23 SAY '                                                          '
    @ 22 00 say '                                                                ;
     LOOP
    ENDIF
   ELSE
    @ 16,59 SAY '                    '
    @ 17,58 SAY A+'                    '
    @ 18,59 SAY '                    '
    @ 19,59 SAY '                    '
    @ 20,59 SAY '                    '
    @ 21,59 SAY '                    '
    LOOP
   ENDIF
  ELSE *EOF WAS REACHED ON FIND FUNCTION
   @ 18,40 SAY CHR(194)

***************************** Screen # 17 ************************************
   STORE CHR(196) TO B
   @ 19,30 SAY CHR(218)+B+B+B+B+B+B+B+B+B+CHR(193)+B+B+B+B+B+B+B+B+B+CHR(191)
   @ 20,30 SAY CHR(179)+'                         '+CHR(179)
   @ 21,30 SAY CHR(192)+B+B+B+B+B+B+B+B+B+B+B+B+B+B+B+B+B+B+B+B+CHR(217)
   SET COLOR TO 112,143
   @ 20,68 SAY CHR(7)+CHR(7)+CHR(7)
   @ 20,32 SAY 'RECORD NOT FOUND!'
   STORE 0 TO CNT
   DO WHILE CNT<50
    STORE CNT+1 TO CNT
   ENDDO
   SET COLOR TO 112,15
   @ 18,40 SAY B
   @ 19,30 SAY '                                        '
   @ 20,30 SAY '                                        '
   @ 21,30 SAY '                                        '
   LOOP
  ENDIF
ENDDO
SET COLOR TO 112,15
RETURN
```

Appendix C:

Standard Welcome Letter

07/12/85

UNIVERSITY OF WHATEVER
Ourname Community College
Ourname, Ourstate 41159

Mary Jones
15 Main Street
Charleston, WV 25325

Dear Mary Jones:

We are pleased to know that you are interested in attending Ourname Community College. We are sending you an application which needs to be returned as soon as possible to avoid the last minute rush during the week of registration.

If you have any questions or concerns about the application form or about starting school, please call the Student Services Office.

Mary, please don't delay too long. The applications for many programs are considered on a first-come, first-served basis.

We are looking forward to your joining us here at Ourname Community College.

Sincerely,

Dr. John Doe
President

asa aft

Enclosure

GUIDELINES FOR THE VALIDATION AND INTERPRETATION OF TESTS USED IN ACADEMIC ADVISING AND PLACEMENT OF ADULT LEARNERS

Introduction

When adult learners explore the prospects of returning to school, they are seeking success experiences. They may have doubts and feelings of uncertainty, but they also are trying to determine their chances of meeting academic challenges and being successful. Institutions that admit adult learners into their programs also want students to achieve and progress successfully. The admissions process, including the counseling, advising, and placement, is a learning process that helps students integrate knowledge about self including their goals and abilities with information about the requirements for success in a particular institution.

Counseling, advising, and proper placement of new students involves decisions by the counselors and academic advisors as well as by the adult learner. Decisionmaking requires the use of accurate and relevant information as part of a process of interaction and participation by counselor, advisor, and adult learner. School staff have knowledge about the college's programs while the student possesses self-knowledge. The use of tests is one means in which a relationship can be established between information about the student and information about the courses in the college's programs.

The use of valid tests in advising and placing students can help the counselor and adult learner seek answers to questions such as:

- What is the student's readiness for learning in a subject area?
- What level of a course is most appropriate for placement of a student?

- What resources of time, energy, effort, and support would the student need in order to be successful in a course?
- Does the student have those resources?

The goals for using tests in advising and placement of adult learners are to maximize the likelihood of success and to help the student become an active participant in his or her own learning and future.

This handbook has been prepared for student and developmental staff, academic advisors, and other personnel in colleges that serve adult learners. The focus is on the validation and interpretation of tests used in the advising and placement process. Guidelines are provided for:

- Validating test items for inclusion in locally developed tests.
- Validating total test and subtest scores derived from locally or commercially developed tests.
- Developing and using local experience tables.
- Interpreting test results with adult learners.

Validation of Test Items for Inclusion in Locally Developed Tests

Introduction

Locally developed tests have some advantages and disadvantages when compared to standardized tests prepared by commercial publishers. The major advantage is that a locally developed test can have test items which are specifically designed for populations and uses determined by local needs. The major disadvantage is that the local institution using the test must make certain that the test has items that are psychometrically good and meet the purposes intended. Also, the locally developed test must be put together in such a way so as to enhance measurement, learning, and decisionmaking.

Each test item should be validated against some criterion of success and have an appropriate level of difficulty before it is included in a locally developed test. The total test should include a sufficient number of items so that the total test score has good reliability. The arrangement of the items in a test usually starts with the least difficult items and proceeds to the most difficult items.

Process for Validating Test Items

Locally developed test items need to be validated against the criteria that relate to the purpose of the test. For example, one purpose of a test to be used with adult learners in college settings could be that of advising and placing students into appropriate levels of math classes. In this case the criterion for validation of test items is success in math class. The general process for validating items in a math test used for advising and placement would be:

- Students take the math placement test prior to entering a math course.
- Each student's success in the math course is rated (grades or teacher's ratings could be used).
- Place the names of the students into three groups of approximately equal size according to their success. One-third of the students' names would be placed in the high success group, one-third in the middle success group, and one-third in the low success group.
- Each student's results on the placement math test would be examined to determine which items were answered correctly.
- Table 1 could be used for tabulating the results. Photo-ready copy for this table can be found in Appendix A.

Table 1

Table for Validating Test Items

	I Students in Low 1/3 of Math Success N = _____		II Students in Middle 1/3 of Math Success N = _____		III Students in High 1/3 of Math Success N = _____		IV All Students Total N = ____	
Test Items	N of Correct Answers	% of Correct Answers	N of Correct Answers	% of Correct Answers	N of Correct Answers	% of Correct Answers	N of Correct Answers	% of Correct Answers
1								
2								
3								
4								
5								
6								
7								
8								
9								
↓								
N								

If an item is valid in predicting the success of students in math, the students in the high success group (column III) should have a higher percent of correct answers than the students in the low success group (column I). The greater the difference between the two groups the higher the validity of test items. The best items will show results in which the low success group had the lowest percent of correct responses, the middle success group will have the next highest percent correct, and the high success group will have the highest percent correct. This process of validation is called the known-group method of validation.

Although an explanation of the table may be sufficient to determine which items are best, statistical procedures can be applied to the data to determine if the difference between the low group and high group is significant for each item. The chi-square method would be an adequate statistical procedure. For information on how to do this, consult a standard statistical textbook.

Results tabulated in Table 1 also provide helpful information about the test items. The data in column IV show the percent of all students who answered each item correctly. In other words, column IV has information on the difficulty level of each item. An item is not very useful in contributing to a total test score if almost all students get the item correct or if almost all students get the item incorrect. Such items as a rule should be taken out of the test, although it is important to include a few items that are representative of test content at the beginning of the test that almost everyone can get correct. This placement of an easy test item can serve as a "warm up" for the students.

The information in column IV can also help to determine the order or sequence of items for the test. The easier items should be located in the beginning of the test and the more difficult items should be placed toward the end of the test.

When multiple levels of math classes are involved in the advising and placement of students, the test items need to be validated for each level of math. Some items may be valid for a low level of math but not valid for a high level of math. The process involving Table 1 should be repeated for each level of math in which counseling, advising, and placement decisions are made. It would not be economical to build a separate advising and

placement test for each level of math. One test can be developed and would probably be effective for all levels unless there are significant differences in content. The test should include some items that are valid for each level of math for which the test is to be used. It is possible for the test to include items that are valid for one level of math and neutral for another level.

Good reliability of a locally developed test is not as difficult to attain as good validity. For tests designed to measure content knowledge and skills, reliability is related closely to the number of items included in the test. If the items are well constructed, if the test directions are clear, and if the average difficulty level of the test items is between 40 percent to 60 percent, a test that has at least 30 items in it will usually have good reliability.

Validation of Total or Subtest Scores Derived From Locally or Commercially Developed Tests

Introduction

A test that is used for advising and placing adult learners needs to be valid for the specific uses made in a local college setting. If valid items are selected in developing a local test, then the total test score will also be valid. However, if a test is already constructed and the items cannot be changed, such as in a commercially developed test that has a copyright, then the test as a whole should be validated for local use. The total scores or subtest scores used for making placement decisions should be validated using the criteria of success in those classes which students enter.

Process for Validating Test Scores

The known-group method, described earlier in validating test items, can also be used to validate test scores. The process is as follows:

- Students take the test prior to entering the courses which relate to the advising and placement uses of the scores.
- Each student's success in the course enrolled is rated through the instructor's evaluation or grades.
- The students' names are assigned to three approximately equal groups; high one-third, middle one-third, and low one-third.
- The scores of the students assigned to each group are recorded and averaged.
- Table 2 can be used for tabulating the results. Photo-ready copy for this table can be found in Appendix A.

Table 2

Table for Validating Test Scores

	I Students in Low 1/3 of Class N = _____	II Students in Middle 1/3 Class N = _____	III Students in High 1/3 of Class N = _____	IV All Students Total N = _____
Test Scores	Frequency	Frequency	Frequency	Frequency
30 (highest 29 score) 28 27 26 ↓ 3 (lowest score)				
Average Score				

Table 2 can be used to record how frequently each score is obtained by students in the low, middle, or high success groups. The recording is made simply by placing a mark beside the score under column I, II, or III. Column IV is used to record the frequency of scores made by the total group of students. The scores in each column are then averaged. If the test is valid, the average score in column III should be higher than the average score in column I. The greater the difference between the average of column III and the average of column I, the greater the validity of the test.

Statistical procedures can be applied to the data to determine if the differences between the average of the low group and the average of the high group is significant. The t-test method would provide an adequate statistical procedure. For information on how to do this, consult a standard statistical textbook.

Developing Local Experience Tables

Introduction

Experience tables can be very useful in the process of advising and placing adult learners. The best experience tables are those developed for use at the local level. An experience table is basically a description of what prior students with certain test scores have experienced in the course or courses for which the test is valid. An experience table is also another means of showing the predictive validity of tests. The purpose for counselors and academic advisors using experience tables is to show incoming students what has occurred in the past with other students with similar scores on the test. If students had difficulty, then help can be given in alerting them to potential difficulties and in planning ways of overcoming them before they happen.

Process of Developing Experience Tables

An experience table is a scattergram showing the relationship between test scores and grades achieved in a course. If the test is valid, students who have high test scores will tend to have high grades and students with low test scores will tend to have low grades.

The process of developing a local experience table is as follows:

- Have a record of test scores made by students prior to taking a course.
- Record the grades earned by the students at the end of the course.
- Prepare an experience table by putting a frequency check in the box that corresponds to each student's test score and grade. Table 3 is an illustration of a form that can be used. Photoready copy for this table can be found in Appendix A.
- Experience tables from several sections of the same course can be combined to form a single experience table that can be used to provide academic advisors and students with helpful information in considering placement. Tables for special sections designed for developmental or remedial purposes should be kept separate and used to prepare experience tables for advising and placement in these courses.

Table 3
Experience Table

	Course Grade							
Test Score	W	I	F	D	C	B	A	Total
(high) 30								
29								
28								
27								
26								
25								
24								
23								
↓								
(low) 4								
Total								

Use of Experience Tables

Experience tables can be helpful to students or they can be harmful to students. It all depends on how the tables are used. The following are some concepts which should be kept in mind when experience tables are used for decisionmaking purposes.

- What has happened in the past does not necessarily mean it will happen in the future.
- The average academic performance of a group of people can be predicted fairly well but the performance of an individual cannot be predicted as well.

- The purpose of using experience tables is to lower the predictive ability of a test score. That is, if a test score indicates potential difficulty, then the counselor and student can plan ways to overcome that potential difficulty and work toward success.
- Test scores are not the only indicator of a student's readiness to enter a course.
- Any test has a standard error of measurement. A student will not achieve the same score if testing is repeated.
- A test score may increase if a student takes the same test again due to practice effect, particularly if the time interval between testing is short.

An experience table provides important information for course planning and is a visual means of communicating with a student. The counselor and student can sit together and examine how the student's test score compares with other students in the past. The student and academic advisor or counselor can share thoughts and plan ways in which the student can achieve the most from courses to be taken.

Additional ideas for use of experience tables and the interpretation of test results are included in the next section.

Interpretation of Test Results With Adult Learners

Test interpretation is a learning process. Two people, the academic advisor or counselor and student, meet together and use the testing experience as a vehicle for learning. If a need exists for planning and action, then decisionmaking becomes a part of the learning process. The general goal of test interpretation in the context of advising and placement is to promote students': learning about themselves, making information about course selection more meaningful, and increasing participation and involvement in decisions related to their lives.

Tests that have been validated for use in a local college setting provide a framework and language for describing some important characteristics of the successful students and for identifying levels of courses in which students may be placed. The test score describes the level of academic readiness that the students have for learning the subject matter and the test score, when related to an experience table, can describe the typical impact that the course has on students who enroll. The test score provides a common language for describing each.

Decisionmaking Model

The use of test results in advising and placement can be enhanced when the counselor or academic advisor functions according to a decisionmaking model. A brief structure of such a model follows:

A	C	B
Student's level of readiness now (Where am I now?)	——————→ Educational change process (How do I get there?)	Student's level of success in future (Where am I going?)

The decisionmaking model raises the three guidance questions: (A) Where am I now?, (B) Where am I going?, and (C) How do I get there?

Clues for answering the question of "Where am I now?" can be gotten, in part, from test scores. The test score gives some indication of the student's academic readiness level for beginning study in a course. The counselor should also get clues about the student's readiness from other sources of information. For example, for fairly recent high school graduates, a high school transcript may be helpful. For transfer students, a transcript of prior college work, or for individuals with employment experiences, the nature of their specialization are useful sources of such clues.

The second question "Where am I going?" relates to both their long range career and life goals as well as to the shorter range goal of being successful in the course. Success in the course is a step in successfully reaching the longer range goal.

The third question "How do I get there?" is of primary concern for both the advisor and student. This question raises thoughts about whether or not interventions may be necessary or are needed and can be made by school personnel to help promote success in reaching the goal. Also, the student can consider what special time management techniques, study skills, support systems, etc., will help or enhance the prospects for success. Also, another way of thinking about the third question is: "What price will I need to pay in order to move from where I am now to where I want to go?"

An experience table relates only to the first and second questions. The table shows the relationship between the test scores (where I am now) and success in a course (where I want to be). It would seem from looking at an experience table that the level of success is predicted by the level of the test score. However, the third question of "how do I get there" brings in the elements of student's efforts and strategies for maximizing learning. This third area is also more under the control of the student. A student whose test score is low may have a low probability of success, according to past experiences of students. However, this student may be more motivated and resourceful in using strategies for effective learning. This student may be more successful than expected and thus "beat" the prediction. Through working with a student, strategies may be designed to negate a "predicted" outcome. This effort to plan special strategies for learning may not occur without knowing about the student's level of

readiness and how it relates prospects for success in a course. The test score and the experience tables thus become tools for helping the adult learner.

Components of a Test Interpretation System

Test interpretation skills are needed by school staff (counselors and advisors) if the testing experiences and the test results are to further student learning. A test interpretation session that will promote such learning should include the following components.

- Recalling test experience.
- Reviewing purpose of testing.
- Making a factual description of test score.
- Integrating other relevant information about student.
- Making inferences about possible outcomes.
- Facilitating planning and deciding in context of student's overall grades.

Helping the student recall his or her experiences in taking the test is a beneficial way to start the test interpretation session. The counselor may ask what the student thought or felt while taking the test. The student can describe anything that happened during the testing. Did the student have some special problems that may have raised doubts as to whether or not the test scores are appropriate in describing his or her skills? The recall process allows the student to participate in the discussion. The test score is a description of the student's performance during the test experience and may or may not be representative of his or her actual ability to determine that the test interpretation should start by looking at the test experience through the student's eyes. For example,

the student may have been ill, tired, or upset or may even have forgotten their eyeglasses on the day of the test.

The test interpreter and the adult learner should have a common understanding about the purpose for taking the test. Since the test score is to be used for advising and placing students, the test taking was initiated by the institution rather than the student. The student should know why the test was given and how results are used and how it might be helpful in planning and deciding.

The test score should be described factually. The basic fact is that the test score is a description of how the student responded to the items on the test. If experience tables are used, another fact which can be described is that a certain percentage of students who had test scores similar to this student's score received, in the past, certain grades in a course. At this point in time, emphasis should be placed on facts not inferences. For example, a fact might be that the student had a low score on a math test. An inference would be that the student has low math skills. A fact might be that, from information on an experience table, students with similar scores performed a certain way in a course. An inference would be that this student will also perform the same way as the other students did.

After factual descriptions are made of the test scores, the student can be helped to describe other information about himself or herself which relates to the test score and to the purpose of the test interpretation session. If the session is focusing on math skills, the student can describe how he or she functioned in high school math classes or in other life experiences involving math. This added information can be used to confirm or reject the test scores as being appropriate.

Inferences can be made, if necessary, by combining information from the test score and other information which the student has about himself or herself. Inferences about the ability or skill level of a student or about how the student might perform in the future if placed in a certain course should be reached through mutual discussion and collaboration between the advisor and student.

Making decisions and plans should also be a process in which both advisor and student participate. The counselor can share ideas and the student can share ideas. Using the decisionmaking model, the advisor and student focus on the questions "Where am I going?" and "How do I get there?" Such participation makes the admissions process and placement a learning process for the student. The advisor can help students develop greater understanding of the relationship between themselves and the requirements for success, participate in decisions affecting their own lives, and derive the meaning essential to learning in making the commitment to return to school.

Counselors and academic advisors need resources if they are to help adult learners benefit from tests and test interpretation. They need to have time to work with students. They also need the support of other college personnel to collect information for use in establishing the validity of tests and in developing experience tables. These guidelines require cooperative working relationships among the personnel in the college setting.

Appendix A:

Photoready Copies of Tables 1-3

Course Number _____ Date _____

Instructor _____ Test Used _____
(version or date)

105

Table for Validating Test Items
(Table 1, page 90)

	I Students in Low 1/3 of Math Success N = _____		II Students in Middle 1/3 of Math Success N = _____		III Students in High 1/3 of Math Success N = _____		IV All Students Total N = _____	
Test Items	N of Correct Answers	% of Correct Answers	N of Correct Answers	% of Correct Answers	N of Correct Answers	% of Correct Answers	N of Correct Answers	% of Correct Answers

Course Number _____ Date _____

Instructor _____ Test Used _____
106 (version or date)

Table for Validating Test Scores
(Table 2, page 93)

	I Students in Low 1/3 of Class N = _____	II Students in Middle 1/3 Class N = _____	III Students in High 1/3 of Class N = _____	IV All Students Total N = ____
Test Scores	Frequency	Frequency	Frequency	Frequency
Average Score				

Course Number _____ Date of Norms _____

Test Used _____

Experience Table
(Table 3, page 96)

	Course Grade							
Test Score	W	I	F	D	C	B	A	Total
Total								

CONCEPT PAPER FOR TOLL-FREE TELEPHONE ACCESS NUMBER

Introduction

Toll-free numbers have been used extensively and successfully in businesses as a way of providing a convenient service for the public and to help increase business. In addition, many educational institutions have set up hotlines to serve the public in a variety of ways.

The Appalachia Educational Laboratory's Lifelong Learning Program (LLP) research efforts have focused on: (1) identifying the factors that facilitate and/or impede adults in successfully completing the admissions process for entry into postsecondary education; and (2) developing and validating interventions that will enhance the facilitating factors and moderate the effect of the impeding factors affecting adults in making the commitment to return to school.

The toll-free telephone access number was identified as an important means for enhancing facilitating factors related to the first step of the admissions process involving encouragement from others, personal competence and better future, and employment improvement; and moderate impeding factors related to apprehensions about self and learning ability through immediate access to institutional staff. This service is particularly important for postsecondary schools serving rural areas or areas where telephone exchanges involve toll charges.

Overview and Objectives

This intervention involves using toll-free telephone service so prospective adult students can call to ask questions and talk with institutional representatives about personal concerns and questions.

The toll-free telephone service addresses the problem of adults being reluctant to initiate contact with an institution to get information about requirements for admission and programs offered. The intervention has been designed to meet the following objectives.

- Provide prospective adult students with a convenient means of responding to recruitment initiatives and to ask questions about attending school. It also provides a means for adults to make an initial contact with an institution and talk with representatives about personal concerns and interests. Eliminates need for adults to pay for a call, write to the school, or make a trip to establish initial contact with the institution.
- Establish conditions that will enable adults to engage in learning associated with admissions through personalized contact and follow-up.
- Increase the efficiency of a variety of recruitment activities by making it easier for adults to respond to recruitment initiatives and begin the admissions process.

Operating Procedures

When the decision is made to offer the service of a toll-free access number, institution personnel should start planning approximately six months ahead of the proposed starting date. The ideal time to offer this service is when recruitment activities begin for an upcoming semester or quarter. It is important to consider such things as the time needed for adults to apply for financial aid and receive it prior to the beginning of school.

As part of the planning phase, a telephone company representative should be contacted and asked to meet with institution personnel to explain the types of service offered and their costs. In deciding what type of service to select all possible alternatives should be looked at.

The geographical location of the institution should be considered in determining the advantages of using interstate as well as intrastate telephone services. Also, it is important to consider the prospective student market in telephone exchange areas that are not included in the school's calling area. The benefits of using the toll-free telephone service can be determined by using the front of a telephone directory and conducting a calling area exchange analysis. The objective would be to identify the exchange numbers included within the institution's service area that cannot be reached without tolls. If this area represents a viable market, the toll-free service should be considered. Decisions also need to be made regarding targeting this service to the geographical areas affected by toll charges to reduce the costs of the service by encouraging prospective students within non-toll areas to use regular telephone service.

The advertisement campaign for the toll-free number should be well planned far enough in advance of the registration period. Advertisement should be specific and state that the toll-free telephone service is for <u>new</u> or <u>prospective</u> students (see Appendix A for examples). Announcements should be released to radio, television, and newspapers--and in posters and flyers distributed throughout the community. The toll-free number could be added to course schedules or other types of admissions documents that are picked up by students or go out to other locations for distribution.

Once the telephone is installed it should be located on a special desk or table away from the center of admissions office activity. The telephone should have two separate lines if the toll-free number and a local number are to be used. This would eliminate the use of the toll-free number by people located within a local calling area. Both telephone numbers could

be placed on all advertisements such as "If you are located within the _____ area, call ___/___-____; or if you are located outside this area, call our toll-free number which is ___/___-____." In addition, on the table or desk where the telephone is located, there should be adequate space for recording information on the log sheet.

One or two people should have full responsibility for answering the phone and recording information. Procedures should be set up and responsibility assigned for mailing application materials, catalogs, and other types of information requested. Financial aid and related information should be added to the list of materials to be mailed to eliminate as much as possible having to contact other staff for special information requests.

A daily log sheet should be maintained and contain the following: date, page number, information requested, i.e., schedule (location), application materials, catalog, bus schedule, financial aid application, other; and columns for comments, caller's name, address, phone number, and a space to check if the caller is a prospective student. The log sheets will provide a means for categorizing the different types of information requested as well as the demand for particular types of information. The chart on the following page represents how data collected are categorized for a complete summary of the types of calls received.

To make it easier to record the most frequent requests and materials to be mailed, a numerical code should be devised. For example, number one could be used for an application packet request, number two for a catalog request, etc. In addition, the person who implements the follow-up should initial the log sheet when action is completed. (See Appendix B for an example of a log sheet with entries.)

Chart 1

Summary of Calls Received

INITIAL INQUIRIES	FINANCIAL AID	SCHEDULE - MAIN CAMPUS	SCHEDULE - OFF CAMPUS	INDIVIDUALS AND SPECIAL ASSISTANCE	BOOK STORE	BUS SCHEDULE	VETERAN INFORMATION	ACADEMIC STATUS	MISCELLANEOUS
Registration Information (21) Application Packet (42) Tuition Costs (6) Catalog (47) Testing (10) Orientation New Students (6) CLEP (1) Admissions (2) Nursing Application (2) GED (2)	General Information (105) Applications (27)	Information on Various Classes (132) Schedules (38) Night Classes (8)	Buchanan County Nursing Program (29) Graham (11) Off Campus (1) Grundy (79) Haysi (8) Council (3) Garden (3) Castlewood (13) Hurley (6)	Honaker (1) Bostic (1) Smith (21) Farris (18) Lotito (16) Cyphers (1) LeRoy (1) Harris (1) Moore (5) Haskin (1) Opitz (2) Robinson (1) Murphy (1) VanHook (1) Compton (1) Lester (1) Griffin (1) Bevins (2) Sullivan (1) Bishara (2) Fiers (1) King (2) Absher (1) Norman (1) Proffitt (1) Bartley (1) Horton (1) Aess (1) Eng. Div. (1) Cont. Ed. (6) Bus. Div. (3) Library (1) Elec. Div. (1) Need to talk with counselors (3) Wanted advice (3)	16	10	11	Grade Change (2) Change in Curriculum (5) Checking on Transcripts (8) Transfer Guide (4) Checking on Diploma (1) RIF Forms (2) Transferring Classes From CVC to SVCC (1) Drop Class (4)	Info on career (1) Buchanan Hospital needed 50 applications (1) Wanted to know if he could get paid (1) Work study check (1) Classes start (3) Plans to stop by (1) Caller hung up (8) Driver Garden Bus (1) Driver Hurley Bus (1) Length of Quarter (1) Using locker 803 in Buchanan Hall (1) Information on returning (1) BUAD 121-30 instructor's name (1) Where to buy books for off campus classes (1) Wrong number (1) Has not registered--will not attend (1) Driver Harman Bus (1) Room # of class (1) If classes closed (1) Social Sec paper (1) Refund (1) Library hours (1) Needs to talk to her instructors (1)
Total: 139	132	173	153	106	16	10	11	27	34
Percent: 17.9	17.0	22.9	19.7	13.7	2.0	1.3	1.4	3.5	4.4

Specific suggestions should be developed to help callers, with special requests not pertaining to admissions, contact the people they are calling or get the information they need. In addition, callers who are reluctant to give their names and addresses should be encouraged to call back if they are interested in receiving more information in the mail. Also, callers should be encouraged to come to school and talk with a student services staff member.

This intervention can also be used with a related LLP intervention, the Admissions Management Information Tracking System (ADMITS). The ADMITS intervention is a microcomputer system that is used to track students through all steps of the admissions process. Therefore, the data collected on the daily log sheets can be entered into the system and, as a result, admissions staff can tell how many prospective students are in the admissions process, how many prospective students are at each stage of the admissions process, names and addresses of prospective students to receive application materials, who has received application materials and has not responded, etc. With this type of information, follow-up letters can be sent out to prospective students needing help.

The toll-free telephone access number intervention could also be used prior to and in conjunction with the LLP intervention, the Information Booth. This intervention is an information facility providing services to adult students. Manned by work study students, general information is disseminated concerning programs offered, admissions procedures, forms, registration, etc.; referral is made to the proper institutional staff if more specific information and assistance are needed. In addition a roster of all prospective students is kept for subsequent follow-up.

This intervention has been designed to address three basic problems: (1) overload on admissions office staff during admissions, (2) adults not having an opportunity to interact and ask questions when getting information, and (3) adults becoming confused in new surroundings and discouraged easily, particularly if they are not able to find out what they want or locate the people they need to talk with.

Evaluation

There is a need to evaluate the toll-free access number to make sure the objectives have been met. This will allow for identification of changes that need to be made for the purpose of improving the operational procedures. It will also allow for a decision to be made as to the value of the toll-free access number to the institution. There are two recommended ways to collect data for this evaluation: (1) maintain log sheets, and (2) informal interviews with the workers.

Informal interviews should be held with the person responsible for maintaining the toll-free access number. Ask for his/her evaluation and to identify any problems he/she may have encountered. This information can also be logged and used to improve the overall operation of the toll-free access number.

The toll-free access number can serve people prior to and at the time of registration and even through the end of the late registration period if necessary.

Summary

This intervention was pilot tested at Southwest Virginia Community College (SVCC) during the fall of 1983 and field tested during the fall 1984 admissions period.

During the pilot and field tests, data were collected through the use of daily log sheets and interviews with personnel responsible for maintaining the toll-free number. Analysis of these data from the pilot test revealed a number of problems. Therefore, the LLP staff, in cooperation with SVCC staff, generated several recommendations to make more effective use of resources and staff time in operating the toll-free telephone service for the field test.

In the final analysis of field test data, it was determined that the toll-free telephone access number accomplished the main objective for the intervention; however, one problem needs to be considered in making a decision on implementing this intervention. The institution has no control over external callers. It is obvious, from the data collected, that once people discover the toll-free number is available, many will use it for more general purposes. A high percentage of calls unrelated to the objectives for the intervention were recorded during the pilot and field tests. It would be an institutional decision as to the value of the calls compared with the overall costs of the service. For example, the toll-free phone could be a valuable service for the institution to offer under other objectives. (A validation report for the Toll-Free Telephone Access Number appears in the LLP Technical Report #1.)

Appendix A:

Specific Examples of Toll-Free Service Announcements

AREA ADULTS

AND

RECENT HIGH SCHOOL GRADUATES:

NOW YOU MAY

CALL SVCC TOLL-FREE

1-800-533-1548

GET IMMEDIATE ANSWERS TO:

- HOW TO APPLY FOR ADMISSION
- HOW TO APPLY FOR FINANCIAL ASSISTANCE
- HOW TO GET HELP IN SELECTING COURSES
- HOW TO REGISTER FOR DAY OR EVENING CLASSES
- HOW TO REGISTER FOR FULL-TIME OR PART-TIME ATTENDANCE
- HOW TO REGISTER FOR SVCC COURSES NEAR YOUP HOME
- HOW TO GET FREE TRANSPORTATION TO AND FROM THE SVCC CAMPUS
- HOW TO PREPARE FOR THE GED EXAMINATION IF YOU ARE NOT A HIGH SCHOOL GRADUATE
- HOW TO GET QUICK ANSWERS TO ALL YOUR OTHER QUESTIONS ABOUT ENROLLING AT SVCC

SVCC is a member of the Virginia Community College System and is an Equal Opportunity/Affirmative Action Institution

TOLL-FREE LINE RINGS DIRECTLY INTO ADMISSIONS/REGISTRATION OFFICE AND FINANCIAL AID OFFICE.

HOURS: MON. - THURS - 8:15 a.m. - 7 p.m.
FRIDAY - 8:15 a.m. - 5 p.m.
THROUGH OCTOBER 5

FALL QUARTER CLASSES BEGIN SEPT. 25

AREA ADULTS
AND RECENT HIGH SCHOOL GRADUATES:

Now You May Call

SOUTHWEST VIRGINIA COMMUNITY COLLEGE

Free-of-Charge.

GET IMMEDIATE ANSWERS TO YOUR QUESTIONS ABOUT:

- ★ HOW TO APPLY FOR ADMISSION
- ★ HOW TO APPLY FOR FINANCIAL ASSISTANCE
- ★ HOW TO GET HELP IN SELECTING COURSES
- ★ HOW TO REGISTER FOR DAY OR EVENING CLASSES
- ★ HOW TO REGISTER FOR FULL-TIME OR PART-TIME ATTENDANCE
- ★ HOW TO REGISTER FOR SVCC COURSES NEAR YOUR HOME
- ★ HOW TO GET FREE TRANSPORTATION TO AND FROM THE SVCC CAMPUS
- ★ HOW TO PREPARE FOR THE GED EXAMINATION IF YOU ARE NOT A HIGH SCHOOL GRADUATE
- ★ HOW TO GET QUICK ANSWERS TO ALL YOUR OTHER QUESTIONS ABOUT ENROLLING AT SVCC

THE CALL IS FREE!

THE REST IS UP TO YOU.

DIAL 1-800-533-1548

TOLL-FREE LINE RINGS DIRECTLY INTO ADMISSIONS/REGISTRATION OFFICE AND FINANCIAL AID OFFICE.

HOURS: MON. - THURS - 8:15 a.m. - 7 p.m.
FRIDAY - 8:15 a.m. - 5 p.m.
THROUGH OCTOBER 5

FALL QUARTER CLASSES BEGIN SEPTEMBER 25

SVCC is a member of the Virginia Community College System and is an Equal Opportunity/Affirmative Action Institution

Southwest Virginia Community College

NEWS

Office of Public Information · P. O. Box SVCC · Richlands, VA 24641 · Telephone: (703) 964-2555

WRITER: Admissions Office

RELEASE DATE: Immediately

RADIO SPOT

A toll-free telephone to Southwest Virginia Community College is now open to adults who are thinking of enrolling for the fall quarter on September 25th. By dialing 1-800-533-1548, callers may receive answers to questions about being admitted to the College, day and evening class schedules, classes at off-campus locations, bus transportation to campus, and student financial aid. The number again is 1-800-533-1548.

-30-

Southwest Virginia Community College NEWS

Office of Public Information · P. O. Box SVCC · Richlands, VA 24641 · Telephone: (703) 964-2555

WRITER: Admissions Office

RELEASE DATE: Immediately

RADIO SPOT

Southwest Virginia Community College has installed a toll-free telephone for use by area adults. Persons who want information about enrolling in college, day or evening classes, off-campus classes, bus transportation, or financial aid are invited to call SVCC, free of charge until October 5th, at 1-800-533-1548.

-30-

Southwest Virginia Community College

NEWS

Office of Public Information · P. O. Box SVCC · Richlands, VA 24641 · Telephone: (703) 964-2555

WRITER: Admissions Office

RELEASE DATE: Immediately

TOLL-FREE PHONE INSTALLED AT SVCC

Southwest Virginia Community College officials have announced the opening of a toll-free telephone which will allow adults of the College's four-county service region to call the campus free of charge. The toll-free line, assigned the number of 1-800-533-1548, will enable area residents to call directly to SVCC's Admissions Office for answers to questions relating to their possible enrollment in fall quarter classes on September 25.

This marks the second year that a toll-free line to the College has been available to adults of the region. During the four-week period leading up to the opening of classes last fall, nearly 1,000 calls were received on the toll-free line. Most questions were about the process of being admitted to the College, day and evening classes, classes being taught at off-campus locations, free bus transportation to the College, provided by the counties served, and about qualifying for financial aid.

Financial support for the toll-free telephone line was made available to SVCC through a grant from the Appalachian Education Laboratory (AEL). The College participates with AEL in a long-range research project with implications for adults throughout the nation. Called the Lifelong Learning Program, the project

studies ways in which college entrance, and the learning process, can be made smoother for adults (described as persons 22 years of age or older, for the study). One of the items identified in the study as making the decision to enter college much easier for adults was the establishment of a toll-free telephone, thus the decision to support such a line at Southwest Virginia Community College.

Dr. Charles King, SVCC President, stated that the toll-free telephone has stimulated the trend for students to enroll in college classes in greater numbers. He speculated that the opportunity to learn about the services of the College, without having to pay for a long-distance call, would help at least as many area adults this year as in the fall of 1983. "A lot of our area residents are looking for ways to improve their career futures, and enrollment in day or evening classes at the College is proving to be one certain avenue toward improvement; through use of this toll-free telephone, answers to questions about enrollment, attendance, and financial aid can be right at their fingertips," King said.

The toll-free telephone will be in operation between the hours of 8:15 am and 7 pm, Mondays through Thursdays, until October 5. Area residents, especially those in the adult age category, are urged to use the line for answers to their enrollment questions.


FIND YOURSELF AT SVCC!
FALL QUARTER DAY AND EVENING CLASSES
BEGIN SEPTEMBER 25
35 ONE AND TWO YEAR PROGRAMS
HEALTH CARE PROGRAMS
TECHNICAL PROGRAMS
BUSINESS PROGRAMS
COLLEGE TRANSFER PROGRAMS (TRANSFER FROM SVCC TO OTHER COLLEGES OR UNIVERSITIES AS A JUNIOR)
NON-HIGH SCHOOL GRADUATES MAY TAKE GED PREPARATORY COURSES
DAY OR EVENING CLASSES
FULL-TIME OR PART-TIME ENROLLMENT
FINANCIAL AID
VETERANS' BENEFITS
COUNSELING ASSISTANCE WITH CAREER CHOICES
OFF-CAMPUS CLASSES NEAR YOUR HOME
LOW TUITION
TUTORING SERVICES
ADULTS: QUESTIONS ABOUT ENROLLING OR QUALIFYING FOR FINANCIAL AID?
CALL TOLL-FREE
1-800-533-1548
THROUGH OCTOBER 5
SVCC is a member of the Virginia Community College System and is an Equal Opportunity/Affirmative Action Institution
Education is the Key!

125

Appendix B:

Daily Log Sheet With Entries

SVCC TOLL-FREE TELEPHONE
LOG SHEET

8/30/84
(DATE)

1
(PAGE NO.)

INFO. REQUESTED						COMMENTS	CALLER'S NAME	ADDRESS	PHONE NO.
SCHEDULE (LOCATION)	APPL. MATERIALS	CATALOG	BUS SCHEDULE	FIN. AID APPL.	OTHER				
						question about Veteran's	Kenneth Mullins		865-5411
✓CH	✓CH			✓CH			Sarah Gray	Lebanon Sylvatus. Box 134 Lebanon, Va.	889-5563
						Financial aid	no name given		
						Financial aid	" " "		
						wanted to know if he could get paid	" " "		
						wanted info on career had to hang up will call back	" " "		
✓CH	✓CH	✓CH					Susan Hutchins	P.O. 394 Richlands, Va	881-8328
						call for Dr. Smith	John Hall	Castlewood	
						nursing program Buch. Co.	Patty Fains		
Evening CH							Jennifer Clark	P.O. Box 1032 Honaker, Va. 24260	873-7494
Grundy CH							Debbie Artrip	Rt. 1 Box 218 Clinch	835-9503
✓CH	✓CH	✓CH	✓CH	✓CH			Clarence Rasnake	Rt. 1 Box 442 Cleveland, Va. 24225	

CONCEPT PAPER FOR INFORMATION BOOTH

Introduction

Adults who consider returning to school are found to be apprehensive in part because they are not familiar with postsecondary institutions or their requirements for admissions, the campuses, buildings, locations of college offices and services, or the college staff. In addition, many do not know where or how to seek the help they need.

The Appalachia Educational Laboratory's (AEL) Lifelong Learning Program (LLP) research efforts have focused on: (1) identifying the factors that facilitate and/or impede adults in successfully completing the admissions process for entry into postsecondary education; and (2) developing and validating interventions that will enhance the facilitating factors and moderate the effect of the impeding factors affecting adults in making the commitment to return to school.

The information booth was identified as an important means for enhancing the facilitating factors of institutional information and services; and for moderating the effect of impeding factors of confusion/unfamiliarity with the institutional process and the lack of information and services. In addition, it has been designed to address three basic problems: (1) overload on admissions office staff during registration periods, (2) information services not being located in prominent easy-to-locate parts of the campus, and (3) adults not having an opportunity to interact and ask questions when seeking admissions information.

Overview and Objectives

This intervention is an information facility providing services to students. General information is disseminated on topics such as programs offered, admissions procedures, application forms, registration, and directions; and referral is made to proper institutional staff when more specific information and assistance are needed. In addition, a roster of all prospective students is kept for subsequent follow-up.

The specific objectives of this intervention are as follows.

- Provide general information to adults concerning programs offered, admissions procedures, forms, etc.
- Refer adults to the proper institutional staff for more specific information and assistance, if necessary.
- Reduce the need for admissions office personnel to provide this type of service during critical periods, such as registration.
- Develop a roster of all prospective students that includes their addresses, phone numbers, and a list of materials/information provided. This roster will be used for subsequent follow-up on all students served.
- Provide an informal atmosphere where adults feel at ease when they request information and will feel comfortable about returning for additional help and information.

Design of Information Booth

The ideal operational time for the information booth corresponds to the times during the year when recruitment and admissions activities are the highest. For example, recruitment activities are usually high during the spring term for high school seniors in area high schools and in late summer for fall term adults. The booth might be operated during these periods when traditional students and parents are encouraged to visit the

campus during the spring and in the fall to accommodate both traditional students and their parents and prospective adult students at the time newspaper, radio, and television announcements are started for fall admissions and registration. Advertising can also mention the information booth so prospective students have a place to go when they come on campus. The information booth can also be operated on special school occasions such as parents' meetings, orientation programs, theatrical performances, open houses, and for other civic events.

The information booth should be located in a strategic place where it will be visible and accessible to visitors as they enter the buildings. However, it should not obstruct the normal flow of traffic. Also, the location should be equipped with a telephone jack to provide phone service when the booth is in operation.

The number of booths needed will depend upon the size of the school. For an institution with one building, it is recommended that one booth be used that will allow four people to work comfortably during a busy time period, i.e., the two weeks prior to registration. For a school that has several buildings on its campus, it is recommended that one booth be placed in or near the entrance of each building located nearest the visitor parking area(s). This would help people on campus for the first time. In addition, signs pointing to the location of the information booths could be placed in appropriate places.

An information booth, in the sense of physical appearances, can range from the use of a conference table to movable counter-high units.

Tables

If a conference table is used, the recommended size is 3' x 8 or 10'. The number of tables used would depend upon several factors, i.e., number of people tending the tables at a time, amount of printed materials on display and available for handouts, whether or not a telephone is available at the booth, and the size of the area where the booth is located. However, adequate table space needs to be available for log sheets to be maintained and there should to be a convenient space for a telephone. A table may also be placed behind the information table so it can be used for other work assignments when the information staff are not busy.

A few problems might be encountered when using a conference table. One is the height. These tables are usually too low, therefore making it difficult for people to fill out forms. Also, when it is not in use, the table and all of the materials may have to be gathered up and carried to another location for storage.

Portable Counter-high Units

This type of unit should be approximately 45" high, 6' in length, and 30" wide. It should have display racks along the sides for inexpensive materials; locking cabinets under the counter for storage of catalogs, application forms, etc.; and a telephone.

Another alternative is to have an information booth built to meet specifications for a permanent location on campus that would contain the same kinds of hardware as mentioned above, i.e., display racks, etc.

Set-up of Information Booth

To make the tables or portable units more attractive, it is suggested that a large colored tablecloth (maybe school colors) be used with the school's name printed across the front. This cloth should be hung across the table or unit that will face the main entrance. In addition, large "information" signs may be placed on the walls behind or adjacent to the table. Handout materials could be placed in display racks for easy access.

Recommendations on Implementation and Operation

The following are recommendations to be considered prior to the implementation of the information booth.

Type of Information to be Disseminated

There are two basic types of information usually dispersed: printed and verbal.

Printed materials might include: program brochures or brochures on any subject that would be pertinent to a prospective student; admissions documents such as schedules of classes offered, testing information, financial aid forms, applications for admissions, tuition rates, add/drop forms, withdrawal forms, applications for refund of registration fees, etc.; and general information such as catalogs, schedules of off-campus courses, and campus maps.

For verbal information, it is recommended that typical questions and answers be written down to provide an information resource for people operating the information booth.

In addition, for people wanting to meet with faculty members, counselors, advisors, financial aid officers, or administrative staff, a telephone would be helpful so workers could call to see if the person is available or set up appointments.

Log Sheets

A daily log sheet (see Appendix A) should be maintained and contain the following information: date, information requested (schedule of classes - evening, regular, off-campus; application materials; catalog; veteran's information; financial aid information; and other), comments, visitor's name, address, phone number, and a space to check if a person is a prospective student. The log sheets will provide a means for categorizing the different types of information requested as well as the demand for particular types of information. It also allows for the identification of the population served--new students, returning students, or adults. In addition to the log sheet, a record should be kept of all questions asked. With this record, questions can be categorized and over a period of time a record developed of the kinds of questions being asked, and the need for any additional materials. From this record, a brochure listing the most popular questions along with the appropriate answers could be either developed or refined.

Personnel

There are several ways of staffing the information booth. They are as follows.

Work study students. These people are very good prospects because they are students themselves and would have a tendency to put people at

ease and, in addition, they are usually familiar with the school and the staff. However, to keep the booth operational at all times there would be a need to hire enough of these students in order for them to rotate and arrange their work schedules around their classes.

Volunteers. This is a very good source for prospective workers. Retired individuals are usually willing and very enthusiastic to help with community activities. However, local and state laws on the use of volunteers should be checked as well as liability insurance coverage.

Admissions office staff. This would be the ideal source of workers. If an admissions office staff is large enough, individuals could be assigned to the information booth or rotated for shorter periods of time to either support work study students or provide direct information services.

Personnel Training

The most important thing for the successful operation of an information booth is the training of personnel. A training period should allow enough time for these people to become very familiar with all aspects of the admissions process, including institutional services, staff, building location, and admissions forms and how to help people fill out their forms. It is recommended that one person from the admissions office be assigned the task of conducting the information booth service and helping these workers during the first week of operation to assure that correct information is being disseminated. However, it should be made clear to the workers that when questions are asked that they cannot answer, they are to make referrals to the proper persons for correct answers. The workers should never give out information they are not sure about.

LLP Related Interventions

The Lifelong Learning Program has three related interventions that may also be developed and used with the information booth: (1) the Audiovisual Information Development Guide, (2) the Toll-Free Telephone Access Number, and (3) the Admissions Management Information Tracking System.

The Audiovisual Information Development Guide consists of instructions on how to develop a sound slide/tape program on: (1) the application process, (2) the academic advising process, and (3) the registration process. If these three audiovisuals were developed, they could be used effectively at the information booth to fully explain all three processes to prospective students.

The Toll-Free Telephone Access Number intervention was designed to provide adult students with a convenient means of responding to recruitment initiatives and to ask questions about attending school and talk with institutional representatives about personal concerns and interests. It eliminates the need for adults to call or write to school or make trips to establish initial contact with the institution. This intervention could precede the information booth, and through the use of the toll-free number, personnel could encourage callers to come in and visit the information booth for any help they might need.

The Admissions Management Information Tracking System intervention is a microcomputer system that is used to track students through all steps of the admissions process. Therefore, the data collected on the daily log sheets can be entered into the system and, as a result, admissions staff can tell how many prospective students are in the admissions process, how many prospective students are at each step of the admissions process, names

and addresses of prospective students to receive application materials, who has received application materials and has not responded, etc. With this type of information, follow-up letters can be sent out to prospective students needing help.

Evaluation

There is a need to evaluate information booth services to make sure the objectives are being met. This will help identify changes that need to be made to improve operational procedures. There are several ways to collect data for this evaluation: maintain log sheets, conduct informal interviews with the workers, and conduct informal interviews with a sample of people who received the services, either randomly during the time the service is in operation or by telephone or mail contact from the log entries.

Interviews

Informal interviews should be held with all workers and a limited number of people who use the information services. Ask for their evaluation of the information booth, recommendations for improving the quality of the services, and problems they may have encountered relating to all aspects of the admissions process. This information can also be logged and used to improve the overall operation of the information booth.

Summary

This intervention was tested at Ashland Community College (ACC), located in Ashland, Kentucky, from November 28, 1984, through January 14, 1985. It was operated by three work study students on a rotating basis and was open from 9:00 a.m. until 3:00 p.m. each day.

Data were collected from the information recorded on the daily log sheets and interviews with personnel responsible for the information facility. Based on data collected, several problems were identified, such as: handout materials were limited, workers needed more training, lack of telephone, no method to check to see people received correct information, workers were not qualified, and a record of questions asked was not kept. However, all personnel felt the information booth intervention was very worthwhile because it met its objectives and helped to take a load off the admissions office staff. ACC plans to operate this intervention year-round. (The Information Booth Validation Report may be found in the Lifelong Learning Program Technical Report #1.)

Appendix A:

Daily Log Sheet

ACC INFORMATION BOOTH DAILY LOG SHEET

Date _____ Page _____ ___

INFORMATION REQUESTED								COMMENTS	VISITOR'S NAME	ADDRESS	PHONE
Schedule of Classes			Application Materials	Catalog	Veteran's Information	Financial Aid Info	Other				
Even	Reg	OC									

READING LEVEL ANALYSIS OF ADMISSIONS DOCUMENTS

Introduction

Community colleges are associated with the 13-14th grades or levels of educational attainment. These institutions, even though they have comparable freshman and sophomore levels of education, serve a somewhat different type of student population than the regular colleges and universities. Community college clientele include students coming directly out of high school, as well as a higher percentage of older and more occupationally oriented students. These adults are more likely to have been out of school for some period of time and have work and family responsibilities while attending school. These adults, particularly if this is their first experience at the postsecondary level, will in all likelihood possess general reading skills at or below the 12th grade level. They will have access to and read information about programs and admissions requirements and procedures, but will not necessarily understand this information or understand it in the way the institution intended if the reading levels are too high.

The basic objective of this intervention is to promote adult learning during the admissions process and to provide more effective and easy to understand information to adults to promote learning and development of the commitment to return to school.

This intervention has been designed to enhance the effect of the facilitating factors and moderate the effect of the impeding factors identified in the research phase of task #1. This intervention will address the specific factor categories and documents identified by adults as being critical.

- Institutional information, services, and opportunities.

- College catalog,
- Admissions information,
- Program information,
- Information about school and programs, and
- Registration information.

The reading level analysis reports were prepared as part of the AEL LLP study of adult vocational development at Ashland Community College and Southwest Virginia Community College. Each report contains a detailed explanation and interpretation of the analysis and recommendations for lowering the reading level.

The outcome of this intervention should be admissions documents written at the 11-12th grade level so that they become useful information resources that can be used by adults without undue dependence upon staff or others for clarification or interpretation.

Procedures

During the study of the admissions process, AEL research staff collected copies of all of the admissions documents used with prospective students. These included:

- College catalogs,
- Application packets,
- Program brochures,
- Applications for federal student aid,
- Admissions letters,
- Advanced registration memorandums,
- Student handbooks, and
- Codes of student conduct.

Reports were completed on six admissions documents for each research site. In addition, three reading level analyses were prepared for Southwest Virginia Community College and included: (1) an admissions instruction card, (2) a brochure titled "Using Your CGP Report," and (3) a brochure titled "CGP: What It's Like."

Several passages of at least 100 words each were selected from each document for analysis. These passages usually were selected randomly from the following categories: the introduction, the glossary, and several representative passages from the major or content portion of the document.

The passages selected were analyzed using the Minnesota Educational Computing Consortium (MECC) software "School Utilities, Volume 2" program* on an Apple II (48K minimum capacity) microcomputer. The program can also be used on an Apple III. Reports include the use of six different readability tests; however, only five are applicable to this type of materials. The tests appropriate for use with secondary/postsecondary materials are the Dale-Chall, Fry, Raygor, Flesch, and Gunning-Fog. The computer printout reports the passage, a syllable count, and the readability results. (See Appendix A for an example of a computer printout.) The computer program has the capacity to analyze 1,000 words; therefore, to receive a total composite of all passages, the 1,000 word limit cannot be exceeded. This allows for at least eight passages averaging 90-130 words. Caution: if the limit of 1,000 words is exceeded, the program will not run and all data must be re-entered.

After the analysis had been printed, the next step was to prepare a summary report. The structuring of the summary is as follows. Section I contains a general summary of the analyses and the analysis of the total reading level. Section II contains the summary and general conclusions,

---

*This program can be purchased from: MECC Distribution Office, 2520 Broadway Drive, St. Paul, Minnesota 55113-5199. School Utilities, Volume 2 (Readability Diskette, No. 749) @ $30.00 per diskette. School Utilities, Volume 2 (Readability Support Booklet, No. A-749) @ $6.70 per booklet.

Section III provides a set of recommendations for lowering reading levels, and Section IV contains an explanation of the reading test. In some cases, a supplementary analysis would be run covering additional passages from the source document and this would become Section V.

A further step in the analysis for the report is to develop two charts. Chart I, Reading Level Test Summary, has six columns. (See page 152 for an example of a completed chart and Appendix B for a sample worksheet.) The first column contains the passage number and title, and the other five columns contain the grade levels related to the passage for each of the five tests listed across the top of the chart. This information is recorded from the individual passage's readability results on the computer printout.

Chart II, Summary of Reading Level Analysis Factors, contains seven columns. (See page 153 for an example of a completed chart and Appendix C for a sample worksheet.) The first column contains the passage number and title, and the other six columns contain summary data for the factors used in the MECC reading tests. Each reading test employs two of the six reading level factors. The tests are identified across the bottom of Chart II, along with information on the relative importance of each factor in determining readability for that test. This information is obtained and recorded from the individual passage summary from the computer printout. (For instructions on how to complete Chart II, see Appendix D.) Charts I and II are used to prepare the summary and general conclusions for Sections I and II of the reports.

The section on recommendations presents information based on the effects of the main predictors for each readability test. These predictors are explained in the section titled "Explanation of Reading Analysis." (See Appendix E for a copy of the explanation.)

In cases where the reading level for admissions materials were higher than desired for the target population, recommendations for lowering reading level were made. Passages were rewritten in many instances to show how reading levels can be lowered without resorting to short choppy sentences and inappropriate language.

Findings

Reading level analysis reports on six different documents for each site were completed. Eleven of the 12 documents analyzed had high reading levels. For example, a developmental math course designed for individuals interested in upgrading their basic educational competencies is described as follows in the catalog at one research site.

Math 05/06

05 - A developmental course in review of arithmetical principles and computations, designed to develop the mathematical proficiency necessary for selected curriculum entrance. Students may reregister for this course in subsequent quarters as necessary until the course objectives are completed. Variable hours.

06 - A developmental course in review of algebra, designed to develop the mathematical proficiency necessary for selected curriculum entrance. Students may reregister for this course in subsequent quarters as necessary until the course objectives are completed. Variable hours.

The reading level test summaries for this passage are as follows.

- Dale-Chall - college graduate.
- Fry - not valid. The 77 words for this passage were in six sentences. This is equivalent to 7-8 sentences per 100 words causing the reading level for the passage to exceed the upper limits of the Fry scale.

- Raygor - not valid. Of the 77 words for this passage, 46 were classified as long words and is equivalent to 61 long words per 100 words. This exceeds the Raygor range for scientific/professional/technical by a considerable margin going off the top of the Raygor scale. The top of the Raygor scale is 44 long words with average sentence lengths of 3.2 to 6.3 sentences per 100 words.

- Flesch - college graduate.

- Gunning-Fog - 20.7.

This report provides a discussion of the findings and examples of the reading level analysis conducted on selected admissions documents used by adults during the admissions process. Documents reported on are from what will be referred to as research site A and research site B and are organized as follows.

Pages 151-154 contain an analysis and charts for the community college system catalog for research Site A.

Pages 154-161 contain an analysis and charts for the admissions letters from research site B. In addition, the charts containing the analysis for the admissions letters from site A are presented on pages 162-163.

Another example of admissions materials is the application packet that provides information pertaining to procedures to follow when applying for admission. It also contains a general information section that includes tuition, student activity fee, vehicle registration, etc. A reading analysis was conducted on the application packet for research site B. The analysis of this packet is presented on pages 164-165.

Program brochures are also very important admissions information. Prospective adult students are more likely to pick up a program brochure and read it before looking at a catalog. Program brochures can have very

positive effects if written at a reading level that communicates effectively and when an ample supply is available.

Research site A had a brochure on one program, while site B had brochures on most of their programs. Pages 166-168 show the results of the reading analysis for selected brochures from site B. In addition, on pages 168-172 is an example of two strategies used in rewriting the electronics brochure, along with charts showing reading level comparisons before and after the rewrites.

Analysis of Catalog

Research Site A

The community college system catalog for research site A is used as a resource by prospective students to learn about the various programs and program requirements offered at the community college level. It is also used by enrolled students as a reference for courses and credits required to obtain a degree or certificate in their chosen program. In addition, the catalog contains information on the community college system; how to apply for admission; expenses and financial aid; facilities and services; and the academic year calendar.

Eight passages were selected for the reading analysis. Chart I, Reading Level Test Summary, provides an overview of the reading level results for the eight passages. The total ratings for each of the individual reading tests are listed across the bottom of the chart. These indicate that the average reading level for the passages ranges from college senior (grade 16) on the Flesch to college graduate (scientific/professional/technical or grade 17+) on the Raygor, Gunning-Fog, and Dale-Chall tests.

Chart I
Reading Level Test Summary

Passages	Dale-Chall	Fry	Raygor	Flesch	Gunning-Fog
1. Community College System (page 5)	College Graduate	17	Scientific Professional Technical	College Graduate	20.8
2. Educational Objectives (page 6)	College Graduate	17	Scientific Professional Technical	College Graduate	18.8
3. Admissions (page 8)	College Graduate	16	Scientific Professional Technical	College Senior	19.6
4. Student Loans (page 13)	13-15	13	11	13-15	16.1
5. Pell Grant Program (page 15)	College Graduate	14	College	College Senior	17.3
6. Early Childhood Educ. (page 42)	College Graduate	17	Scientific Professional Technical	College Graduate	22.2
7. Management Technology (page 46)	13-15	16	Scientific Professional Technical	College Senior	15.7
8. Cooperative Work Exper. (page 73)	College Graduate	16	Scientific Professional Technical	College Senior	16.6
Totals	College Graduate	17	Scientific Professional Technical	College Senior	18.1

Chart II, Summary of Reading Level Analysis Factors, organizes the reading level results for comparison purposes. It displays data on the factors used for the MECC reading tests. Each test used employs two of the six factors shown across the top of the chart. The tests are identified across the bottom of Chart II, along with information on the relative importance of each factor in determining readability.

Chart II
Summary of Reading Level Analysis Factors

Passages	Average Sentence Length	Sentences Per 100 Words	Hard Words With 3 Or More Syllables	Syllables Per 100 Words	Long Words 6 Or More Letters	Unfamiliar Words
1. Com. Coll. System (page 5)	21.0	4.76	31%	206.00	54.8	33
2. Educational Objectives (page 6)	19.2	5.20	32%	192.17	46.1	48
3. Admissions (page 8)	23.6	4.24	30%	176.27	40.7	41
4. Student Loans (page 13)	22.4	4.46	20%	164.28	32.1	33
5. Pell Grant Program (page 15)	25.8	3.87	18%	167.00	35.0	42
6. Early Child. Ed. (page 42)	27.7	3.61	23%	200.00	48.2	28
7. Management Technology (page 46)	21.4	4.67	19%	177.57	40.2	35
8. Cooperat. Work Exper. (page 73)	17.6	5.68	21%	177.27	43.2	37
Total (T)			189.0	1470.00	340	297
Average (A)	21.9	4.57	23.3	181.48	42.5	37.1
Tests in Which Factors Apply and Importance (1) Most (2) About Equal (3) Less	Dale-Chall (3) Flesch (2) Gunning-Fog (2)	Fry (3) Raygor (3)	Gunning-Fog (2)	Fry (1) Flesch (2)	Raygor (1)	Dale-Chall (1)

The community college catalog may be the first piece of information that adults have access to in helping them formulate their decision to return to school. This catalog appears to be geared to a level of general educational development that is not typical of the 13th and 14th grade levels which is considered within a suitable range for community college students.

Therefore, this could be an indication that the catalog is an impediment to many adults in the successful completion of task #1 and may have a definite affect in informing prospective students.

This is also true for other documents that fall within the high range of reading level; for example, the admissions letters sent to prospective adults from both research sites A and B. A total of 16 letters were analyzed; seven from site A and nine from site B.

Analysis of Admissions Letters

Research Site B

Chart I, Reading Level Test Summary, provides an overview of the reading level results for the nine admissions letters. The admissions letters are coded in accordance with Steps I-V of the Admissions Model (see Appendix F for a copy of the Admissions Model) and are listed down the side of the chart. Reading levels range from a high of scientific/professional/technical for letters III-1, III-4, and IV-2, as shown by the Raygor test, to a low of 9 for letter V-1 as shown by the Fry test.

Chart I
Reading Level Test Summary

Passages	Dale-Chall	Fry	Raygor	Flesch	Gunning-Fog
I-1	College Graduate	15	Scientific Professional Technical	16	19.2
II-1	11-12	10	12	11	12.6
II-2	College Graduate	17	Scientific Professional Technical	College Graduate	20.1
II-3	College Graduate	14	11	13-15	15.8
III-1	13-15	12	College Level	13-15	13.5
III-2	College Graduate	Not Valid	Not Valid	12	13.0
III-3	13-15	8	11	9	9.0
Total	College Graduate	13	Scientific Professional Technical	13-15	14.1

Letters:

I-1 Announcement of TV course
II-1 Response to initial request for college information
II-2 Services offered for handicapped persons
II-3 Class schedules and registration instructions
III-1 Missing supporting documents for admission
III-2 Admission status for nonresidents
III-3 Missing documents for nondegree status persons

Chart II
Summary of Reading Level Analysis Factors

Passages	Average Sentence Length	Sentences Per 100 Words	Hard Words With 3 Or More Syllables	Syllables Per 100 Words	Long Words 6 Or More Letters	Unfamiliar Words
I-1	24.5	4.1	23.5	172.4	42.9	42
II-1	15.8	6.3	15.8	156.0	37.9	23
II-2	19.6	5.1	30.6	198.0	56.1	46
II-3	23.0	4.3	16.5	170.0	33.9	41
III-1	17.2	5.8	16.5	167.0	41.7	35
III-2	11.9	8.4	20.6	171.0	43.9	42
III-3	14.5	6.9	8.0	149.4	37.9	28
Total (T)					295	257
Average (A)	16.3	6.1	18.9	169.	42.0	37
Tests in Which Factors Apply and Importance (1) Most (2) About Equal (3) Less	Dale-Chall (3) Flesch (2) Gunning-Fog (2)	Fry (3) Raygor (3)	Gunning-Fog (2)	Fry (1) Flesch (2)	Raygor (1)	Dale-Chall (1)

The following is a general summary of the findings of this study.

A general factor that relates to each of the MECC reading tests is sentence length. This factor, whether stated in terms of "average sentence length" or "sentences per 100 words" is used in all tests. Generally, it is weighted more heavily in determining readability at the lower grade levels than it is at the secondary/postsecondary grade levels in all tests but the Flesch and Gunning-Fog. As a consequence, reading level can usually be lowered to some degree by shortening sentences, but not as dramatically as by lowering the number of syllables per 100 words, hard words, long words, or unfamiliar words. A good practice to follow is to use from 14-25 words per sentence or from 4-7 sentences per 100 words. This applies for all tests except the Gunning-Fog and Flesch were shorter sentences have a more direct effect on lowering reading level.

The summaries for the specific reading tests are as follows.

Dale-Chall. Readability for the Dale-Chall is determined by the average sentence length and number of "unfamiliar words." The unfamiliar words are those that are not on Dale's list of 3,000 familiar words.* Chart II shows that letters II-1, III-4, and IV-2 had average sentence lengths that fall between the recommended range of 14-25 words per sentence. Specific comparison shows that these letters were rated 11-12, college graduate, and 13-15 based primarily on an unfamiliar word count of 31, 36, and 33 respectively. By comparing these to the results of letter V-1 rated at the 9-10 grade for

*Dale, Edgar and Chall, Jeanne S. "A Formula for Predicting Readability: Instructions." Educational Research Bulletin, 27 (Jan. 21 and Feb. 17, 1948), 1-20, 37-54.

reading, that had a slightly lower than average sentence length of 27.5 and 18 unfamiliar words, the effect of the number of unfamiliar words on readability becomes clear. Dropping the unfamiliar word count for the Dale-Chall from above 30 to somewhere in the low to high 20's would be an effective way of improving the Dale-Chall readability of the admissions letters.

Fry. Readability for the Fry is determined by the number of sentences and syllables per 100 words. For the secondary and postsecondary levels, from 3-7 sentences per 100 words is acceptable. Shorter sentences have a moderate positive effect in lowering readability, but not as much as lowering the number of syllables per 100 words. In the analysis of the nine admissions letters, letter III-4 was rated at the 17th grade level and had 180.4 syllables per 100 words (182 is the top of the Fry scale).

Raygor. Readability for this test is determined by the number of sentences per 100 words and the number of long words or words with six or more letters. The total reading level of scientific/professional/technical or college graduate for letters III-1, III-4, and IV-2 is a direct result of the long word count that ranged from 39.0 - 42.3. Letter V-1, rated at the 11th grade, possessed 3.6 sentences per 100 words and a 28.2 long word count and letter II-1, also rated at the 11th grade, had 4.7 sentences per 100 words and a 33.3 long word count; therefore, by holding sentences to between 4 and 6 per 100 and the number of hard words from 30-36 per 100, an acceptable range of readability will be achieved.

The following chart shows the reading levels resulting from variations between the number of hard words and sentence length.

Number of Hard Words Per 100 Allowed
By Sentence Length for Specific Grade Levels

Grade Level	Sentence Length Per 100 Words 4.0+.2	5.0+.2	6.0+.2
10th	27-29	30-32	33-34
11th	30-32	33-34	35-36
12th	33-35	35-37	37-38
13-16th	36-38	38-40	39-41
SPT	39+	41+	42+

Flesch. Readability for this test is based upon the average sentence length and syllables per 100 words. This test uses the same factors as the Fry, but gives more weight in determining readability to sentence length. As a result, the Fry formula is slightly more responsive to changes in the length of sentences than number of syllables. Both are, however, important for lowering readability. The following chart shows the number of syllables allowed on the Flesch for average sentence lengths of 15, 20, and 25 words to maintain readability within acceptable ranges.

Number of Syllables Per 100 Words Allowed
By Selected Sentence Length for Specific Grade Ranges

Grade Level	Average Sentence Length 15	24	25
9-10	145-156	139-150	133-144
11-12	157-167	151-161	145-155
13-15	168-179	163-173	156-167

Note on Chart II letters II-1, IV-2, and V-2 come within this range, with average sentence length ranging from 16.6 - 23.6 and syllables per 100 words of 155.0, 164.1, and 166.1, respectively. Letters III-1 and III-3 had about 167 syllables per 100 words, but had average sentence lengths of 37.0 and 35.3 respectively--pushing them up to a reading level of college graduate or grade 17+. However, letter V-1, with an average sentence length of 27.5 and 139 syllables per 100 words, brought this letter down to a 10th grade reading level.

Gunning-Fog. Readability for this test is determined by average sentence length and the number of hard words or words with three or more syllables. In using the Fog index, readability is equally responsive to changes in either sentence length or the number of hard words. Six of the nine letters were at grade 15 or above. The following chart shows the ranges for the number of ard words and average sentence length. The numbers in circles plotted onto the chart show where the letters fell in relation to the acceptable range.

Grade Level Relationships Based on
Average Sentence Length and Number of Hard Words

Number of Hard Words	Average Sentence Length (Number of Words) 10	12.5	15	17.5	20	22.5	25	27.5	30	32.5	35	37.5
								V-1				
10	8	9	10	11	12	13	14	15	16	17	18	19
12.5	9	10	11	12	13	14	15	16	17	18	19	20
							IV-1					
15	10	11	12	13	14	15	16	17	18	19	20	21
			V-2									III-1
17.5	11	12	13	14	15	16	17	18	19	20	21	22
					II-1	IV-2						III-3
20	12	13	14	15	16	17	18	19	20	21	22	23
22.5	13	14	15	16	17	18	19	20	21	22	23	24
			III-2		III-4							
25	14	15	16	17	18	19	20	21	22	23	24	25
27.5	15	16	17	18	19	20	21	22	23	24	25	26
30	16	17	18	19	20	21	22	23	24	25	26	27
32.5	17	18	19	20	21	22	23	24	25	26	27	28

Summary

The preceding information explains why the reading levels for site B admissions letters were considered fairly high. Each has been examined in terms of how readability is determined for each test and why the reading analysis came out as they did. In general, sentence length for most letters was within reasonable limits except for the Flesch and Gunning-Fog which could be lowered significantly by reducing sentence length. For the other tests, reducing sentence length makes some difference, especially when the other, more critical factors, are near the cut-off levels for a grade level. The Dale-Chall, Fry, and Raygor rely more heavily on the number of unfamiliar words, syllables per 100 words, and long words in determining reading level. It would, therefore, be more effective on these tests to concentrate on these concepts to reduce the reading level of the admissions letters.

Research Site A

Chart I
Reading Level Test Summary

Letters	Dale-Chall	Fry	Raygor	Flesch	Gunning-Fog
II-1	11-12	11	11	12	14.5
III-1	College Graduate	14	Scientific Professional Technical	College Graduate	20.9
III-2	13-15	15	College	13-15	15.7
III-3	13-15	14	College	College Graduate	21.7
III-4	College Graduate	17	Scientific Professional Technical	College Senior	16.6
IV-1	13-15	12	College	13-15	16.3
IV-2	13-15	13	Scientific Professional Technical	13-15	17.2
V-1	9-10	9	11	10	13.5
V-2	13-15	11	College	12	13.5

LETTERS

II-1 - Response to initial request for college information
III-1 - Incomplete application file
III-2 - Missing supporting documents for admission
III-3 - Enrollment status request
III-4 - Request for personal interview
IV-1 - Letter of acceptance
IV-2 - Advisor appointment
V-1 - Follow-up on nonenrollment
V-2 - Incomplete registration

Chart II
Summary of Reading Level Analysis Factors

Passages	Average Sentence Length	Sentences Per 100 Words	Hard Words With 3 Or More Syllables	Syllables Per 100 Words	Long Words 6 Or More Letters	Unfamiliar Words
II-1	21.5	4.7	14.7	155.0	33.3	31
III-1	37.0	2.7	15.3	167.7	42.3	36
III-2	16.6	6.0	22.6	175.9	40.6	43
III-3	35.3	2.6	18.9	167.0	34.0	26
III-4	17.0	5.9	24.5	180.4	45.1	36
IV-1	26.5	3.8	14.2	157.5	37.7	27
IV-2	23.6	4.2	19.5	166.1	39.0	33
V-1	27.5	3.6	6.4	139.0	28.2	18
V-2	16.7	6.0	17.1	164.1	41.0	38
Tests in Which Factors Apply and Importance (1) Most (2) About Equal (3) Less	Dale-Chall (3) Flesch (2) Gunning-Fog (2)	Fry (3) Raygor (3)	Gunning-Fog (2)	Fry (1) Flesch (2)	Raygor (1)	Dale-Chall (1)

Analysis of Application Packet

Research Site B

Chart I provides an overview of the reading level results for the four passages analyzed. The total ratings for each of the individual reading tests indicate that the reading level for the document ranges from college level (or grades 13-16) on the Raygor to college graduate on the Dale-Chall and Gunning-Fog tests. Passage 1 is the only one with consistently low reading levels on all of the reading tests.

Chart I
Reading Level Test Summary

Passages	Dale-Chall	Fry	Raygor	Flesch	Gunning-Fog
Admissions Information	13-15	11	11	12	13.9
Admissions Programs	College Graduate	17	Scientific Professional Technical	College Graduate	22.0
President Message	13-15	14	College Level	College Senior	19.3
Student Activity Fee	College Graduate	15	Scientific Professional Technical	College Senior	17.3
Total	College Graduate	15	College Level	College Senior	17.8

Chart II
Summary of Reading Level Analysis Factors

Passages	Average Sentence Length	Sentences Per 100 Words	Hard Words With 3 Or More Syllables	Syllables Per 100 Words	Long Words 6 Or More Letters	Unfamiliar Words
Admissions Information	21.8	4.6	12.8	157.8	32.1	35
Admissions Programs	20.0	5.0	35.0	198.0	51	43
President Message	29.5	3.4	18.6	168.6	43	35
Student Activity Fee	23.8	4.2	19.3	174.8	40.3	55
Total (T)			446		177	168
Average (A)	23.5	4.3	21.1	174.2	39.7	42
Tests in Which Factors Apply and Importance (1) Most (2) About Equal (3) Less	Dale-Chall (3) Flesch (2) Gunning-Fog (2)	Fry (3) Raygor (3)	Gunning-Fog (2)	Fry (1) Flesch (2)	Raygor (1)	Dale-Chall (1)

Analysis of Program Brochures

Research Site B

A summary of the reading analysis for the program brochures is found in the following two charts. They give the specific analysis for each brochure.

Chart I
Reading Level Test Summary

Program Brochure	Dale-Chall	Fry	Raygor	Flesch	Gunning-Fog
Clerk-Typist	College Graduate	15	Scientific Professional or Technical	College Senior	21.0
Drafting	College Graduate	17	Scientific Professional or Technical	College Senior	18.3
Electronics	College Graduate	17	Scientific Professional or Technical	College Graduate	28.6
Engineering	13-15	13	Scientific Professional or Technical	13-15	17.5
Machine Tool	13-15	14	13-16	13-15	15.6

Chart I indicates that all of the brochures have high reading levels on all tests. This is particularly true when the brochures are intended, at least in part, for individuals that have been out of school for any period of time. The reading test probably most suited for analysis of the brochures is the Gunning-Fog. It is designed for newspapers, magazine articles, and written communications to general audiences.

Chart II
Summary of Reading Level Analysis Factors

Passages	Average Sentence Length	Sentences Per 100 Words	Hard Words With 3 Or More Syllables	Syllables Per 100 Words	Long Words 6 Or More Letters	Unfamiliar Words
Clerk-Typist	29.8	3.4	22.7%	171.4	38.7	40
Drafting and Design	21.0	4.8	24.8%	183.8	47.6	45
Electronics	33.5	2.8	38.1%	220.1	55.2	69
Engineering	22.0	4.5	21.8%	166.3	40.9	36
Machine Tool Operation	21.0	4.8	18.1%	169.5	39.0	31
Tests in Which Factors Apply and Importance (1) Most (2) About Equal (3) Less	Dale-Chall (3) Flesch (2) Gunning-Fog (2)	Fry (3) Raygor (3)	Gunning-Fog (2)	Fry (1) Flesch (2)	Raygor (1)	Dale-Chall (1)

Chart II describes the factors of the brochure content that can be manipulated to reduce the reading level. Even the brochures with the lowest reading levels, engineering and machine tool, are written above the level desired for effective communication. The more difficult brochure to read is electronics. It has an average sentence length of 33.5 words, 38.1 percent of which have three or more syllables, and 55.2 percent or over half of the words that have six or more letters.

The brochures will probably be more understandable by those who have completed the prescribed training or by those who possess a higher level of general educational development than the intended audience. The target group will, in all likelihood, not be within the range of effective communication.

Examples of Rewrites for the Electronics Brochure

This section provides examples of two rewrite strategies for the passages selected from the electronics brochure.

- **Rewrite #1.** This strategy concentrates on lowering the value of all six of the factors used in the MECC reading analysis. This includes reducing the 33.5 average sentence length in the original passage to between 14-25 words per sentence. All other factors will be reduced as much as possible to still be able to communicate the essential information contained in the passage.

- **Rewrite #2.** This strategy will concentrate on lowering the average sentence length even further and demonstrate the use of a special MECC method to reduce the unfamiliar word count for the Dale-Chall reading test.

Rewrite #1. This rewrite strategy will reduce the value of all of the reading level factors while maintaining an average sentence length of 14-25 words. Staying within this range will maintain the validity of both the Fry and Flesch tests which become involved when the sentence length is shorter. The rewritten passage is presented on page 169.

The analysis for this rewrite is shown on Charts I and II on pages 169 and 170 and indicates the following.

- The average sentence length was reduced from 33.5 to 16.2 words and to within the 16-25 word boundary. This represents a 52 percent reduction over the original passage and will contribute to a lower reading level on all tests.

Rewrite #1 of Passage for Electronics Brochure

Electronics Brochure - (Site B) offers a one year program or a four quarter certificate in this area. This program of studies will provide students with the knowledge and skills needed to obtain work. A large portion of time will be spent in class and in lab setting where students learn theory and service techniques. They will be trained to install, maintain, and service AM-FM radio, black and white, and color TV. Training also prepares students to work on intercom, public address, high fi, and stereo sound systems. They are also trained to inspect finished products in electronics plants.

Chart I
Reading Level Test Summary

Electronics Passage	Dale-Chall	Fry	Raygor	Flesch	Gunning-Fog
Original Material	College Graduate	17	Scientific Professional Technical	College Graduate	28.6
Rewrite #1	College Graduate	8	College	7	18.4
Rewrite #2	13-15	Not Valid	Not Valid	13-15	12.6

Chart II
Summary of Reading Level Analysis Factors

Passages	Average Sentence Length	Sentences Per 100 Words	Hard Words With 3 Or More Syllables	Syllables Per 100 Words	Long Words 6 Or More Letters	Unfamiliar Words
Original Passage	33.5	2.8	38.1%	220.1	55.2	69
Rewrite #1	16.2	6.2	9.3%	152.6	39.2	34
Rewrite #2	9.9	10.1	21.5%	179.7	45.6	31
Tests in Which Factors Apply and Importance (1) Most (2) About Equal (3) Less	Dale-Chall (3) Flesch (2) Gunning-Fog (2)	Fry (3) Raygor (3)	Gunning-Fog (2)	Fry (1) Flesch (2)	Raygor (1)	Dale-Chall (1)

Rewrite #2. The strategy followed in this rewrite was directed to the Dale-Chall reading test and is intended to reduce sentence length and the number of unfamiliar words.

The procedure used in this analysis involves identifying words, such as proper nouns or technical terms, for which no shorter alternate words are available. This strategy involves identifying words that are normally unfamiliar and treating them as "familiar" words in the Dale-Chall analysis. An example of this is the series of nouns in a school's name. By prefixing words--to be treated as familiar--with a # symbol, they will be classified as familiar terms in the Dale-Chall analysis. A typical computer entry using the symbol is as follows: #Electronics #Servicing or #Electronics #Technology. Word length and syllables are still counted which means that

these words will still be counted as long words and hard words for the analyses on the other reading test. See page 172 for the text of the rewritten passage.

The reading levels and characteristics of the passage are shown on Charts I and II in Rewrite #1, pages 169 and 170. The rewrite of this passage accomplished the following.

- The Dale-Chall readability score dropped from college graduate to grade 13.5.
- The number of words in the passage was lowered from 134 to 79.
- The average sentence length was lowered from 33.5 to 9.9 words per sentence.
- The number of words was reduced from 69 to 31.

The other reading tests were affected in the following manner as a result of Rewrite #2.

- The Fry and Raygor reading tests became invalid because the number of sentences per 100 words in this rewrite were too high for these tests. The Fry also uses the number of syllables per 100 words and although the new count of 180 is better than the original count of 200, it still is at the top of the Fry scale.
- The Raygor uses sentence length along with the number of long words. In this case, the number of long words per 100 is 45.6 and goes off the top of the Raygor scale.
- The Flesch was lowered from college graduate to grades 13-15, which in effect is two levels. This is the result of lowering the syllables per 100 words from 220 to 152.6. It was lowered from 28.6 in the original passage to grade 12.1 which may still be a little higher than desired for effective communication with adults.

With this procedure the Dale-Chall test can be used to determine the effect of a lot of proper nouns and technical training terminology on the reading level of admissions materials. To use this procedure, it is

necessary to identify the technical terms and proper nouns used in admissions documents and classify them as familiar words when using the Dale-Chall analysis on the MECC program. It is recommended, however, that all tests be used to be able to cross-check and compare the reading levels of admissions materials.

Rewrite #2 of Passage for Electronics Brochure

> #Electronics #Servicing - one year program. #(Site B) offers a four quarter #certificate in this area. Studies provide students with the knowledge and skills for employment. Students will learn theory and service techniques in class and in lab settings. #Electronics #technicians are trained to install, maintain, and service #electronic equipment. This includes AM-FM radio, black and white, and color TV. It also includes intercom, public address, high fidelity, and stereo sound sytems. They may also work as inspectors in #electronics manufacturing.

General Summary and Recommendations

A general recommendation, based upon the preceding circumstances, is that admissions documents be written at the 11th and 12th grade levels, but no higher than the 13-15th grade level in order for these documents to be information resources that can be used without undue dependence upon staff for clarification or interpretation. This recommendation is consistent with the basic principle upon which the AEL Lifelong Learning Program is based--that adults become self-directed and responsible learners.

Specific recommendations are as follows.

- A general rewrite of admissions documents could be undertaken. A copy of the MECC reading analysis program could be purchased for use on the Apple II microcomputer and used to evaluate progress in gearing content to the target reading level.

- Sentence length should be as short as possible without presenting ideas and information in a choppy manner. For most tests, sentence length is not as important as other factors in determining reading level. The Flesch and Gunning-Fog, however, are exceptions to this rule. With these tests, it is as important to reduce sentence length as it is to reduce the number of syllables and hard words. Generally speaking, sentence length can range from 12 to 25 words or 3 to 7 sentences per 100 words. Sentences longer than 25 words should be shortened whenever possible.

- **Fry and Flesch.** The number of syllables per 100 words is used in the Fry and Flesch reading tests. Syllables should range between 140-160 per 100 words. When the syllable count is around 160, five sentences per 100 words should be used to keep the reading level at the 11-12th grade.

- **Gunning-Fog.** The Gunning-Fog uses both average sentence length and the number of hard words to determine reading levels. Hard words are those with three or more syllables. To maintain a 11-12 grade reading level, the numerical total of the average sentence length and number of hard words should be between 27.5-30.0. That is, an average sentence length of 10 words would accommodate 17.5 to 20 hard words while an average sentence of 20 words would allow only 7.5 to 10 hard words to maintain a 11-12 grade reading level.

- **Raygor.** Long words are those with six or more letters. This, along with sentences per 100 words, constitutes the basis of the Raygor. The top of the Raygor scale is 44 long words per 100. To maintain a 11-12 grade reading level, long words should range between 26-34 per 100. When using 34 long words per 100 it is necessary to use from 5-6 sentences per 100 words to keep the reading level within range.

- **Dale-Chall.** The Dale-Chall uses average sentence length plus number of unfamiliar words as the basis for determining readability. For this test it is important to use Dale's list of 3,000 familiar words when writing materials.

Additions can also be made to this list by prefixing proper nouns or technical terms with a # symbol when entering items into the MECC analysis program. This allows such words as #school name, #curriculum, or #certificate to be counted as familiar words. This technique will only lower the reading level on the Dale-Chall.

In addition to the specific recommendations listed above, the following are suggestions to consider when writing or rewriting a document for use with prospective college students.*

- Materials should show sincerity and concern and should focus more on people than things.
- Messages should be short and to the point.
- Materials should be neat, attractive, appealing, and printed on high-quality paper (attractiveness can be enhanced by color, even one color of ink over colored paper, which is only slightly more costly than black on white).
- Complexity should be avoided, and simple language used; however, one must be careful never to talk down to students.
- A mix of formats can be useful but can be overdone; the proper mix is stimulating, while too many may confuse the students.
- Large amounts of white space on a page are desirable.
- The image projected throughout the material should be one of quality.
- Slang will alienate young people if it comes from those from whom they expect formal language.
- Prose should be fluent.
- Type should be large and readable.

---

*Guidebook for Colleges and Universities: Presenting Information to Prospective Students, Oscar T. Lenning, Edward M. Cooper, The National Center for Higher Education Management Systems, 1978.

- Good use should be made of contrast, and bold face should be used for titles.
- Material should be organized so that its logic is apparent and so that one can easily locate items of interest; a succinct table of contents, prominent descriptive heads at the top of each page, and special inserts are especially helpful.
- The front cover should be uncluttered but attention-getting and should project the image of the institution.
- The most important information should be presented, or at least summarized, first.
- Materials should be informative rather than rhetorical.*
- Since generalizations cannot adequately convey excellence, they should be complemented with concrete information, such as case studies, statistics, photographs of students, and interviews.

---

*A panel of communication-design consultants from Adsociates, Inc., explained at the Central State University Institute that their most difficult task is to convince college and university personnel that they should not boast in their materials about their institution, but should instead focus on the students, their needs, and ways in which the institution can meet them.

Appendix A:

Example of Computer Printout

A DEVELOPMENTAL COURSE IN REVIEW OF ARITHMETICAL PRINCIPLES AND COMPUTATIONS. DESIGNED TO DEVELOP THE MATHEMATICAL PROFICIENCY NECESSARY FOR SELECTED CURRICULUM ENTRANCE. STUDENTS MAY REREGISTER FOR THIS COURSE IN SUBSEQUENT QUARTERS AS NECESSARY UNTIL THE COURSE OBJECTIVES ARE COMPLETED. VARIABLE HOURS. A DEVELOPMENTAL COURSE IN REVIEW OF ALGEBRA. DESIGNED TO DEVELOP THE MATHEMATICAL PROFICIENCY NECESSARY FOR SELECTED CURRICULUM ENTRANCE. STUDENTS MAY REREGISTER FOR THIS COURSE IN SUBSEQUENT QUARTERS AS NECESSARY UNTIL THE COURSE OBJECTIVES ARE COMPLETED. VARIABLE HOURS.

SYLLABLE COUNTS:

1 A	5 DEVELOPMENTAL
1 COURSE	1 IN
2 REVIEW	1 OF
5 ARITHMETICAL	3 PRINCIPLES
1 AND	4 COMPUTATIONS
2 DESIGNED	1 TO
3 DEVELOP	1 THE
5 MATHEMATICAL	4 PROFICIENCY
4 NECESSARY	1 FOR
3 SELECTED	4 CURRICULUM
2 ENTRANCE	2 STUDENTS
1 MAY	4 REREGISTER
1 FOR	1 THIS
1 COURSE	1 IN
3 SUBSEQUENT	2 QUARTERS
1 AS	4 NECESSARY
2 UNTIL	1 THE
1 COURSE	3 OBJECTIVES
1 ARE	3 COMPLETED
4 VARIABLE	1 HOURS
1 A	5 DEVELOPMENTAL
1 COURSE	1 IN
2 REVIEW	1 OF
3 ALGEBRA	2 DESIGNED
1 TO	3 DEVELOP
1 THE	5 MATHEMATICAL
4 PROFICIENCY	4 NECESSARY
1 FOR	3 SELECTED
4 CURRICULUM	2 ENTRANCE
2 STUDENTS	1 MAY
4 REREGISTER	1 FOR
1 THIS	1 COURSE
1 IN	3 SUBSEQUENT
2 QUARTERS	1 AS
4 NECESSARY	2 UNTIL
1 THE	1 COURSE
3 OBJECTIVES	1 ARE
3 COMPLETED	4 VARIABLE
1 HOURS	

NUMBER OF SENTENCES:	6
NUMBER OF WORDS:	77
NUMBER OF SYLLABLES:	172
WORDS OF 6 OR MORE LETTERS:	46
3 OR MORE SYLLABLE WORDS:	30
% OF 3 OR MORE SYLLABLE WORDS:	39
AVERAGE SENTENCE LENGTH:	12.8
AVERAGE LETTERS PER WORD:	6.4
AVERAGE SYLLABLES PER WORD:	2.2

THERE ARE 34 WORDS NOT IN THE DALE-CHALL WORD LIST. CORRECTED DALE-CHALL GRADE LEVEL: COLLEGE GRADUATE.

THE FRY GRADE LEVEL IS NOT VALID.

THE RAYGOR READABILITY ESTIMATE:
AVERAGE NUMBER OF LONG WORDS (MORE THAN 5 LETTERS) PER 100 WORDS = 59.7.
AVG. SENTENCES PER 100 WORDS = 7.8.
THIS ESTIMATE IS NOT VALID.

THE FLESCH READABILITY SCORE IS 4.8.
THIS SAMPLE IS AT THE COLLEGE GRADUATE LEVEL.

THE GUNNING-FOG GRADE LEVEL IS 20.7.

Appendix B:

Chart I Worksheet

_____ ACC

_____ SVCC

CHART I

Reading Level Test Summary

Document _____ Date _____

Passages	Dale-Chall	Fry	Raygor	Flesch	Gunning-Fog
Total					

Appendix C:

Chart II Worksheet

_____ ACC

_____ SVCC

CHART II

Summary of Reading Level Analysis Factors

Document _____ Date _____

Passages	Average Sentence Length	Sentences Per 100 Words	Hard Words With 3 Or More Syllables	Syllables Per 100 Words	Long Words 6 Or More Letters	Unfamiliar Words
Total (T) Average (A)						
Tests in Which Factors Apply and Importance (1) Most (2) About Equal (3) Less	Dale-Chall (3) Flesch (2) Gunning-Fog (2)	Fry (3) Raygor (3)	Gunning-Fog (2)	Fry (1) Flesch (2)	Raygor (1)	Dale-Chall (1)

Appendix D:

Instructions for Completing Chart II

_____ ACC

_____ SVCC

INSTRUCTIONS FOR COMPLETING CHART II

CHART II

Summary of Reading Level Analysis Factors

Document _____ Date _____

Passages	Average Sentence Length	Sentences Per 100 Words	Hard Words With 3 Or More Syllables	Syllables Per 100 Words	Long Words 6 Or More Letters	Unfamiliar Words
Brief title and page number for selected passages.	Take figure for this column from Passage Summary on computer report "average sentence length."	Divide 100 by average sentence length found in column 2.	Take figure for this column from Passage Summary on computer report "% of 3 or more syllable words."	Divide 100 by number of words in the passage and multiply that total by number of syllables in passage. Both are from Passage Summary on computer report. For the average for all passages, divide the final value by the number of passages selected.	Take figure for this column from Readability Results on computer report--Raygor results "average number of long words per 100 words."	Take figure for this column from Readability Results on "number of words not in the Dale-Chall word list."
Total (T) Average (A)						
Tests in Which Factors Apply and Importance (1) Most (2) About Equal (3) Less	Dale-Chall (3) Flesch (2) Gunning-Fog (2)	Fry (3) Raygor (3)	Gunning-Fog (2)	Fry (1) Flesch (2)	Raygor (1)	Dale-Chall (1)

Appendix E:

Explanation of Reading Analysis

EXPLANATION OF READING ANALYSIS

The reading analysis has been done on the Apple II TM Microcomputer using software developed by the Minnesota Educational Computing Consortium. The program contains six readability tests: Spache, Dale-Chall, Fry, Raygor, Flesch, and Gunning-Fog. However, only four of the six are applicable for postsecondary reading materials. The Spache (for grades 1-4) has not been used. The Gunning-Fog (for newspaper and magazine articles) has been included for informational purposes only. It is useful in analyzing general correspondence. The following provides a brief description for each of the tests and recommendations for reading level interpretation.

Dale-Chall (5th grade and up)

Developed by Edgar Dale and Jeanne Chall, it is the most widely accepted and most often used method of predicting readability. Dale developed a list of about 3,000 "familiar" words (words that were known to at least 80 percent of the sample fourth grade students he questioned). The number of "unfamiliar" words (words not found on the Dale Word List) and average sentence length are the two predictors used in this estimate.

Fry (5th grade-college level)

Developed by Edward Fry to provide a "quick and easy" method to estimate readability. In place of the word list, the Fry method uses a count of the number of syllables and the number of sentences as the two predictors.

Raygor (secondary-postsecondary levels)

Developed by Alton Raygor, it is a quick and easy method best suited to predict the reading level of secondary and postsecondary materials. In place of a word list, the Raygor method uses the percentage of words with six or more letters along with the average sentence length to make up the two predictors used in this estimate. The Raygor will specify both high and low invalid reading levels.

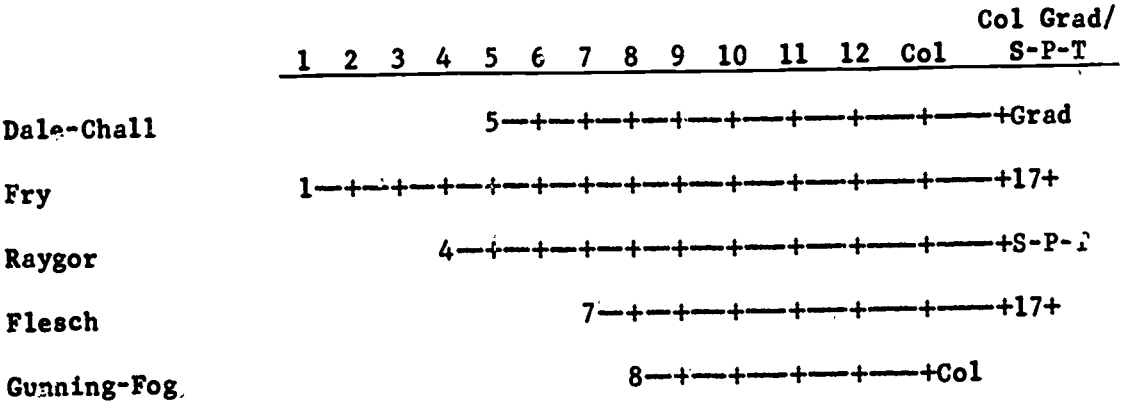
Flesch (secondary-postsecondary levels)

Developed by R. F. Flesch, its use is limited to secondary and postsecondary reading materials. It selects out words with three or more syllables and this is the predictor used in the estimate. This test provides a readability score and level.

Gunning-Fog (readability of newspaper stories and general correspondence)

The number of three or more syllable words and average sentence length are the two predictors used in this estimate.

Recommended Grade Levels



Why Results of Tests May Vary

Grade levels predicted for a book based upon a large number of 100 word samples was found to have a normal distribution. Several passages from a book may differ by several grade levels because, individually, the passages are not representative of the whole book. It is important, therefore, to use an average of three or more passages to obtain an accurate estimate of reading level.

Results obtained by the various tests applied to a given book or passage may differ because of the measures used as predictors and the criteria by which the methods were validated.

All methods in School Utilities, Volume 2 - Readability are based upon a measure of vocabulary difficulty and a method of sentence structure complexity as predictors. However, the various methods arrive at these measures in different ways.

Sentence length is the predictor of sentence structure complexity for all the methods in School Utilities, Volume 2 - Readability, but the weight given to this predictor varies from one method to the next.

Several measures are used to predict vocabulary difficulty which accounts for most of the variance between the grade level results in the various methods. For example, there are quite a number of words with three or more syllables that appear on the Dale list of "familiar" words. These familiar words are counted as difficult by methods which employ syllable counts. The word list methods of Dale-Chall and Spache have proven to be more accurate.

Another cause of differences in results is the criterion used to validate each of the methods. The Spache method was validated against the grade level of basal reader series. Most other measures predict the grade level required to score 50 percent correct on the multiple choice comprehension tests used by McCall and Crabbs in their Standard Test Lessons in Reading.

It is important to keep in mind that readability formulas only predict the probable grade level. However, as Edward Fry said, "high motivation can overcome high readability level, but low motivation demands a low readability level." ("Fry's Readability Graph," Journal of Reading, 21, December 1977, pp. 242-251)

Appendix F:

Admissions Model

AEL LIFELONG LEARNING PROGRAM ADMISSIONS MODEL

ADMISSIONS PROCESS					MATRICULATION PROCESS
STEP 1	STEP 2	STEP 3	STEP 4	STEP 5	
INSTITUTIONAL PROCEDURES					
Recruitment Process →		→ Induction Process →			
Contacting Prospective Adult Students Contacting and Attracting Adults: (Through Students, Former Students, Staff, Media, etc.)	**Informing Prospective Adult Students** Providing Information Providing Application Materials Responding to Questions Interviewing	**Evaluating Prospective Adult Students** Receiving Application Information: Application Form, Transcripts, Medical Information, Test Results, Interview Data Counseling Receiving Requests for Financial Aid	**Admitting Adult Students** Selecting Assigning Advisor Advising Orienting	**Registering Adult Students** Starting Records Preparing Class Rosters Receiving Funds Assigning Resources, Staff, Room	**Monitoring Student Progress** Advising Reporting on Exceptions Counseling Tutoring
INDIVIDUAL PROCEDURES					
Commitment Process →					
Responding to Initial Information About Learning Opportunities Receiving Information on School and Programs Offered Responding by Making Written, Phone, or Personal Inquiry Assessing Relevance of General Information General Personal Factors, Self Concept, Prior Learning Experience, Interests, and Goals Personal and Family Circumstances Encouragement From Other Family, Friends, Students, Employer Referral by Education or Community Agency	**Exploring Personal Relevance of Program Options** Learning About Institution and Programs: Location of School, Programs Offered, Admissions Staff, Counselors, Costs, Financial Aid, Transportation Options Exploring Personal Relevance and General Implications of Information: Personal Goals, Family, Work, Health, Personal Crisis, Other Interests and Responsibilities Clarifying Options Regarding Program Graduation Requirements Exploring Implications for Future: Personal Growth, Employment, Career, Income, Standard of Living, Social Involvement	**Deciding to Apply for Program** Understanding Program Requirements and Making Tentative Program Selection Setting Personal and Career Goals Providing Personal Information Seeking Information Seeking Counseling Understanding Institutional Information Planning Finances, Student Loans, Financial Aids	**Finalizing Program Selection** Receiving Academic Advising Understanding Learning Requirements Developing a Schedule Setting Learning Expectations Setting Time Expectations Planning Transportation Arranging Finances	**Completing Registration** Implementing Decision to Return Completing Registation Process Getting Schedule Approved Paying Fees Organizing Family and Work Responsibility Organizing Self to Participate in Class Organizing Self to Study Implementing Transportation Plans Purchasing Learning Materials	**Subsequent Vocational Development Tasks** VDT #2→VDT #3→VDT #4

EDUCATIONAL PLANNING RESOURCE CENTER

Introduction

This manual gives specific directions for educational resource managers to plan, install, operate, update, and maintain an Educational Planning Resource Center (EPRC), plus directions on how to provide adults information and assistance in conducting career exploration activities with particular reference to selection of courses and majors.

An EPRC is a site such as a library or student services center where resources important for career exploration and educational planning can be located and is designed to provide individuals with the opportunity for career and educational exploration.

The Appalachia Educational Laboratory (AEL) Lifelong Learning Program (LLP) research findings identified that the primary motivation for adults in returning to school was employment betterment. However, many adults had little or at least limited information and were unable to articulate their plans or goals for employment in terms that relate to educational opportunities available for preparation.

The structure and organization plans for an EPRC were provided to Ashland Community College where it has been installed and is currently operating. It has been used to support the Educational Planning Course.

Although this intervention focuses on use of the EPRC during the admissions process, it has also been developed for use by students during all phases of their postsecondary educational and career preparation experiences. The staff training package on the EPRC has been designed for use with academic advising, instructional, and counseling staff to assist them

in understanding the importance of the EPRC and making effective use of the center as part of the admissions and institutional process.

Intervention Objectives

Specific objectives for this intervention are to:

- Provide up-to-date occupational and educational information.
- Assist individuals in assessing and understanding their interests, temperaments, and aptitudes.
- Help individuals use available resources to achieve their goals.
- Promote career planning and decision-making activities.
- Provide a delivery system for career counseling activities.
- Prepare individuals for life-role transitions.
- Foster the integration of career development activities into classroom instruction.
- Provide a setting where individuals can feel comfortable in sharing their interests and concerns in a nonthreatening environment.
- Support educational and occupational exploration and occupational placement activities conducted as part of the instructional or student services programs.

Planning for the Educational Planning Resource Center

Planning is an important first step in installing and implementing the EPRC. It is important to set goals and procedures, to make necessary decisions, and to develop a Plan of Action.

A planning committee comprised of members from the administration, faculty, and student body may be formed to assist with plans for the installation and utilization of the EPRC.

One person needs to have full responsibility for carrying out, delegating, and overseeing the work of setting up and operating the ERPC. This person should be someone who is familiar with career information resources and/or career information systems and a person with initiative, a self-starter, and a motivator of other people.

In developing a Plan of Action, the following points are recommended for consideration.

- Allocation of space. The library should be considered. Space is needed large enough to accommodate the resources and to provide enough space for student use. In addition, the physical arrangement should provide for a relaxed informal atmosphere.

- Identification of existing resources. All existing career information resources should be located if they are scattered throughout the school. Plans need to be made concerning how to go about getting the resources into one location. Although having materials in one location facilitates use, some special information resources may need to stay in other locations. However, these materials can still be entered into the system.

- Setting up the EPRC is primarily a clerical task; therefore, professional time should be limited on this type of work. However, the person responsible for the EPRC should be familiar with procedures and perhaps supervise the process. Student help should also be considered.

Organizing Information Resources

One of the most essential elements in any EPRC is information resources. Without appropriate and adequate resources, students may be limited in their exploration which affects their career decision-making. Therefore, the identification and organization of career information resources are vital to the success of any EPRC.

It is recognized that it is impossible to build a "total" system containing information about all of the thousands of different occupations. If such information were available, it would be impossible for students to explore all occupations. Therefore, the critical tasks in setting up, maintaining, and expanding the EPRC are: (1) the identification of information resources representative of employment opportunities and preparation programs, and (2) providing opportunities for students to learn how to use these resources including establishing personalized access strategies.

In addressing problem areas encountered with most career information resources, four important steps should be considered.

Analyze and evaluate existing resources. Typical resources found in most settings are looseleaf occupational briefs; bound occupational information publications, such as the Occupational Outlook Handbook published by the U.S. Department of Labor; and a few audiovisual materials. Although these resources may be considered limited in relation to what is needed, they do form a basic source from which a more comprehensive system can be developed. In addition to analyzing the types of resources available, existing resources need to be evaluated. Those that are out-of-date or contain sex, age, recruitment, or other biases should be purged from the files. In addition to printed and audiovisual occupational information resources, a variety of other resources needs to be incorporated into the system. These should include education/training and job opportunity/placement information.

Organize the available resources. Materials need to be organized so that all resources relevant to each occupation can be easily identified. In addition, the resources need to be organized by a group or clustering

structure. This structure must facilitate locating materials on some other basis than occupational titles, namely, the access variables commonly used in most career guidance programs such as interests and aptitudes. Thus, all information resources are identified by occupations and further linked to the system's grouping structure through indexing and filing procedures.

Identify appropriate materials and access strategies that will contribute to an individual's understanding of self and the world of work. This understanding is fundamental in helping individuals identify related groups of occupations and related training and placement information.

Incorporate the access strategies and materials into career exploration and educational planning activities and develop a process for involving adults.

The Career Information System (CIS) developed by AEL was selected as the basic structure for the EPRC intervention. This CIS is based upon the Worker Trait Group (WTG) Arrangement of the Guide for Occupational Exploration developed by the U.S. Department of Labor. Its structure consists of 12 Career Areas and 66 Worker Trait Groups. The CIS provides an organization and management system for all types of career information resources.

Other existing systems can be adapted to the CIS and remain as the structure for the EPRC.

Installing the Career Information System

Installing the CIS provides an opportunity to improve career information resources usually found in a school library. Improvement would include:

Evaluating present resources and purging outdated materials, recruitment materials, and any information that would be of little value to students.

A general "rule of thumb" used for identifying outdated materials is anything five years or older. There may be a need to keep these old materials if that is the only information available on an occupation. If old materials are kept, they should be marked "CAUTION--These Materials May Be Outdated."

Identifying coverage of the world of work present in the existing resources. As the CIS is completed, there should be resources available related to each WTG. These resources should include information about occupations providing employment opportunities in the local area and state. The Worker Trait Group Guide (a CIS product) contains a core listing of 2,835 occupations. This listing represents the high employment opportunities in the nation and the most common occupational briefs published by commercial publishers. Since the guide is organized by the 12 Career Areas and 66 Worker Trait Groups, it may be used to identify what additional resources need to be added to the WTGs that contain little or no information in the system being set up.

Obtaining and adding new resources to the system. This can be accomplished through subscribing to the various commercial brief services and writing for free materials from government agencies and professional organizations. However, use caution to select free materials as they may represent biased concepts or recruitment literature. In selecting free materials, the National Vocational Guidance Association Guidelines should be used if available (see Appendix A for suggested resources).

A file plan (installation guide) has been developed which contains step-by-step procedures for setting up the CIS. It is divided into two sections. The first section describes and illustrates how to install the

basic system which includes entering all looseleaf materials, such as briefs and pamphlets, into the system.

The second section describes and illustrates how to expand the basic system by entering bound occupational references such as the Occupational Outlook Handbook and the Encyclopedia of Careers, audiovisuals, bound books, and omnibus materials.

All information needed to install the CIS, including training those assisting with the process, is contained in the file plan. The easy to follow format allows the flexibility for using students and business classes to help install the system. (See Appendix B for a copy of the AEL Career Information System File Plan.)

Two filmstrips are also available on a loan basis from Bennett-McKnight Publishing Company which can be used to help train those assisting in the installation of the CIS. The filmstrips were designed to provide an overview of the materials and procedures used. The first filmstrip "Installing the AEL Career Information System" describes the installation of the basic system and can be used as a visual aid with the first section of the file plan. The second filmstrip "Expanding the AEL Career Information System" describes installation of other resources to expand the system and can be used with the second section of the file plan.

Notebooks and preprinted forms and labels are materials furnished with the CIS package* (see Appendix B). However, the installer is responsible for a file and other cabinets for storing the resources. In addition, the

---

*CIS materials can be purchased from Bennett-McKnight Publishing Company, 809 West Detweiller Drive, Peoria, Illinois 61615.

basic system which includes entering all looseleaf materials, such as briefs and pamphlets, into the system.

The second section describes and illustrates how to expand the basic system by entering bound occupational references such as the Occupational Outlook Handbook and the Encyclopedia of Careers, audiovisuals, bound books, and omnibus materials.

All information needed to install the CIS, including training those assisting with the process, is contained in the file plan. The easy to follow format allows the flexibility for using students and business classes to help install the system. (See Appendix B for a copy of the AEL Career Information System File Plan.)

Two filmstrips are also available on a loan basis from Bennett-McKnight Publishing Company which can be used to help train those assisting in the installation of the CIS. The filmstrips were designed to provide an overview of the materials and procedures used. The first filmstrip "Installing the AEL Career Information System" describes the installation of the basic system and can be used as a visual aid with the first section of the file plan. The second filmstrip "Expanding the AEL Career Information System" describes installation of other resources to expand the system and can be used with the second section of the file plan.

Notebooks and preprinted forms and labels are materials furnished with the CIS package* (see Appendix B). However, the installer is responsible for a file and other cabinets for storing the resources. In addition, the

*CIS materials can be purchased from Bennett-McKnight Publishing Company, 809 West Detweiller Drive, Peoria, Illinois 61615.

installer needs to furnish standard office supplies such as file dividers, folders, and a rolodex or library drawer file.

When installing the CIS, there is a period of time when existing resources will not be available for student use. Installation procedures have been divided to reduce this time. It is recommended that the basic system be set up first, which involves organizing the looseleaf occupational briefs into the system and setting up the basic filing and indexing materials. The amount of time this takes depends upon the amount of resources available and when they were last purged of outdated materials. However, 120 person hours minimum should be allowed for setting up the basic system. The number of people involved can shorten the time needed to get the basic system operational. Consideration might be given for doing this work during the summer or other periods when the materials are not being used. Once the basic system has been set up, the expanding procedures permit the system to be operational but removes from use one type of resource at a time as it is being entered into the system.

Using the System

When the EPRC is set up and ready for use, orientation sessions should be provided for users as similar orientation sessions are provided for users of the library. These sessions could be organized in a variety of ways, depending on the user group. Initial orientation needs to be provided for all teachers and counselors as well as students. Then, as part of regular orientation, sessions could be held for all incoming classes, new faculty, and students. Also, as part of orientation, posters containing steps on use of the system could be placed in the EPRC to help people become familiar

with the system or to review the procedures. Two filmstrips are available for orientation purposes: "Introduction to the Career Information System" and "Using the Career Information System." Having people use the system in some way, as part of orientation, increases their understanding.

One of the major strengths of the Career Information System is its utility for providing access to career information in a variety of ways which facilitate personalized career exploration. Awareness and understanding of personal qualities such as aptitudes, vocational interests, leisure time activities, hobbies, and preferences for a variety of things, including school subjects, are critical elements in career exploration. These personal characteristics, when linked to the world of work through WTGs, provide a means for career exploration.

Users of the EPRC may access information in two different ways--by specific occupational title or by WTG. When entering the system by WTG, users will explore groups of occupations related to their interests and other personal characteristics. Identifying occupational information related to WTGs provides a means of expanding an individual's understanding of the world of work through becoming aware of related groups of occupations. When entering by specific occupational title, through the use of an alphabetical card file, all resources in the system related to that occupation can be identified. In addition, the alpha card contains the WTG number which can be used to identify related occupations for exploration.

The EPRC can offer more than just facilities for housing career information resources. Structured activities can be provided for more meaningful career exploration experiences for walk-in students.

One approach would be the station concept. This concept provides for a self-instructional approach where users can move from station to station on their own, or stop and explore occupational information at any point. Each station would have posters with specific instructions on the use of that station. Examples of what stations would contain are: the first station would introduce the structure used in dividing the total world of work consisting of 20,000 occupations into 12 broad Career Areas and 66 Worker Trait Groups (this may be bypassed for those already familiar with it); the second station would contain CIS self-assessment checklists along with filmstrips designed to introduce them; the third station would show students how to use the EPRC resource materials; and the fourth station would contain charts and indexes linking the WTGs and occupations to college fields of study and majors. (See Appendix C for specific station activities.)

An example of another activity, which could be used very easily with walk-in students, is a browsing technique using the Worker Trait Group Guide. Students can quickly read the 12 Career Area descriptions, identify those that interest them, and then explore related WTGs and occupations.

Suggestions for Using the Educational Planning Resource Center with College Students

The following suggestions for use of the EPRC are organized in terms of the matriculation status of the prospective student or students. These suggestions relate to student services and instructional uses of the resource center and are provided so that the librarian will have a better sense of the educational potential for the system.

1. USE OF THE EPRC PRIOR TO STARTING THE ADMISSIONS PROCESS

   A. Educational Planning Course. Many adults are returning to school without vocational plans or career goals. The Educational Planning Course has been designed to help adults identify a career goal and translate this into career plans. The course materials consist of three modules and an Instructor's Guide. Modules A and B are used as part of the self-assessment process and Module C is used as a self-instructional module in preparing for employment. The Instructor's Guide gives step-by-step procedures for the instructor to follow in presenting each module. The EPRC is explained as part of Module A.

   This course has been designed as an LLP intervention and a training package has been developed to provide information and materials to train staff who will utilize the curriculum materials.

2. USES OF THE EPRC DURING THE ADMISSIONS PROCESS

   A. Career Counseling During Admissions Process. There are three specific ways counselors can help adults and other students use the EPRC during the admissions process.

      1. Counselors can help the undecided student through self-assessment activities and relate this knowledge of self to the world of work. For example, the counselor can give a student the Work Activities Checklist, use the Keysort Deck to identify Worker Trait Groups related to his/her preferred work activities, use the Worker Trait Group Guide for detailed explanations of those WTGs he/she wanted to explore, and use the School Subject-Occupational Index and the College Major-Occupation Index to identify fields of study related to his/her preferred Worker Trait Groups. The Index would also help to identify occupations related to a particular major or field of study. Then the Dictionary of Occupational Titles (DOT) could be used to read about specific occupations. And a complete listing of occupations belonging to a specific Worker Trait Group can be found in the Guide for Occupational Exploration (GOE) at the end of each Work Group description.

      2. In addition, adults may want to explore occupations related to their field of interest when not admitted to their preferred program. To do this, they would explore the Worker Trait Group that particular field of interest was in. For example, the nursing program falls into WTG 10.02, Nursing and Therapy Services. They can read 10.02 in the Worker Trait Group Guide and look at the occupations related to this field listed at the end of the WTG description. In addition, they can use the GOE and see a complete field of interest.

3. Adults or other students come in for counseling and have an occupational preference with little or no background. For a better understanding of this preferred occupation, the counselor can refer them to work with the librarian in the EPRC. Through this type of exploration, they will also be exposed to other related occupations and this will help to broaden their horizons.

B. Individual Exploration. When students have an interest in using the EPRC to explore on their own, there are specific things the librarian can do to help them get started.

1. The librarian should provide an orientation to the EPRC. This could be accomplished through having the student view the filmstrips "Introduction to the Career Information System" and "Using the Career Information System." Or the student could read "Touring the Career Information System" found on pages 3-23 of the Career Information System Guide.

2. Then, the student could use the browsing technique to start his/her exploration. For example, a student could browse through the Worker Trait Group Guide and, based on the detailed descriptions, identify the ones for further exploration.

3. A student could also browse through the Alphabetical Card File and, based upon a specific occupational title, explore all resources in the EPRC related to that occupation.

C. Occupational Exploration. After a student has been accepted and assigned an academic advisor, the EPRC can be used by the student under the direction of the advisor to explore the implications of program requirements and specific occupational outcomes related to the major. Empowering the student to articulate personal and career goals in terms of specific possibilities gives having goals credibility. This process can be repeated periodically and will take on greater meaning as the student develops a greater command of the knowledge and skills essential for occupational completion.

3. USES OF THE EPRC AFTER MATRICULATION

A. Orientation Course. This approach can be used to key into specific areas; for example, nursing, business administration, or clerical. Three class periods can be used for the following activities.

1. First class period show the filmstrips "Introduction to the Career Information System" and "Work Activities." Have students take the Work Activities Checklist.

Second class period have students identify WTGs related to their preferred Work Activities following instructions on page 2 of the checklist. Have students go to the EPRC to explore their

identified WTGs in the Worker Trait Group Guide keeping a list of the ones they want to explore further.

Third class period have students identify occupations related to their preferred WTGs using the occupations listed at the end of each WTG description in the guide and the complete listing at the end of each Work Group in the GOE. Have them explore specific occupations by going to the Vertical File and Worker Trait Group Notebook to Occupational Information. As they explore, have them prepare an occupational information summary sheet (see Appendix D for an example).

2. As an alternative, the Ohio Vocational Interest Survey (OVIS II) could be given and results used for further exploration. (Published by the Psychological Corporation, 7500 Old Oak Boulevard, Cleveland, Ohio 44310, 216/234-5300.)

B. Support for Specific Programs and Courses for Students. Instructors may use the following suggestions for students to explore occupational information for a specific academic course.

1. Identify specific occupations related to a subject area using the School Subject-Occupation Index and read the DOT definitions for each occupation. See DOT introduction, page xvi, for a breakdown of the component parts of the DOT definitions and identification of the task element statements. Select one or more of the task element statements and develop a list of the specific subject matter content and skills taught in a course that relates to performing the task element. Even though advanced training may be required to perform the task successfully, the course can provide the basic knowledge and skills to enable students to explore the occupation and related areas of work.

2. Study the task element statements for several occupations in the same occupational group. An occupational group consists of those occupations in the DOT with identical digits in the first three numbers of the nine-digit DOT code.

Note: (1) the occurrence of the same or similar task elements across several of the occupations found in the occupational group, and (2) the various combinations of task elements among the occupations found within the group. As you move to other occupational groups found in the same section of the DOT (similar first two digits), the content knowledge is usually applied in a different way and new content knowledge is added. Developing an understanding of these relationships helps to show the linkage that exists between a subject and a wide range of occupations.

3. Develop guidelines for outside resource persons to use in preparing to speak to students about their occupations. These presentations can be directed toward demonstrating the rationality or thinking process, work values, and skills related to the subject that contribute to performing the work tasks. An example of such a presentation would be: a physician verbalizing a diagnosis of a patient's health problem that involves a discussion of the proper functions of organs; possible reasons for malfunctioning; the step-by-step reasoning followed in the diagnosis; evidence considered; conclusions drawn; treatment recommended based on assessment of the general condition of the patient; expectation for cure; and plan for monitoring the progress of recovery. Such guidelines can also be used with engineers, lawyers, nurses, garage service managers, etc., in planning and delivering similarly structured presentations involving their work.

4. Start with a WTG related to a subject area and use the data found in the WTG Guide's Qualification Profile (QP) to develop more detailed information on how the general qualification statements in the QP relate to the subject area. For example:

   (a) Work activities - There are ten basic Work Activities (WA) that describe what workers do in all occupations. These are stated in terms of basic research constructs that differentiate among the WTGs based on the important work activity factors and patterns of these factors. The ten Work Activities are defined in Appendix A (pages 408-409) of the WTG Guide. The WTG 02.02, Life Sciences QP (page 60), indicates that WA factors 1, 6, 7, and 8 relate to the occupations on page 61. Students can take each of these WA factors and develop ideas and examples of the specific ways the subject relates to the occupations related to the WTG. A "Work Activities" filmstrip and checklist are available for this learning experience.

   The same approach can be used for each of the other categories found in the QP. The underlying principle related to work varies with each QP category and provides a new, yet related, frame of reference in which to examine work. The other categories are:

   (a) Work situations - There are ten basic types of situations to which workers must adapt. These describe the varying circumstances under which work is done in an occupation. These can be used to consider the competencies and responsibility associated with use of subject matter in an occupation. Appendix B of the WTG Guide (pages 410-411), a "Work Situations" filmstrip, and checklist are available for this learning experience.

(b) Worker functions - Appendix C of the WTG Guide (pages 412-415). In this case do not use the Low-Average-High ratings presented in the QP. Use the middle three digits found in the nine-digit DOT number following each occupation listed in the orange box at the end of each WTG QP, i.e., WTG 02.02, Biologist, 041.061.030. These numbers show the highest level of worker functioning in relation to D-Data, P-People, and T-things. The Data category specifies the level of involvement workers have with subject matter content; the People category indicates the level of interpersonal skills involved; while Things describe the level of skill involved in the set-up or operation of equipment or use of tools.

(c) Physical demands - This describes the normal requirements associated with work (see #5 below). Also, preference for levels of physical activity vary with age and health considerations. Appendix D of the WTG Guide (pages 416-418), and a filmstrip "Working Conditions and Physical Demand," are available for this learning experience.

(d) Working conditions - These address the physical surroundings of the worker and are very important in many occupations. Appendix E of the WTG Guide (pages 419-420), and a filmstrip "Working Conditions and Physical Demands," are available for this learning experience.

(e) Aptitudes - Students already have understanding of their verbal and numerical aptitudes based on school experiences. There are nine more aptitudes that are related to education and work that are not understood. Appendix F of the WTG Guide (pages 421-422), two filmstrips "What are Aptitudes?" and "Learning About Aptitudes," and a checklist are available for this learning experience.

(f) Preparation and training - This is a useful classification for career planning and course selection. Appendix H of the WTG Guide (pages 425-427) is available for this learning experience.

5. Use the concept of job development--redesigning work to fit physical and mental limitations of individuals. Review the Physical Demands factors in the WTG Guide related to a subject to identify ways in which occupations can be modified to accommodate individuals with certain disabilities so that they can perform work tasks or perform some of the work tasks related to specific occupations listed for the WTG (see Physical Demands under [c] above.)

6. Develop guidelines for the preparation of occupational briefs and have students simulate a publishing activity. This can involve research on an occupation using the CIS and by interviewing individuals working in those occupations within the community. The information developed for each occupation can include a description of the occupation, education and training requirements, local and regional businesses and industries providing employment, wages, etc., and can involve teaching in the skills and processes related to research--writing, editing, art, layout, galley, and marketing--getting a local sponsor to underwrite printing. Individual briefs can then be made available to students as they explore an occupation or to teachers interested in relating an occupation to subject matter content or preparing students for a field trip. This approach can also be directed toward preparing additional information for the school's EPRC or in developing a classroom occupational file.

7. Students can use information about work and subject matter content as the framework to investigate the process of occupational socialization--how the nature of work influences and shapes one's intelligence, personality, career, and life.

8. Conduct industry field trips for a specific course (math or science) or combinations of courses (math and science) to examine a wide range of occupations such as engineering in a large corporation or the medical specialties found at a hospital or medical service facility.

9. Conduct occupational field trips for a specific course to examine in-depth the work performed by one or more individuals working in the same occupation. Prepare students to inquire not only about what the worker does, but also about the importance of the subject in doing the work, the competence required by the worker, responsibility involved in doing the work, etc. The Work Situations factors listed in the WTG Guide for the occupation provide a general framework for developing questions. Also, the D-P-T levels can be used as the basis for inquiry into the complexity involved in the occupation (see worker functions presented under [b] above).

10. Use a scholar, leader, performer, or artist in your subject area as the focus of study. This can be an effective means of demonstrating the integration of knowledge about work with your subject area. Students can analyze the individual's mastery of the subject as it relates to his/her early training, experience, processes used in working, and specific accomplishments. By examining the person's life in terms of the concepts and language about work (occupation and worker characteristics), students will gain greater facility for relating these ideas to their own careers. This type of activity can help students:

(a) Appreciate the importance of work in one's life.

(b) Gain insight into the career development process.

(c) Understand the relevance of the subject in their own lives and careers.

(d) Discover the unifying elements and organizing principles relating to knowledge about work.

All of the previous activities can be implemented although your current occupational resources are arranged by another structure other than the CIS WTG arrangement. (See Appendix E for details.)

Appendix A:

Suggested Materials for the Educational Planning Resource Center

SUGGESTED MATERIALS FOR THE EDUCATIONAL PLANNING RESOURCE CENTER

Career Information System Installation Materials

Material	Order Number	Number to Purchase
Worker Trait Group Guide	67071	15
School Subject-Occupation Index	67075	5
College Major-Occupation Index	67114	10
School Subject-Worker Trait Group Chart	67081	1
Field of Study-Worker Trait Group Chart	67112	1
Worker Trait Group Keysort Deck	67083	3
Career Information System Guide	67076	10
Dictionary of Occupational Titles, 4th Ed, 1977	67106	5
Guide for Occupational Exploration, 1979	67107	2

In addition, it would be helpful to have available one copy of the latest edition of each of these reference books:

Current Career and Occupational Literacy 1977-1979, by Leonard H. Goodman. Published by The H.W. Wilson Company, New York.

Occupational Outlook Handbook. Published by U.S. Department of Labor, U.S. Government Printing Office, Washington, DC.

Encyclopedia of Careers. Published by J.G. Ferguson Publishing Company.

File System Materials

Material	Order Number	Number to Purchase
Alphabetical Card File	67080	1
WTG Index to Occupational Information	67073	1
Worker Trait Group File Content Notebook	67076	1

Operational Materials

Material	Order Number	Number to Purchase
Career Area Interest Checklist	67135	3
Work Activities Checklist	67077	3
Work Situations Checklist	67078	3
Aptitudes Checklist	67079	1

Filmstrip/Cassette Materials

Material	Order Number	Number to Purchase
College Level Filmstrips		
Career Decision-Making	2861	1
Career Interests	2862	1
Work Activities	2863	1
Work Situations	2864	1
What Are Aptitudes	2865	1
Introduction to the CIS	2866	1
Career Goals	2867	1
Career Planning	2868	1
Deciding	2869	1
Career Resource Filmstrips		
How to Use the Dictionary of Occupational Titles	67132	1
How to Use the Guide for Occupational Exploration	67132	1
Educational Planning Course Filmstrips		
Work Activities	67314	1
Working Conditions and Physical Demands	67315	1
Work Situations	67316	1
Credentials and Competencies: Get Ready, Get Set, Go!	67317	1
What Are Aptitudes	67318	1
Learning About Aptitudes	67319	1
Career Area Filmstrips		
Overview	67536	1
Artistic	67524	1
Scientific	67525	1
Plants and Animals	67526	1
Protective	67527	1
Mechanical	67528	1
Industrial	67529	1
Business Detail	67530	1
Selling	67531	1
Accommodating	67532	1
Humanitarian	67533	1
Leading-Influencing	67534	1
Physical Performing	67535	1
Instructor's Guide	67131	1

Occupational Briefs

Careers, Inc.
Box 135
Largo, Florida 33540
(subscription service available)

Chronicle Guidance Publications
Moravia, New York 13118
(subscription service available)

COPS System Career Briefs
EDITS, P. O. Box 7234
San Diego, California 92107

OCCU-FILE MINI-BRIEFS
Occupational Awareness
P. O. Box 948
Los Alamitos, California 90720

Career Booklets

Arco Publishing Company
219 Park Avenue, South
New York, New York 10003

Finney Company
3350 Gorham Avenue
Minneapolis, Minnesota 55426

New York Life Insurance Company ------ (This company will furnish free of charge a set of 15 booklets entitled "Careers in a Changing World")
51 Madison Avenue
New York, New York 10010

Butterick Publishing Company --------- (Twelve booklets organized by USOE 15 clusters)
708 Third Avenue
New York, New York 10017

Audiovisuals

Talking Handbook of American Occupations (135 cassettes)
Creative Visuals
Box 1862 K
Big Spring, Texas 79720

Modern Talking Picture Service
St. Petersburg, Florida
(Free)

C & P Telephone Company has a film library and they keep it updated. (Use is free.) You have to subscribe early in the year.

NOTE: All materials with an order number can be purchased from the address below.

Bennett and McKnight
A Division of GLENCOE Publishing Company
809 West Detweiller Drive
Peoria, Illinois 61615
309/691-4454

Appendix B:

AEL Career Information System File Plan

AEL CAREER INFORMATION SYSTEM FILE PLAN INSTALLATION GUIDE

Introduction

The AEL Career Information System (CIS) is an organization and management system for all types of career information resources. The CIS structure is based upon the 12 Career Areas and 66 Work Groups found in the Guide for Occupational Exploration, a supplement to the Dictionary of Occupational Titles, Fourth Edition. All resources for career information that can be linked with occupations or with the Area/Worker Trait Groups are processed into the System by using a standard method of classifying occupational titles according to their appropriate Worker Trait Group, and by filing and indexing the resources.

Installation of the CIS should start with setting up the Basic System. This involves entering all looseleaf occupational information that describes a single job into the System. After this stage of development has been completed, the System can be expanded by entering bound books, audiovisuals, and experience resources.

The installation guide has been designed to assist in setting up the Career Information System. It consists of two sections:

1. The first section contains step-by-step procedures for installing the Basic System.
2. The second section contains procedures for expansion of the Basic System.

It is important that the installer read the step-by-step procedures. Each step has been explained in detail and includes illustrations for further clarification.

Most of the materials needed to install the System are provided as part of the CIS package published by Bennett-McKnight Publishing Company. These materials, along with materials and equipment to be furnished by the installer, are listed below.

Materials Required for Set-up of the CIS

1. Career Information System Professional Manual.
2. 1,500 Preprinted Alpha Cards.
3. Worker Trait Group Index to Occupational Information.
4. Worker Trait Group File Content Notebook.
5. File Content Notebook Forms.
6. Dictionary of Occupational Titles.
7. Guide for Occupational Exploration.

Materials and Equipment to be Furnished by the Installer

1. Vertical file cabinet, letter size, two or more drawers.
2. 78 vertical file dividers, letter size, 3 cut metal tabs.
3. Card file, rolodex, or standard library drawer; 3 x 5. card size; minimum capacity 2,500 cards.
4. 1,500 blank index cards, 3 x 5.
5. Card file alphabetic dividers.

Installing the Basic System

Initial installation focuses on developing a basic system which is designed to accommodate single-job unbound materials.

The basic system is composed of three physical components. Four procedures are used for processing single-job unbound materials into the system.

Physical components:

1. File Content Notebook.
2. Alphabetical Card File.
3. Vertical File.

Processing procedures:

1. Coding.
2. Recording.
3. Cataloging.
4. Filing.

The Basic System is installed by following the steps listed below.

Step A. File Content Notebook

The File Content Notebook is a looseleaf notebook containing a record of all career information resources filed into the system. It is organized by 78 dividers--12 for the Career Areas and 66 for the Worker Trait Groups.

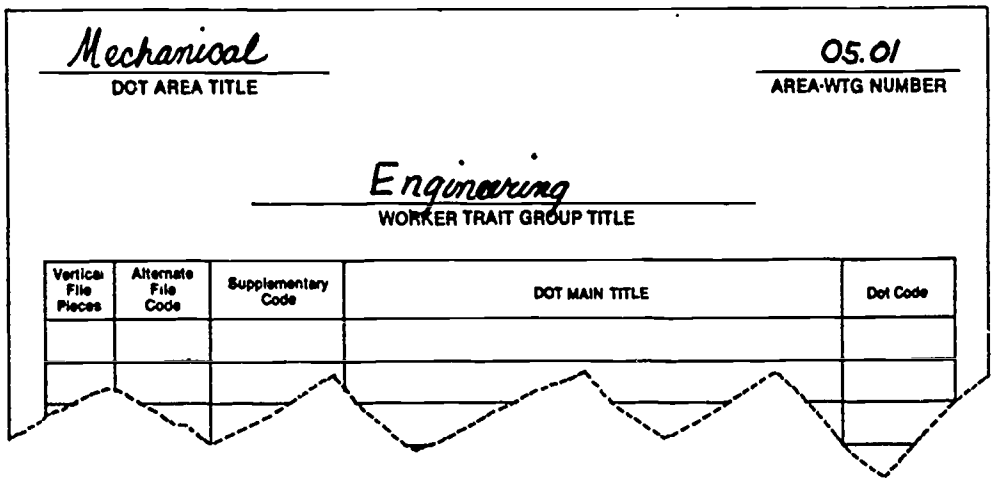
Materials provided for setting up the File Content Notebook are:

1. Three-ring notebook.
2. 12 dividers for Career Areas.
3. 66 dividers for Worker Trait Groups.
4. Printed notebook forms.
5. Area-Worker Trait Group List.

The File Content Notebook is developed by using the following procedures:

1. Prepare a notebook form for each of the 66 Worker Trait Groups. Fill in the appropriate blanks on the top margin of the form using information on the File Content Notebook dividers.

   The following is an example of a File Content Notebook Sheet with headings.


Mechanical
DOT AREA TITLE

05.01
AREA-WTG NUMBER

Engineering
WORKER TRAIT GROUP TITLE

Vertical File Pieces	Alternate File Code	Supplementary Code	DOT MAIN TITLE	Dot Code

1. Insert the prepared forms behind the appropriate Area-Worker Trait Group dividers in the File Content Notebook.

Step B. Alphabetical Card File

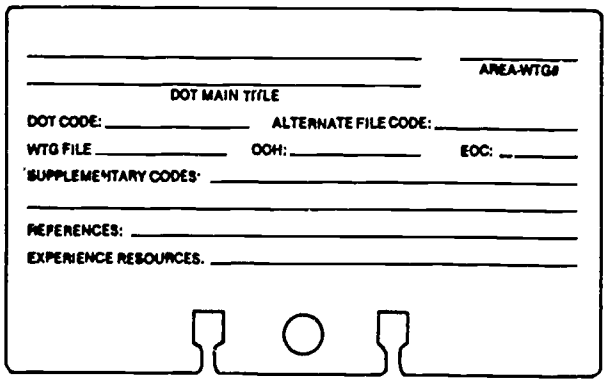
The Alphabetical Card File is an index for all occupational titles processed into the system. It has two types of cards: DOT Main Title Cards and Alternate Title Cards.

NOTE: The Alphabetical Card File is developed after materials are coded and recorded.

1. Make sure you have the following materials:

   - Card File (standard or rolodex).
   - Alphabetical dividers.
   - Cards (3 x 5):
     - preprinted Main Title Cards, and
     - blank cards for Alternate Titles.

Below is an example of a preprinted Main Title Card:


AREA-WTG#

DOT MAIN TITLE

DOT CODE: _____ ALTERNATE FILE CODE: _____

WTG FILE _____ OOH: _____ EOC: _____

SUPPLEMENTARY CODES: _____

REFERENCES: _____

EXPERIENCE RESOURCES: _____

Step C. WTG Vertical File

This file is used to store all looseleaf career information resources in the system. It is organized by 12 Career Area dividers and 66 Worker Trait Group dividers.

Materials used to develop the Vertical File are:

1. Standard vertical filing cabinet(s).
2. 78 file dividers (3 cut metal tabs).
3. Labels for dividers.

The Vertical File is prepared in the following sequence:

1. Label the file drawer cabinets using the same titles as the File Content Notebook dividers.
2. After inserting the labels, place the dividers in the drawers of the Vertical File in sequence beginning with 01 Artistic and WTG 01.01 - 01.08.

NOTE: A standard vertical file drawer accommodates approximately 400 briefs or pamphlets. If more than one drawer of the file is used for these dividers, label the drawers to show the range of Career Areas and Worker Trait Groups in each drawer.

Processing Single-Job Unbound Materials

Step A. Coding Single-Job Unbound Materials

The primary purpose of the coding procedure is to identify the Worker Trait Group to which the occupation described in the single-job unbound material belongs. Coding is crucial to the installation process. Personnel setting up the system should be thoroughly familiar with the coding procedure.

There are two procedures used in coding:

1. Identify the DOT Main Title for the occupation described in the material being processed. This is important since all materials are processed into the System by DOT Main Title.

2. Identify the Area/Worker Trait Group number to which the DOT Main Title belongs.

There are three publications available for use in coding:

1. Worker Trait Group Index to Commercial Briefs and its updated Supplement.

2. A set of labels, containing all necessary coding information, for each of the commercial briefs published by Chronical, Careers, and SRA. It also contains an updated Supplement.

3. The Alphabetical Index in the Guide for Occupational Exploration.

To use these publications, follow the directions listed for each.

1. Worker Trait Group Index to Commercial Briefs and Supplement.

   This publication is organized in alphabetical order by brief title. The brief title appears in parentheses if different from the DOT Main Title.

   - Look for the brief title being processed.
   - Once it has been located, note if it appears in parentheses. If so, write the DOT Main Title, which appears above the brief title, on the brief.
   - Use a red pen and place parentheses around the brief title. This is now called an alternate title.
   - Look under the column entitled DOT code and write the nine-digit DOT code below the DOT Main Title on the brief.
   - Look under the column entitled WTG number and write the four-digit WTG number in the upper right hand corner of the brief.

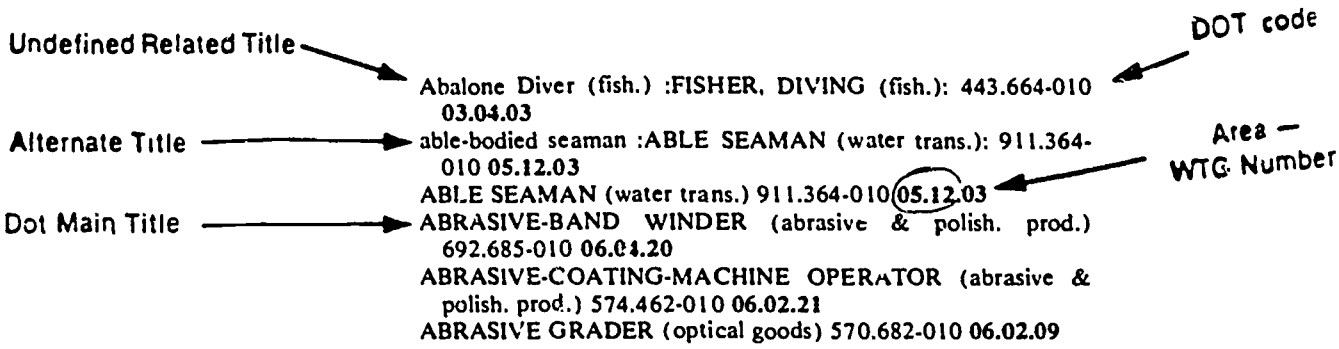
2. Labels for each set of commercial briefs and supplement.

   The labels are also arranged in alphabetical order by brief title. The brief titles appear in parentheses if different from the DOT Main Title.

- Use the set of labels for the commercial briefs being coded.
- Locate the brief title.
- Once you have located the title, peel off the label and affix it to the brief in the upper right hand corner.
- The label contains all the necessary coding information.

3. Alphabetical Index of the Guide for Occupational Exploration.

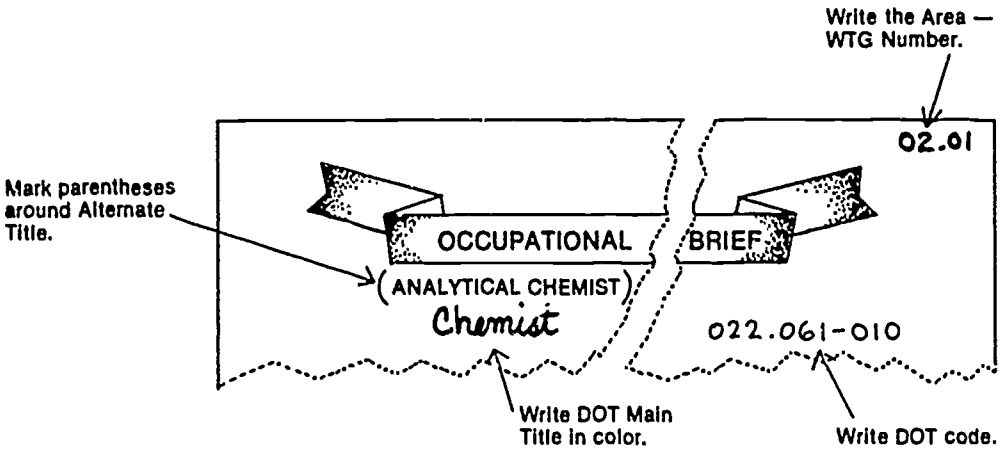
Turn to the alphabetical index in the Guide beginning on page 336. The following example illustrates the alphabetical index.



- When a title appears in all capital letters, this is the DOT Main Title.
- When the title appears in beginning capital letters, it is an Undefined Related Title. The DOT Main Title appears in all caps after the Undefined Related Title.
- When the title appears in all small letters, it is an Alternate Title. The DOT Main Title appears in all caps after the Alternate Title.
  - NOTE: Any title appearing on occupational information that is not a DOT Main Title is called an Alternate Title in the AEL Career Information System and marked with parentheses.
- Using the Alphabetical Index in the Guide for Occupational Exploration, locate the occupational title you are processing.
- Write the DOT Main Title on the brief and if the brief title is different from the DOT Main Title, use a red pen and place parentheses around the brief title.
- Write the nine-digit DOT code under the DOT Main Title.

- Identify the Area/WTG number to which the DOT Main Title belongs. This number is located at the end of each entry line in the alphabetical index as shown in the example above. However, only the first four digits are used.
- Enter the Area/WTG number in the upper right hand corner of the brief.

Below is an illustration of an occupational brief with complete coding information.



For any occupational title you cannot find, use the following procedures:

1. To identify a DOT Main Title you cannot find for occupational information being processed into the Career Information System and to determine what Worker Trait Group it fits into, use the Dictionary of Occupational Titles (DOT).

2. The first step is to determine what work activities are involved in that particular occupation.

3. Then turn to the front of the DOT, page xxxvi, to a listing of the occupational groups arranged by the three-digit OGA number.

4. Scan the Categories and Divisions to determine what occupational group pertains to the title you are looking for.

5. Then, using the first three OGA digits, turn to that section in the DOT and scan the descriptions for the various occupations.

6. Most of the time you will find the DOT Main Title and description where the material fits.

7. After you have determined the DOT Main Title, go to the GOE Index and locate the coding information.

8. In addition, if you have an occupational title you cannot locate in the GOE, scan the various indexes in the Worker Trait Group Guide to Occupational Information. Sometimes the title might be there along with the appropriate coding information.

Step B. Recording Single-Job Unbound Materials

After coding all single-job unbound materials, DOT Main Titles are recorded on the forms in the File Content Notebook. Alternate or undefined related titles are not recorded.

To record, follow the directions below:

1. Place coded materials into order by Worker Trait Group number.

2. To record a DOT Main Title, use the Worker Trait Group number on the material and open the File Content Notebook to the Worker Trait Group Form.

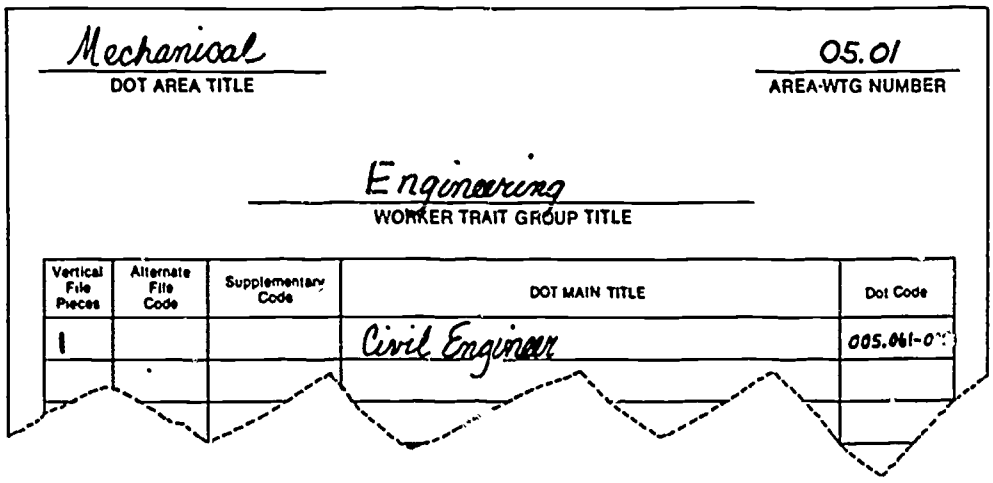
3. Enter the DOT Main Title in the fourth column.

4. Enter the DOT nine-digit code in the fifth column.

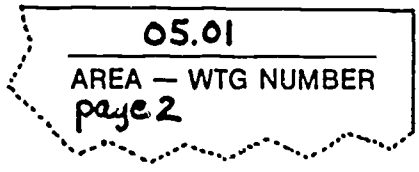
5. Enter one tally mark in the first column. A pencil should be used so that tally marks can be changed easily.

NOTE: As the recording proceeds, several occupations will be entered on most File Content Notebook forms. You should scan the fourth column as you record each piece so that you do not make more than one entry for a DOT Main Title. Make an additional tally mark in the first column when a title is already recorded.

The following example shows correct entries in the File Content Notebook:



NOTE: When a WTG form has been completed filled with occupational title entries, an additional form should have a page number designation placed under the Area/WTG number as in the following example:



Step C. Cataloging Single-Job Unbound Materials

There are two types of cards prepared for the alphabetical index. One card is the DOT Main Title Card and contains all resources in the center for that particular occupation. The second card is the Alternate Title Card which serves as a cross reference card to the DOT Main Title Card.

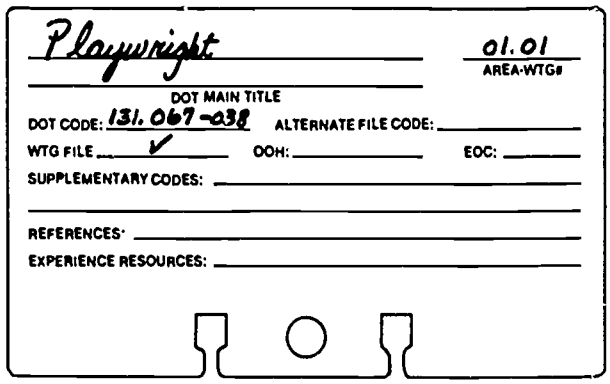
NOTE: As the system is being developed, scan the cards in the Alphabetical Card File for the titles being processed before making any cards. If a card for either a DOT Main Title or Alternate Title is already on the file, do not make a new one or add any information.

After all materials have been recorded in the File Content Notebook, prepare the alphabetical index cards. The following describes how to complete DOT Main Title and Alternate Title Cards.

1. DOT Main Title Cards.

   - Write or type the DOT Main title, nine-digit DOT code, and the Area/WTG number on the appropriate lines of the printed card.
   - Place a pencil checkmark (✓) in the WTG File blank. This indicates that material about this title is filed in the Vertical File.

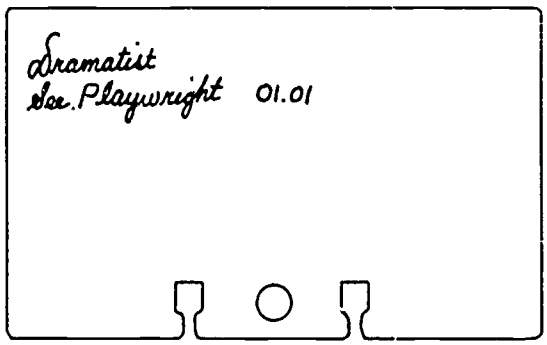
   The example below shows a DOT Main Title Card with the appropriate coding information.



2. Alternate Title Cards.

   - When coded materials include titles around which you have placed parentheses, you fill out a blank card to include this Alternate Title, as well as the DOT Main Title and Area/WTG Number.

   The following example shows an Alternate Card with the appropriate coding information.



   - Place both the DOT Main Title cards and the Alternate Title Cards in the Alphabetical Card File.

Step D. Filing Single-Unbound Materials

After coding, recording, and cataloging, single-job unbound materials are placed into the Vertical File behind the appropriate Area/WTG file dividers.

Summary

The CIS Basic System is now ready for use. Individuals can access single-job descriptions in unbound form by Worker Trait Group using the File Content Notebook or by specific occupational title using the Alphabetical Card File.

Both the File Content Notebook and the Alphabetical Card File should be placed on or near the Vertical File for easy access.

Certain policies and procedures for operating the system should be determined before opening your Basic System for use. The following matters must be addressed:

1. Will users be given check-out procedures for any information resources?
2. Will there be arrangements for copies of certain materials to be made for users to keep?
3. Will the users be encouraged to refile materials after use or will refiling be done by a limited number of trained individuals?
4. Will there be procedures for developing a record of CIS use?

The following information contains suggestions for operating and maintaining the CIS.

Operating and Maintaining the Career Information System

One person should be responsible for operating and maintaining the Career Information System. To help keep the system in order and operating properly, consideration should be given to using student help and/or parent volunteers. However, the person responsible for the CIS should supervise the upkeep of the system.

Check-Out/Check-In Procedures

If CIS materials are not to be used outside the Career Resource Center, check-out/check-in procedures may not be necessary. However, if students or others will be allowed to use materials outside the Career Resource Center or for a prolonged period of time, then a sign-out sheet should be used and a return area determined. This procedure may be necessary if the CIS location has very limited space for use of materials, and students need to go to another area to use them. For example, the CIS may be located in a small foyer and students may want to check out materials to use in a study hall.

The sign-out sheet should be a simple form containing spaces for the student's name, title of the materials, and dates checked out and in. The following is an example of a sign-out sheet:

CIS SIGN-OUT SHEET			
Name	Materials	Date Out	In

This type of form can be maintained in a card file, spiral notebook, or other binder. When the materials are returned, the form should be properly marked. This responsibility can be assigned to student assistants.

Refiling of Returned Materials

A return area should be established and clearly marked to reduce the possibility of materials becoming misplaced after they have been returned. This return area can be a wire basket or cardboard box, conspicuously placed on top of the file or on a desk or table.

Materials should not be kept out of the system for an extended length of time. Refiling of materials should occur as soon as possible. This activity may be performed by the users of the materials or by assigned personnel.

A refiling schedule should be established, determining whether materials are replaced immediately after use, at the end of a period, or at the end of a day. This schedule can be modified as the usage pattern of the CIS changes.

Materials in the filing and indexing system may become misfiled, lost, worn, or outdated. To ensure that materials are filed in the correct divisions of the WTG Vertical File, a periodic check should be made scanning the Area/WTG numbers written on the materials. This procedure might be conducted weekly or monthly, depending on how frequently the file is used.

To determine whether any materials are missing from the system, each division of the WTG Vertical File can be checked against the corresponding entries and tally marks in the File Content Notebook. A check for missing materials should be done annually or semi-annually, again depending on the

frequency with which the materials are used. As this check is being made, worn or outdated materials may be removed from the files.

Acquiring Replacement Materials

Acquiring new information for the CIS should be on a continuous basis. Watch for new materials such as a state occupational information system; in addition, when bound occupational references such as the Occupational Outlook Handbook and the Encyclopedia of Careers are revised and published, they should be purchased and their Worker Trait Group Indexes added to the system. A subscription service to the various occupational brief services should be acquired as well as free materials obtained for input into the system.

New or replacement materials should be processed as soon as they are received, or at short periodic intervals to prevent them from accumulating into quantities requiring a great deal of processing time.

Using the CIS

As students use the CIS for exploration, consider providing forms for their use in order for them to record the location of resources they are wanting to explore in addition to detailed information about occupations they are wanting to keep a record of. Also, if there is access to xeroxing facilities, it is suggested that students be notified for any information they would like to have, a copy might be xeroxed. This type of service will help prevent stealing briefs and looseleaf materials or ripping out pages from various publications.

Once the CIS is set up and operational, consider different promotional ideas. Use bulletin boards, have a career of the month, invite speakers into the Career Resource Center, or form a career club. Various activities of this sort will help keep students interested in the center and help them keep exposed to the vast sources of information concerning the world of work.

Expanding the Basic System

Now that the Basic System is set up and operational, the next step is to expand the System by adding resources such as Audiovisuals, Books, and Experience Resources.

In addition, bound references such as the Occupational Outlook Handbook (OOH) and the Encyclopedia of Careers (EOC) are included in the expansion of the System.

Any resource or activity that is specific to an occupation or related to a particular Career Area or Worker Trait Group can be used in expanding the System.

Bound References

As a first step in expanding the System, add the occupations contained in the OOH and EOC references to the Alphabetical Card File. Two references, the Occupational Outlook Handbook (OOH) and the Encyclopedia of Careers (EOC), have been indexed to the Worker Trait Groups. These two indexes are furnished with the "Worker Trait Group Index to Occupational Information."

The Worker Trait Group Indexes for the OOH and EOC are arranged by Area/WTG number. The titles listed under the Career Areas are omnibus titles and are not included in the Alphabetical Card File. Under each Worker Trait Group number, the occupational titles are listed in alphabetical order. If only one title appears for an occupational reference, it is the DOT Main Title and also the one used in the OOH. When two titles appear, the first is the DOT Main Title and the second is the OOH.

1. Start with the first DOT Main Title listed under WTG number 01.01 either in the OOH or EOC Index.

2. Check the Alphabetical Card File for this title. If there is a card in the file for this title, place a checkmark (✓) in the appropriate blank (OOH for the Occupational Outlook Handbook and the EOC for the Encyclopedia of Careers). Follow this procedure for each DOT Main Title listed in the Index.

3. If there is a DOT Main Title that does not have a card in the file, then make one. However, do not place a checkmark in the WTG Vertical File blank as this material will not be found in the Vertical File.

4. If the Index shows a DOT Main Title and a OOH Title under the Main Title, make an alternate title card for the OOH Title.

5. Check each DOT Main Title in both the OOH and EOC Indexes with the Alphabetical Card File. When this is completed, your System will be expanded to include two of the most widely used sources of bound occupational information--the OOH and EOC.

A second step in expanding the System is to process media resources into the System.

This phase of development will involve the same general physical components and processing procedures as those used to set up the Basic System. However, some modification is necessary due to the diverse nature of the resources being incorporated.

Media Resources

Media resources include books and audiovisual materials which cannot be filed into the System. These resources are processed into the:

1. File Content Notebook.
2. Alphabetical Card File.

Processing Single-Job Bound Books

Books and other bound references about a single job are processed into the System by coding, cataloging, and recording the DOT Main Title.

The following are used in processing single-job bound books:

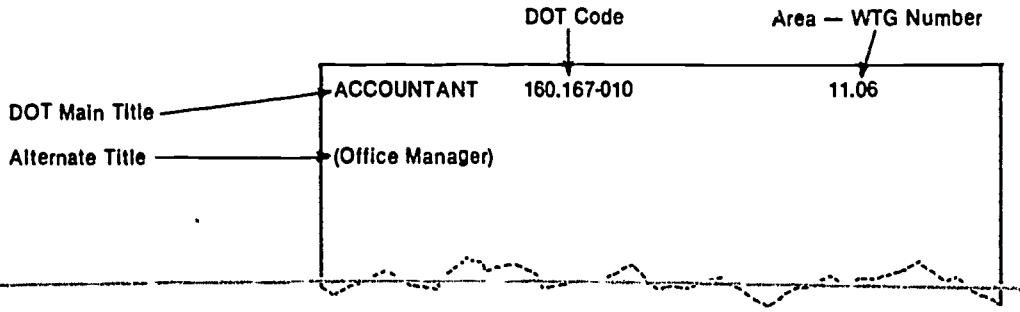
1. Guide for Occupational Exploration.
2. File Content Notebook.
3. Alphabetical Card File.
4. Bookshelves.
5. Spine labels (self-adhesive).

Step A. Coding Single-Job Bound Books

To code single-job bound books, follow these steps:

1. Identify the occupation described in the book.
2. Use the Worker Trait Group Index to Commercial Briefs or the Guide for Occupational Exploration and locate the title.
3. On the inside front cover of the bound book, write the following information:
   - DOT Main Title.
   - Title of occupation book describes if different than DOT Title.
   - DOT nine-digit code.
   - Area/WTG number.

The following information is an example of a book with the proper coding information.



Step B. Recording Single-Job Bound Books

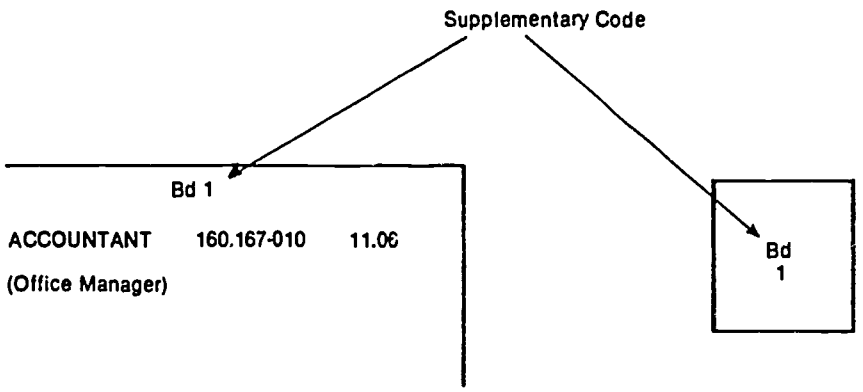
Single-job bound books are recorded in the File Content Notebook by assigning each book a supplementary code. The first book would be BD 1, BD 2, etc.

Follow the directions listed below:

1. Write the supplementary code on a spine label and affix to the book. Do this in sequence for each book being processed.

2. In addition, write the assigned code--such as BD 1--on the inside front cover of the book.

The following is an example of a book with the proper coding information:



The File Content Notebook forms are prepared for recording by:

1. Enter the word "Bound" followed by the abbreviation (BD) in parentheses, on the line entitled Division Title/Code.

2. Enter the coding information in the appropriate columns. Be sure to record the title of each book and not the DOT Main Title.

Below is an example of a File Content Notebook form properly recorded:

Bound (Bd)
DIVISION TITLE / CODE

Supplementary Code	TITLE OF MATERIAL	Location	AREA-WTG NUMBER(S)
Bd 1	What an Accountant Does	Shelf	11.06

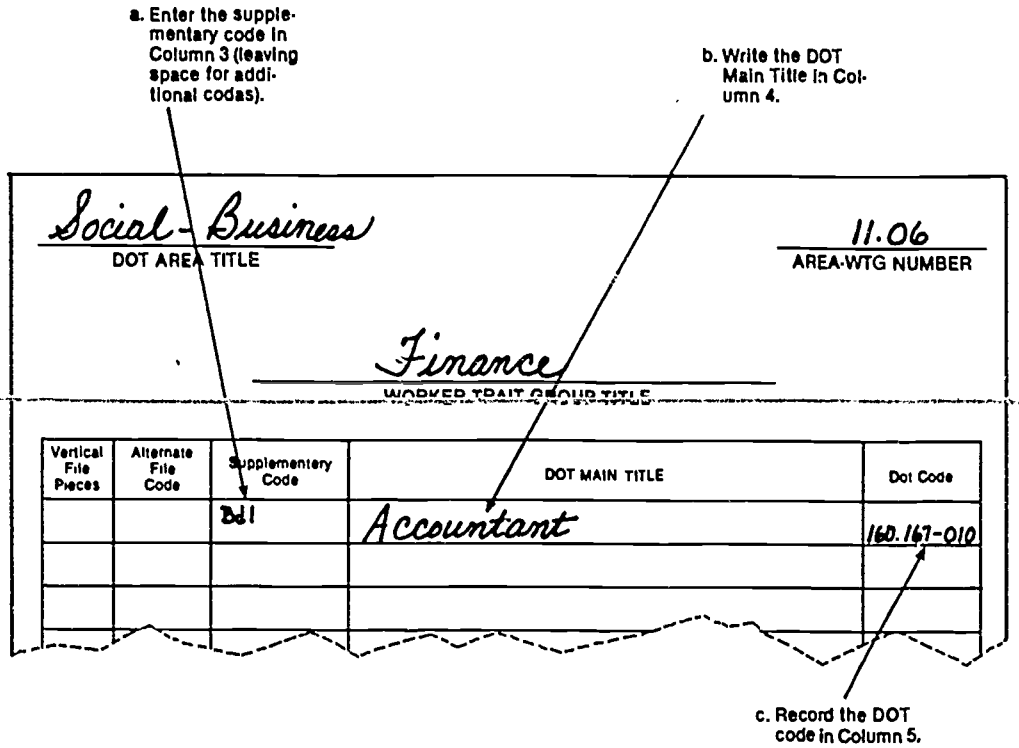
3. To complete the recording procedures, use the Area/WTG number assigned to the materials being processed and turn to that page in the Main Section of the File Content Notebook.

4. Scan the sheet for the DOT Main Title.

5. If it appears, then write the supplementary code in Column 3.

6. If it does not appear, then record the DOT Main Title, Supplementary Code, and DOT nine-digit code.

The following example shows a completed entry:



Step C. Cataloging Single-Job Bound Books

Follow the directions below to catalog single-job bound materials.

1. Scan the alphabetical cards for the DOT Main Title you are processing.

2. If there, enter the supplementary code on the appropriate blank.

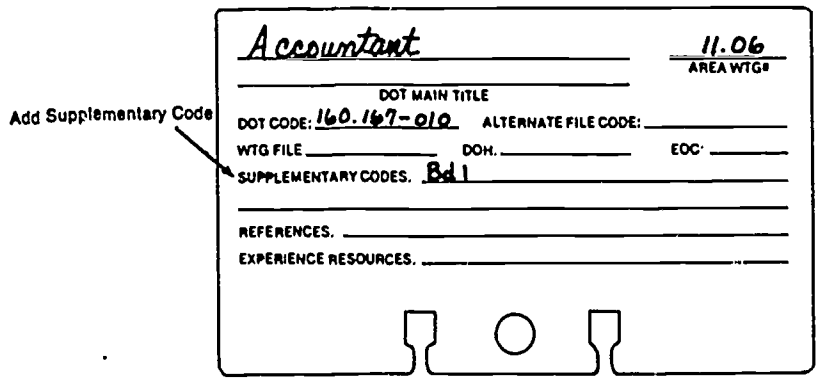
3. If there is not a card for the title being processed, make one.

4. A new card would contain the DOT Main Title, Area/WTG number, DOT nine-digit code, and supplementary code.

5. If the material being processed ha. an alternate title, be sure to make a card cross-referencing that title to the DOT Main Title.

NOTE: Only one entry card is made and placed in the Alphabetical Card File for any DOT Main Title or Alternate Title.

The following is an example of a supplementary code recorded on a DOT Main Title Card:



Step D. Storing Single-Job Bound Books

Single-job bound books are shored on shelves. Materials are shelved in order of their supplementary codes, such as BD 1, BD 2, and BD 3.

Processing Single-Job Audiovisuals

Audiovisuals about a single job are packaged in many forms, including cassettes, films, and filmstrips. Single-job audiovisuals are processed into the System by coding, recording, and cataloging the occupation described in each.

The following items are used to process single-job audiovisuals:

1. Guide for Occupational Exploration or Worker Trait Group Index to Commercial Briefs.
2. File Content Notebook.
3. Alphabetical Card File.
4. Audiovisual cabinets or racks.
5. Self-adhesive labels (2" x 4").
6. Spine labels (self-adhesive).

Step A. Coding Single-Job Audiovisuals

It may be necessary to preview the audiovisual to identify the occupation described. To code single-job audiovisuals, follow these steps:

1. Identify the DOT Main Title.

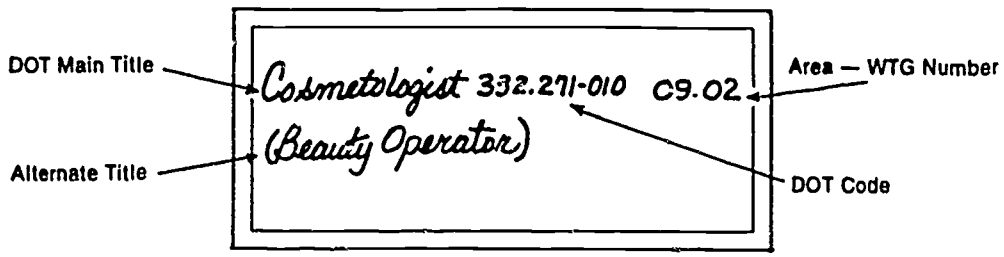
2. Identify the nine-digit DOT code.

3. Identify the Area/WTG number.

4. Write the coding information on a self-adhesive label.

5. Affix the coded label to the audiovisual being processed.

Below is an example of a properly coded label:



Step B. Recording Single-Job Audiovisuals

For recording, prepare a File Content Notebook form for each type of audiovisual to be recorded.

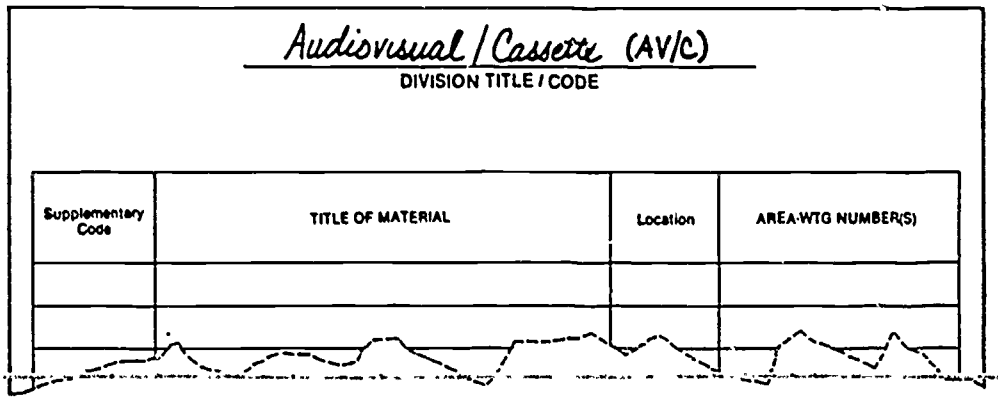
1. Prepare only the forms needed for the audiovisuals to be processed.

2. Fill in the heading and abbreviation for each type of audiovisual to be processed.

The following list of suggested titles and abbreviations for different types of audiovisuals may be used as a guide.

AUDIOVISUAL/Cassette -- Av/C
AUDIOVISUAL/Film -- Av/F
AUDIOVISUAL/Filmstrip -- Av/Fs
AUDIOVISUAL/Filmloop -- Av/Fl
AUDIOVISUAL/Record -- Av/R
AUDIOVISUAL/Tapes -- Av/T
AUDIOVISUAL/Videotape Recording -- Av/VTR

The following is an example of a form for AUDIOVISUAL/Cassette (Av/C):



Audiovisual / Cassette (AV/C)
DIVISION TITLE / CODE

Supplementary Code	TITLE OF MATERIAL	Location	AREA-WTG NUMBER(S)

Single-job audiovisual materials are recorded by assigning supplementary codes, and making entries in the main and supplementary sections of the File Content Notebook.

Other supplementary codes are assigned in sequence as Av/C2, Av/C3, and Av/C4. Apply this sequence to all other types of audiovisual materials.

Follow these directions:

1. Open the File Content Notebook to the "AUDIOVISUAL (Av)" division.

2. This division may have one or more printed forms, depending upon the different types of audiovisual materials processed.

3. Turn to the appropriate form. For example, AUDIOVISUAL/ Cassette (Av/C).

4. If there are no entries on the form, the supplementary code is Av/C1. This means that the audiovisual material is in cassette form and is the first cassette processed into the System.

The following example shows a form completed with the appropriate information.

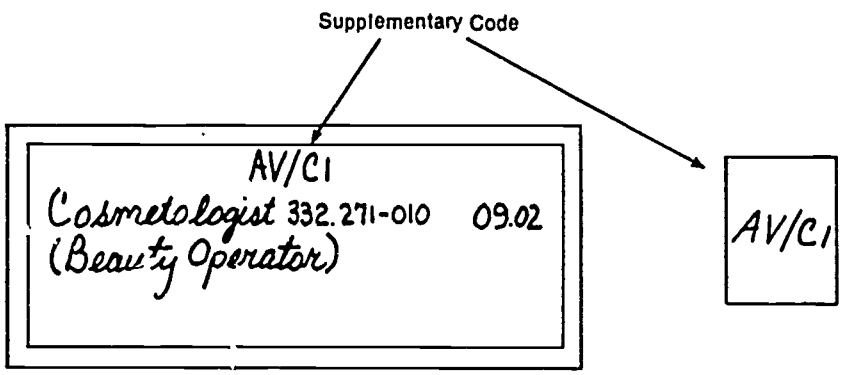
Audiovisual / Cassette (AV/C)
DIVISION TITLE / CODE

Supplementary Code	TITLE OF MATERIAL	Location	AREA WTG NUMBER(S)
AV/C1	Interview with a Beauty Operator	AV Cabinet	09.02

5. Write the assigned supplementary code on the top of the self-adhesive label.

6. A smaller self-adhesive label may be made for this code and attached to the material for storage purposes.

The example below shows the supplementary code:



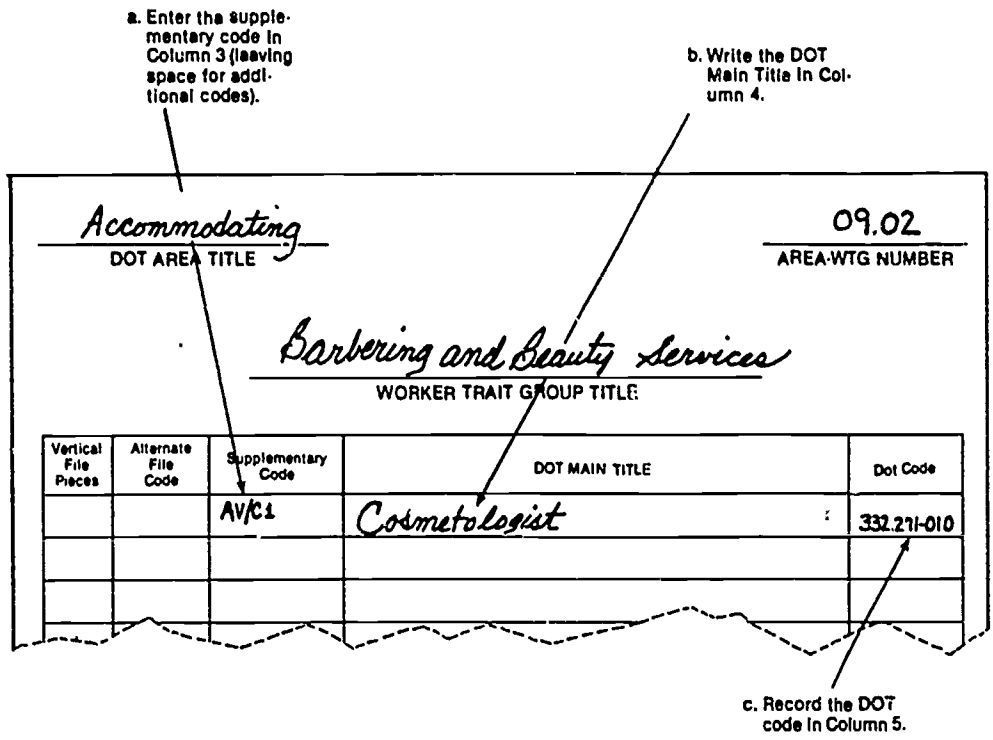
7. To complete the recording process, use the Area/WTG number assigned to the material being processed and turn to that page in the Main Section of the File Content Notebook.

8. Scan the sheet for the DOT Main Title.

9. If it appears, then write the supplementary code for the audiovisual being processed in Column 3.

10. If it does not appear, then record the DOT Main Title, supplementary code, and DOT nine-digit code.

The example below shows a completed entry:



Step C. Cataloging Single-Job Audiovisuals

Follow the directions listed below to catalog single-job audiovisuals.

1. Scan the alphabetical cards for the DOT Main Title being processed.

2. If there, enter the supplementary code on the appropriate blank.

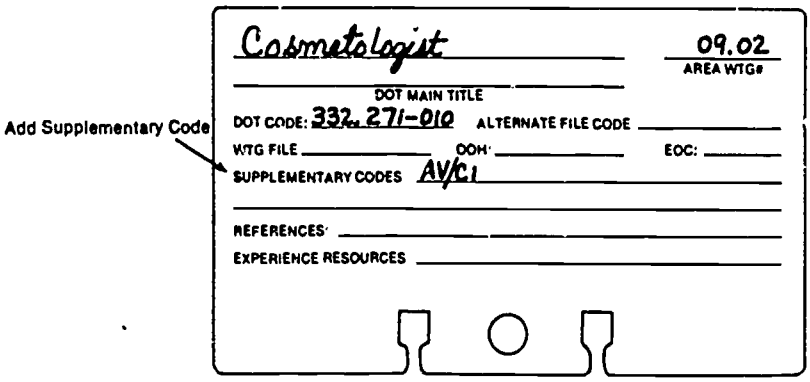
3. If there is not a card for the title being processed, make one.

4. A new card would contain the DOT Main Title, Area/WTG number, DOT nine-digit code, and supplementary code.

5. If the material being processed has an alternate title, be sure to make a card cross-referencing that title to the DOT Main Title.

NOTE: Only one entry is made and placed into the Alphabetical Card File for any DOT Main Title or Alternate Title.

The following is an example of a supplementary code recorded on a DOT Main Title card:



Step D. Storing Single-Job Audiovisuals

1. Single-job audiovisuals can be stored in cabinets or racks.

2. Materials are usually stored according to their packaging. For example, all cassettes can be kept in one cabinet, in order of their supplementary codes: Av/C1, Av/C2, Av/C3.

Omnibus Materials

Omnibus materials contain descriptions of more than one occupation. These materials come in many forms, such as briefs, books, and audiovisuals. Some omnibus materials describe several specific occupations while others describe, in general terms, a field of work or industry.

Thus, omnibus materials present a special organizational problem. Some of them may be directly linked to one of the 12 Career Areas. Others may be so general in nature that they encompass several Career Areas.

Omnibus materials can be processed into the System. There is a publication available listing all omnibus commercial briefs assigned to their appropriate Career Area.

Follow the directions listed below:

1. Review all omnibus materials to determine their usability and value.

2. Omnibus materials containing adequate and specific information about occupations or a career area should be processed.

Step A. Coding Omnibus Unbound Materials

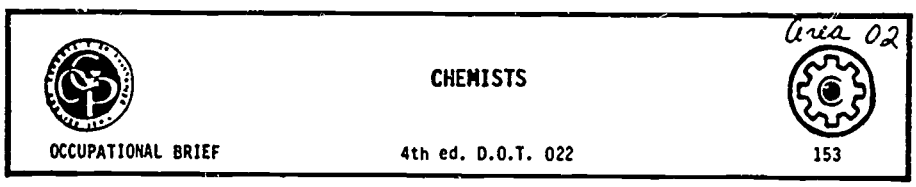
1. Scan the occupations being described in the material.

2. Read the 12 Career Area titles and and their brief descriptions in the Worker Trait Group Guide.

3. Determine and assign the material to the appropriate Career Area code.

4. Record the Career Area code across the top of an occupational brief; on a spine label for books; and on a regular label for audiovisuals.

The following example shows an omnibus brief with the appropriate coding:



Step B. Recording Omnibus Unbound Materials

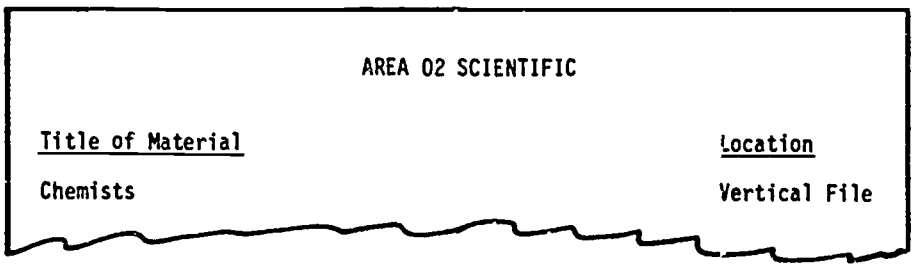
1. Develop 12 sheets of paper with two column headings:

   - Title of Material.
   - Location.

2. Punch the sheets and place one behind each Career Area title and number in the File Content Notebook.

3. After coding the omnibus unbound materials, list their titles and locations on the appropriate Career Area form.

The following example shows a Career Area form properly recorded:



4. Place the unbound materials behind the appropriate Career Area divider in the Vertical File.

5. File the omnibus books and audiovisuals by Career Area number on shelves with the other materials.

Experience Resources

Experience resources such as work experiences, career clubs, and resource people are processed into the System through an indexing procedure.

The procedure for processing experience resources includes: coding, recording, and cataloging.

Step A. Coding Experience Resources

1. Prepare a worksheet listing all occupational titles and their sources.

2. After making this worksheet, proceed with coding, following these steps:

   - Identify the DOT Main Title.
   - Identify the nine-digit DOT code.
   - Identify the number of the Area/WTG.

The following illustration shows a sample worksheet which contains all the coded information for community resource people:

SAMPLE WORKSHEET

Resource Persons Worksheet

Occupational Title	Dot Code	Area/WTG	Source
Photographer, Still	143.062-030	01.02	Earl White White's Photos City 111-0101
Floral Designer	142.081-010	01.02	John Shdeed City Floral Co. City 100-1111
Display Designer	142.051-010	01.02	Sara Boast Peeks Mercantile City 110-1110

NOTE: Since this is a list of people resources, students should not have direct access to it, but should go through the person responsible for coordinating contacts and scheduling.

Step B. Recording Experience Resources

Follow the directions listed below:

1. Prepare a notebook divider with the title "Experience Resources."
2. Prepare 66 notebook forms, one for each Worker Trait Group.

The following example shows a notebook form with appropriate headings:

AREA/WTG NUMBER

WORKER TRAIT GROUP TITLE

DOT MAIN TITLE	EXPERIENCE CODE	DOT CODE

3. Insert the divider and forms into the notebook entitled "Worker Trait Group Index to Occupational Information."

4. Record the DOT Main Titles on the appropriate Worker Trait Group form using the information from your worksheet.

5. Assign an experience resource code to represent the type of experience available. Use the following code suggestions as a guideline.

   Code Suggestions:

   Work Experience -- WE
   Resource Person -- RP
   Career Club -- CC
   Field Trip -- FT

6. List the experience resource codes selected for use on the "Experience Resource" divider.

The following shows an example of a completed experience resource form with the appropriate information:

SAMPLE FORM

01.02
AREA – WTG NUMBER

Visual Arts
WORKER TRAIT GROUP TITLE

DOT MAIN TITLE	EXPERIENCE CODE	DOT CODE
Display Designer	RP, WE, FT	142.051-010
Floral Designer	WE, RP	142.081-010
Photographer, Still	RP, CC	143.062-030

CODE SUGGESTIONS

Work Experience	WE
Resource Person	RP
Career Club	CC
Field Trip	FT

Step C. Cataloging Experience Resources

Follow the directions listed below:

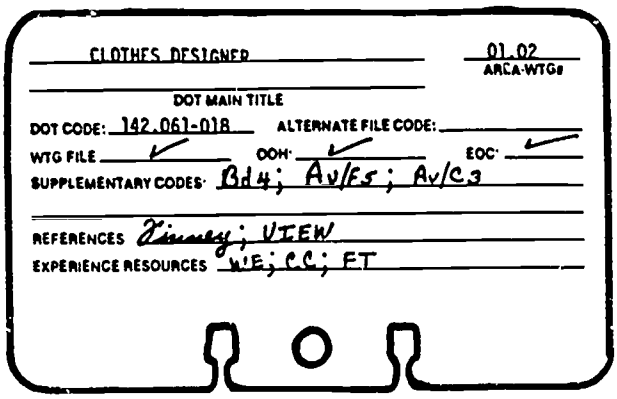
1. Scan the alphabetical cards for the DOT Main Title being processed.

2. If there, record the experience resource code in the appropriate blank.

3. If there is not a card, make one. A new card would contain the DOT Main Title, Area/WTG number, DOT nine-digit code, and experience code.

4. If the experience resource being processed has an alternate title, make an alternate title card cross referencing that title to the DOT Main Title.

The following example shows an alphabetical card containing experience resource codes.



Appendix C:

Educational Planning Resource Center Station Approach

EDUCATIONAL PLANNING RESOURCE CENTER
STATION APPROACH

Many people who seek occupational information usually do so by a specific occupational title. However, for meaningful career resource information, individuals need to identify and use interests, temperaments, abilities, goals, and aspirations and then assess career information based upon these characteristics.

To accomplish this, the approach recommended here is to set up individualized career exploration "Stations" in a Educational Planning Resource Center. Basically, this approach provides for the utilization of resource materials on a self-instructional basis. Each Station represents a separate mode for helping an individual understand himself/herself in categories related to the world of work and to link this knowledge to available career information resources.

In order to have a Station approach, the career resources must be organized and linked to the AEL Career Information System (CIS). The CIS provides for the organization and management of career information resources utilizing an arrangement of occupations into common clusters based upon worker characteristics related to successful job performance. These clusters are called Worker Trait Groups (WTGs) in the AEL Worker Trait Group Guide and Work Groups in the Guide for Occupational Exploration published by the Department of Labor.

The following Station activities are provided to assist librarians or resource center personnel in working with students interested in career

or occupational exploration.* This employs a Station approach to introduce individuals to resource materials and requires a space containing a writing surface, materials used, and a wall surface for directions/instructions.

Although it is recommended that students go through all four Stations, they do have the option of using only one or two, i.e., if a student just wants to know how to use the EPRC, he/she would go to Station 3 only. Below is a listing of the Stations with a brief description of each.

Station 1: Career Areas. Introduces the 12 Career Areas for identifying related Worker Trait Groups for exploration.

Station 2: Self-Instructional Exploration. Helps a student identify his/her interests and temperaments and then relate this knowledge to Worker Trait Groups.

Station 3: Using the Educational Planning Resource Center. Introduces and explains how to use the materials in the EPRC.

Station 4: Choosing a College Major. Helps a student identify and explore college majors and related occupations.

---

*Booklets and activity sheets would need to be reproduced for student use at Stations 2 and 3. Other materials would be purchased from Bennett-McKnight Publishing Company, 809 West Detweiller Drive, Peoria, Illinois 61615.

STATION 1: CAREER AREAS

General Information: This activity serves as a browsing technique to help individuals gain a better understanding of the Career Areas and related Worker Trait Groups.

Materials Needed:

1. Filmstrip "Career Areas"
2. Projector
3. Worker Trait Group Guide

Instructions:

1. View the filmstrip "Career Areas."
2. Use the Worker Trait Group Guide and read the brief descriptions for the 12 Career Areas. For the ones that interest you, read the related Worker Trait Groups.
3. At this point, you may go to the next Station for self-exploration activities, or Station 3 and learn to use the EPRC to explore occupations related to the Worker Trait Groups that interest you.

STATION 2: SELF-INSTRUCTIONAL EXPLORATION

Materials Needed:

1. Filmstrip "Work Activities"
2. Filmstrip "Work Situations"
3. Projector
4. Self-Instructional Exploration Workbook
5. Work Activities Checklist
6. Work Situations Checklist
7. Worker Trait Group Keysort Deck

Instructions:

1. Complete the activities in the "Self-Instructional Exploration Workbook."
2. After completing the workbook, go to the next Station to learn how to use the EPRC to explore occupations related to Worker Trait Groups you have identified.

Work Activities Checklist

+

Work Situations Checklist

+

Worker Trait Group Keysort Deck

Identifying Worker Trait Groups Related to Work Activities and Work Situations

A. Use the Work Activities Checklist and follow the instructions for I "Learning About Work Activities" and II "Rating Your Preferences for Work Activities." Keep your completed checklist.

B. Use the Work Situations Checklist and follow the instructions for I "Learning About Work Situations" and II "Rating Your Preferences for Work Situations." Keep your completed checklist.

C. Now you are ready to identify Worker Trait Groups related to your preferences for Work Activities and related to Work Situations you may wish to avoid. To do this activity, you will need a deck of Keysort Cards.

But first, you need to know something about the Keysort Deck.

REMOVE THE DECK OF CARDS AND THE SORTING NEEDLE FROM THE BOX.

Examine the cards and note that:

THERE ARE 66 CARDS. One for each Worker Trait Group. These groups of occupations are organized by worker traits (personal characteristics).

THE UPPER LEFT-HAND CORNER OF EACH CARD IS CUT OFF. The other corners are rounded. This serves as a visual check to make sure all cards are facing in the right direction and are not updside down.

NOTE THE BLACK PRINT. The Worker Trait Croup is given at the upper left. It will always be a 4-digit number with a decimal as shown. The title and brief description of WTGs are followed by a listing of subgroups.

NOTE THE BLACK BORDER. Each section in black represents one of the worker traits around which the WTGs are organized. Find the section for Work Activities. The numbers in that section represent the ten types of activities.

NOTE THE HOLES AND NOTCHES. Each notch identifies a Work Activity (or other factor in the other sections) that relates to that particular Worker Trait Group. When you stick the sorting needle through a particular numbered hole, the cards (WTGs) related to that factor will fall from the deck because of these notches.

YOU CAN NOW USE THE KEYSORT DECK TO EXPLORE FOR WORKER TRAIT GROUPS USING YOUR WORK ACTIVITY PREFERENCES. FOLLOW THE STEPS ON THE NEXT PAGE.

D. Work Activities

1. Line up the entire deck with the cut corner at the upper left. Strike the bottom edge of the deck against a flat surface to line up the cards and holes. Hold the deck in that position.

2. Refer to your completed Work Activity Checklist and note the number for your first choice. Insert the needle in that number in the WORK ACTIVITY SECTION of the deck and close the catch.

3. Hold the side of the deck with one hand and raise the needle with the other. As you gently shake the deck, CARDS WILL FALL. Check the hole through which the needle goes to see that ALL notched cards have fallen from the needle.

   PLACE THE CARDS THAT HAVE FALLEN FROM THE DECK FACE UP IN YOUR "KEEP STACK." CONTINUE SORTING, USING THE CARDS LEFT ON THE NEEDLE.

4. Remove the cards from the needle and insert the needle in the number for the activity you rated as 2nd choice. Sort as described in Step 3.

   PLACE THE CARDS THAT FALL IN YOUR "KEEP STACK." CONTINUE SORTING, USING THE CARDS LEFT ON THE NEEDLE.

5. Remove the cards from the needle and insert the needle in the number for the activity you rated as 3rd choice. Sort as described in Step 3.

   PLACE THE CARDS THAT FALL IN YOUR "KEEP STACK."

   THE CARDS THAT NOW REMAIN ON THE NEEDLE ARE NOT RELATED TO YOUR PREFERRED WORK ACTIVITIES. REMOVE THEM FROM THE NEEDLE AND LOOK AT EACH TO SEE IF YOU WANT TO ADD IT TO YOUR "KEEP STACK" BECAUSE IT INTERESTS YOU. THOSE YOU DISCARD SHOULD BE PLACED IN THE BOX. YOU NO LONGER NEED THEM.

E. Work Situations

1. Use the cards you have in your "KEEP STACK" from sorting on Work Activities.

2. Refer to your completed Work Situations Checklist and note the number for your 8th choice. Insert the needle in that number in the WORK SITUATIONS SECTION and close the catch.

3. The cards that fall from the deck represent Worker Trait Groups that have Work Situations YOU WOULD LIKE TO AVOID. Place the cards that fell from the deck in a special "HOLD STACK."

4. Use the cards remaining on the needle and sort on the number representing your 9th choice. Place the cards that fall from the deck in your "HOLD STACK."

5. Use the cards remaining on the needle and sort on the number for your last choice. Place the cards that fall from the deck in your "HOLD STACK."

6. The cards remaining on the needle are your final "KEEP STACK." These cards represent Worker Trait Groups that contain your preference for Work Activities, but also are free from Work Situations you wish to avoid.

7. Pick up the cards in your "HOLD STACK." Review these cards and decide if you want to discard them because of the Work Situations involved or if you want to return them to your "KEEP STACK."

8. In the blanks provided below, list the Worker Trait Group numbers from your final "KEEP STACK." RETURN ALL KEYSORT CARDS TO THE BOX.

Use your recorded numbers and look up the detailed descriptions for each in the Worker Trait Group Guide. The guide is arranged by Area/Worker Trait Group number.

YOU ARE NOW READY TO ENTER THE EDUCATIONAL PLANNING RESOURCE CENTER TO EXPLORE OCCUPATIONS RELATED TO YOUR FINAL SELECTION OF PREFERRED WORKER TRAIT GROUPS.

F. Go to Station 3 for instructions on using the Educational Planning Resource Center.

STATION 3: USING THE EDUCATIONAL PLANNING RESOURCE CENTER

At Station 1 you identified Career Areas that interested you. You further clarified your interests by examining and identifying Worker Trait Groups you would like to explore in-depth. Your Educational Planning Resource Center contains information about occupations related to the Worker Trait Groups of your choice. This Station will show you how to use materials in the EPRC to explore those occupations by leading you through a detailed exploration of a Worker Trait Group of your choice. You will then know how to use the center to explore other Worker Trait Groups and related occupations.

Use this booklet and a Worker Trait Group Exploration Record. The booklet provides instructions and explanations. You will record information on the Exploration Record as directed. Keep the booklet and Exploration Record with you as you locate and use various materials in the resource center.

- Select a Worker Trait Group that you would like to explore from among those you identified in Station 1 or 2.
- Enter the four-digit number and the title of the Worker Trait Group in the spaces at the top of the Exploration Record.
- Turn the page and follow the directions in this booklet.

Worker Trait Group Exploration Record

WTG # ____.____ WTG Title _____

Occupation	DOT Code	Vert-ical File	OOH Page	EOC Page		

Worker Trait Group Guide

Locate the Worker Trait Group Guide. This book is gold with brown lettering on the cover.

Locate the description of the Worker Trait Group (WTG) of your choice. WTG numbers are in large print at the top of each page to help you locate descriptions quickly.

Locate the list of occupations in the orange box at the end of the WTG descriptions.

- Read the list and select those titles that interest you.
- Record the occupational titles you choose, along with the nine-digit number (DOT Code) on your Worker Trait Group Exploration Record.
- Turn this page and use the occupations you have recorded to start your exploration.

File Content Notebook

Locate the File Content Notebook. It is a three-ring gold notebook with brown lettering on the cover.

Examine the dividers in the notebook. There is one for each of the 12 Career Areas and 66 Worker Trait Groups. Behind the dividers you will find a listing of career resources filed in our Educational Planning Resource Center.

The page(s) list occupational titles when there is one or more briefs or pamphlets in the file where looseleaf materials are kept. The tally marks (𝍸 I) indicate how many separate pieces of information are filed for each occupational title.

- Locate the divider for the WTG you are exploring.
- Among the occupational titles listed in the notebook, look for the titles you have recorded on your Exploration Record.
- Record the tally marks in the Vertical File column of your Exploration Record to indicate the number of pieces filed.

NOTE: If you cannot find an occupational title you selected among those listed on the File Content Notebook page, it means that there is nothing filed for that title.

You may find some occupational titles listed that you would like to add to your list for exploration. Do so, if you like.

Worker Trait Group Exploration Record

WTG # 02.02 WTG Title Life Sciences

Occupation	DOT Code	Vert-ical File	OOH Page
Animal Scientist	040.061-014	𝍸 I	

Worker Trait Group Index to Occupational Information

Locate the Worker Trait Group Index to Occupational Information. It is a beige colored three-ring notebook with brown lettering on the cover.

Examine the contents of the notebook. Note that it contains several Indexes which relate Worker Trait Groups to other occupational information resources.

- Turn to the Index for the Occupational Outlook Handbook (OOH).
- Use the WTG numbers in the left column and locate the WTG you are exploring.
- Record the page numbers (right column) in the OOH Page column on your Exploration Record.

NOTE: The OOH does not include all occupations in a Worker Trait Group. You may not find all of the occupations you have listed.

You may find some occupations listed in the OOH Index that you would like to add to your list for exploration. Do so, if you like.

- Turn to the Index for the Encyclopedia of Careers (EOC). This Index is organized like the OOH Index.
- Use it in the same way and record page numbers in the EOC Page column of your Exploration Record. Also, add occupations to your list if you find ones that interest you.

Worker Trait Group Exploration Record

WTG # 02.02 WTG Title Life Sciences

Occupation	DOT Code	Vert-ical File	OOH Page	EOC Page
Animal Scientist	040.061-014	HH 1	128	204

Vertical File

Locate the Vertical File or other source where looseleaf occupational information is filed in your Educational Planning Resource Center.

Note that briefs and pamphlets about occupations are stored in the folders behind dividers marked with WTG numbers to which the occupations belong.

- Locate the divider for the WTG you are exploring.
- Remove the folder.
- Browse through the materials to locate the information about the occupations listed on your Exploration Record.
- Try to find all of the pieces about each occupation. Remember that the tally marks you entered on your Exploration Record indicate how many pieces of information are filed for each occupation. Don't be satisfied in reading just one description of an occupation. Other pieces may give you new information.

NOTE: If you can't find a piece for every tally mark, do not be concerned. Some pieces may have been borrowed or lost.

As you search the folder for the occupations you listed on your Exploration Record, you may find others that you would like to read about. Take the time to do so. You may want to add them to your list for exploration.

You may want to stop exploring some occupations because of the information you find. If so, you can draw a line through that occupation listed on your Exploration Record.

Occupational Outlook Handbook

Locate the Occupational Outlook Handbook. It may be a paperback or a hard-bound book, depending upon which your school purchased. The color on the covers varies with each edition, so you will have to locate it by title.

- Turn to the OOH pages you listed on your Exploration Record. As you read the information about each occupation, note particularly the Employment Outlook and Earnings sections. The OOH provides the most up-to-date information about these topics because it is published every two years.
- Note the Sources of Additional Information section at the end of each description. You should consider writing to these sources for additional information and occupations that you are seriously considering.

NOTE: Not all occupations have entire articles devoted to them. The occupation you are exploring will appear on the page referenced, but it may be a part of an article about a group of occupations or an industry.

Encyclopedia of Careers

Locate the Encyclopedia of Careers (EOC). It is a large book. The color on the covers varies with each edition, so you will have to locate it by title. Be sure you get Volume II.

- Use the EOC in the same way that you used the OOH. The EOC page numbers you listed on your Exploration Record will help you find the information.

Guide for Occupational Exploration

Locate the Guide for Occupational Exploration (GOE). It is a large blue book with white and black printing on the cover. It may be paperback or hardbound.

The GOE is organized like the Worker Trait Group Guide with 12 Career Areas and 66 Work Groups (WG).

- Locate the description for the WTG you are exploring by using the WG numbers at the top of the pages in the GOE.
- Scan the WG description. Note that it contains information that is similar to what is in the Worker Trait Group Guide. However, the GOE does not contain a Qualifications Profile.
- Examine the list of occupations at the end of the WG description.
- Note that the list is much longer than the one in the Worker Trait Group Guide. The GOE also organizes the occupations by sub-groups and adds two digits to identify the sub-group to which an occupation belongs. (05.01.02 identifies the second sub-group in WG 05.01)

NOTE: You should see occupational titles you have been exploring. You may also find occupational titles that you have not seen before. You might like to add one or more of these titles to your Exploration Record and find out more about them.

- Turn to the Alphabetical Arrangement of Occupations beginning on page 336.
- Locate the entry for one of the occupations you have been exploring. The six-digit number at the end of the entry is the WG and sub-group in which the occupation is listed.
- Locate the occupation in the listing following the WG description in the front of the GOE.

NOTE: You can use the GOE to see the listing of all occupations belonging to a WTG you are exploring.

You can use the GOE Alphabetical Index to find out the WTG to which an occupation belongs.

Dictionary of Occupational Titles

Locate the Dictionary of Occupational Titles (DOT). It is a very large red book. It may be paperback or hardbound.

- Turn to page 233 in the DOT. Examine the various occupational titles and the descriptions.
- Read one or two descriptions that interest you. Note how they make a general statement about what a worker does and then lists work tasks.
- Look at the nine-digit numbers before each occupational title. This is the DOT code that you have seen after all occupational titles in the CIS. The descriptions in the DOT are arranged in numerical order using this code.
- Examine the numerical sequence of the descriptions on pages 232 and 233. Some numbers are skipped over to make room for new occupations as they are created.
- Note that the nine digits are in groups of three. This helps you read the numbers.

NOTE: The DOT codes for the first and last occupations on two facing pages are printed at the top of the pages. This helps you find the descriptions easier.

- Select an occupation from your list on the Exploration Record.
- Using the DOT code, locate and read the description for that occupation in the DOT.

NOTE: Descriptions in the DOT are often written in technical language and may be hard to understand. However, the DOT is the only source of information for some occupations.

DOT descriptions are also short and list specific work tasks.

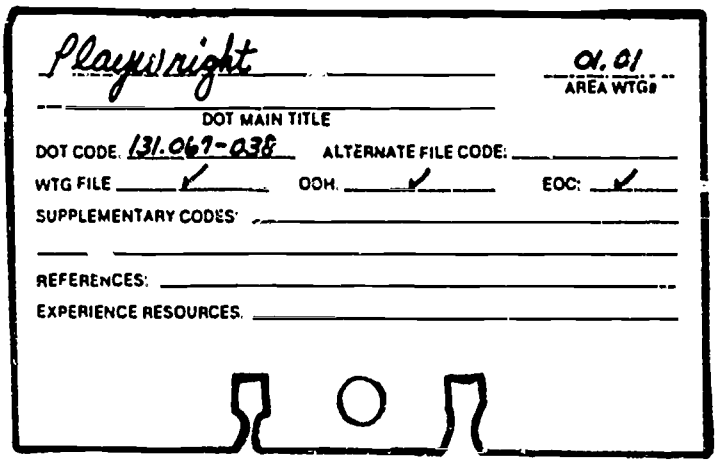
Alphabetical Card File

Locate the Alphabetical Card File. It may be a rotary file or a drawer type card file such as you find in libraries.

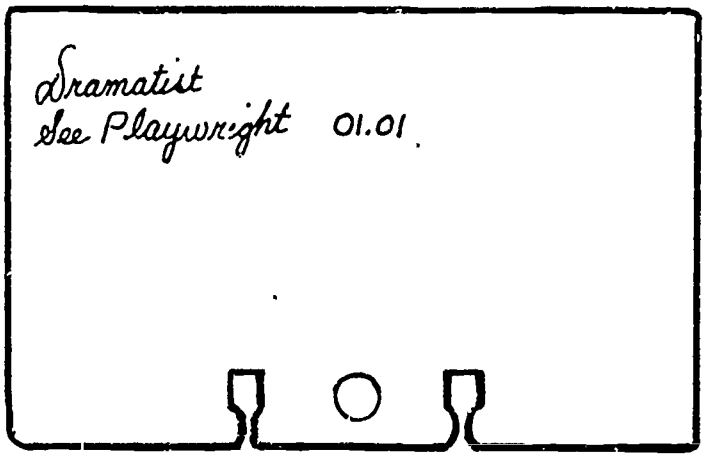
Notice that the cards are arranged alphabetically by occupational title.

THIS IS THE WAY YOU ENTER THE SYSTEM IF YOU KNOW THE NAME OF AN OCCUPATION RATHER THAN A WORKER TRAIT GROUP.

- Note that there are two kinds of cards.
- Examine a card with the printed lines. The DOT Main Title is in the upper left corner. The WTG to which the occupation belongs is shown in the upper right. **IF YOU HAD ONLY THE NAME OF AN OCCUPATION, YOU WOULD NOW HAVE THE KEY TO USING THE CIS--THE WTG NUMBER. Everything in the CIS is filed or indexed by this number.**



- The DOT code is listed so that you may go directly to the DOT and read the description.
- A checkmark (✓) in the WTG File space means that one or more occupational briefs or pamphlets are in the Vertical File for the occupation. You should check the File Content Notebook also.
- A checkmark for OOH or EOC means that those resources contain information about the occupation. You should check the WTG Index to Occupational Information for page numbers.
- You may know an occupation by a name other than that used by the DOT. Some titles are cross-referenced by using cards that refer you to the DOT Main Title card that provides the information you need to use the CIS.



NOTE: The Alphabetical Card File contains only those occupations for which your EPRC has information. If you cannot find a card for the occupation you are exploring, your center has only one source of information--the DOT.

Summary

Now that you have completed a systematic exploration of a Worker Trait Group, you should know how to explore on your own. You need not use all resources nor in the same sequence when you use the CIS. The following summary of the materials includes a brief statement about the unique function of each.

- Worker Trait Group Guide. Information about WTGs and listing of important occupations belonging to each.
- File Content Notebook. An index to looseleaf occupational information filed in the Vertical File or other source.
- Worker Trait Group Index to Occupational Information. Contains WTG Indexes to the OOH, EOC, and other occupational information resources.
- Vertical File. Looseleaf occupational information filed in drawers.
- Occupational Outlook Handbook (OOH). Specific occupational descriptions. Up-to-date employment outlook and wage information.
- Encyclopedia of Careers (EOC). Volume II contains specific occupational information.
- Guide for Occupational Exploration (GOE). Full listing of occupations belonging to each WTG. Alphabetical index lists WTG assignment for all occupations.
- Dictionary of Occupational Titles (DOT). Contains descriptions of all occupations. It is the sole source of information for some occupations.
- Alphabetical Card File. Contains cards arranged by the DOT occupational titles that gives all the resources in the EPRC for a specific occupation. Also contains cross-reference cards to the DOT Main Title cards.

STATION 4: CHOOSING A COLLEGE MAJOR

Materials Needed:

1. A personalized Field of Study-Worker Trait Group Chart. Complete instructions for the development of this chart are found as Attachment A to this Station.

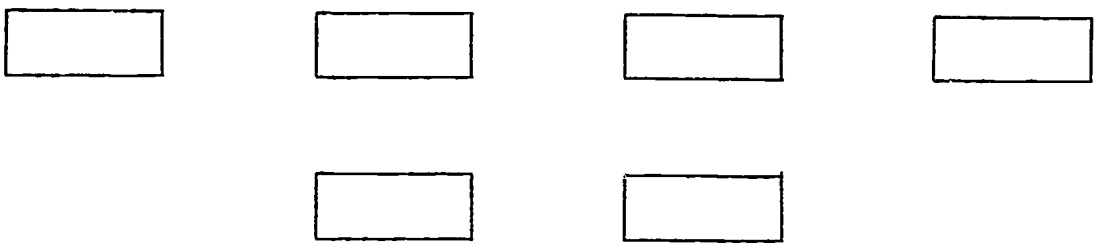
2. A personalized College Major-Occupation Index. Complete instructions for the development of this index are found as Attachment B to this Station.

Instructions:

1. Read and complete the following activities.

This Station is based on the assumption that you have completed at least Station 1 and have identified several Worker Trait Groups that interest you. If you have skipped Stations 2 and 3, you should plan to complete both of them either before or after you have completed this station. They will help you in your selection process.

IN THE SPACES BELOW, ENTER THE NUMBERS OF THE WORKER TRAIT GROUPS YOU HAVE IDENTIFIED AS MOST INTERESTING TO YOU.



This Station can help you in choosing/confirming a college major. It will lead you through a series of activities and give you suggestions for exploring college majors and occupations. Follow the steps listed below.

- Use your college Field of Study-Worker Trait Group Chart located in the EPRC.
- The chart has the Worker Trait Groups that relate to your institution's educational programs across the top and majors listed down the side.
- Each "x" identifies a Worker Trait Group containing occupations that relate to majors offered at your institution.
- Go down the column of cells under each Worker Trait Group you identified as interesting on page 284. If an "x" is present in a cell then go across the chart to identify the related major. List the related majors on a sheet of paper.
- Next, obtain a copy of your institution's College Major-Occupation Index.
- This activity will help you select specific occupations and related majors that interest you.
- Use the table of contents in the index and locate the page number for a major you have listed on your chart. Turn to the appropriate page and note the list of occupations organized by Worker Trait Groups.
- Next, find a Worker Trait Group you listed on page 284.
- Examine the occupations listed under that Worker Trait Group and select those which interest you (if any). You may want to read occupational descriptions in the Dictionary of Occupational Titles to help you choose. (You can find descriptions in the DOT by using the nine-digit number for the occupation. They are organized numerically in that resource.)
- Continue by examining all of your preferred majors and related Worker Trait Groups.
- Then, make a final list of your preferred major(s) and related occupations for further exploration.

LET'S REVIEW WHAT YOU HAVE DONE TO THIS POINT

1. You identified Worker Trait Groups that interest you.
2. You identified Fields of Study related to those Worker Trait Groups (Fields of Study-Worker Trait Group Chart).
3. You selected specific occupations within those WTGs and the related college majors (within those areas).

THE MAJOR OF YOUR CHOICE IS PROBABLY AMONG THOSE YOU HAVE LISTED.

PROVIDING there is one:

That you really like.

That relates to occupations you like.

That you think you can successfully complete.

YOU ARE NEARLY FINISHED WITH THIS STATION...

But your exploration of majors and occupations, leading to your selection of a major, it just beginning!

There is no easy way to conduct a thorough investigation of the **Institutional Majors** you have identified. You must take the time to make and keep appointments, talk with people, make notes, and otherwise investigate each major you have identified.

The following suggestions should help you:

FIRST, READ ABOUT THE MAJOR IN THE COLLEGE CATALOG.

Ask yourself:
- Do I have the necessary abilities to complete the requirements listed?
- Am I really interested in the courses listed?
- Do I have the special talents or aptitudes needed?
- Do I have all the prerequisites or will I have to take any extra courses?

SECOND, TALK TO STUDENTS (juniors or seniors) WHO ARE TAKING THE MAJOR!

Ask them:
- What is it like to be a student in that major?
- Why did you choose that major?
- What are some of the pros and cons about the major?

CAUTION--Remember that you are getting student opinons. They are not always accurate and may not reflect the way you would respond with the same background and experience.

THIRD, TALK TO A DEPARTMENTAL ADVISOR OR INSTRUCTOR IN THE FIELD OR MAJOR.

Ask them:

- Will the major I am thinking about help me prepare for the occupations I have listed?
- Would a master or doctoral program be required in order to complete my education?
- What other occupations do you think relate to the major I have listed?
- What should I know about the major that is not given in the college catalog?

FOURTH, TALK WITH PERSONNEL AT THE PLACEMENT OFFICE.

Ask them:

- Are there records of the kinds of jobs that graduates in the major have gotten?
- Do employers in the region hire graduates with this major?
- What about employers from other parts of the country?
- Do you have any suggestions for anyone planning to declare this major?

You should not only explore the majors, but find out all you can about the occupations you have listed.

Use the Educational Planning Resource Center
Talk to career counselors
Check the campus placement office
Check professional journals
Ask for information from professional associations

During the course of your investigations (majors and occupations) you will begin to favor one of the majors.

Remember a choice of major is a commitment for the present--not your whole life. You may stay with it or grow out of it and move into something else.

You can change majors nearly anytime. (But it may cost.)

TAKE THE TIME--AND MAKE THE EFFORT--TO INVESTIGATE YOUR CHOICES THOROUGHLY

THEN **CHOOSE!**

Attachment A to Station 4

INSTRUCTIONS FOR DEVELOPING A FIELD OF STUDY-WORKER TRAIT GROUP CHART FOR YOUR INSTITUTION

Students will use the Field of Study-Worker Trait Group Chart to quickly identify majors or programs at your institution to explore or that can help them reach their career goals. It is highly recommended that you develop this chart in order to direct student attention to Field of Study-Worker Trait Group relationships that represent local educational opportunities.

The chart has the Worker Trait Groups that relate to your educational programs across the top and majors listed down the side. Such a chart shows at a glance the relationships of your institution's educational programs and the world of work. The accompanying indexes will show detailed listings of the specific occupations that are related to your majors.

You can develop the chart by following these procedures:

1. Identify Worker Trait Groups (WTGs) related to the type of programs offered by your institution. If your institution has vocational, technical, associate, and baccalaureate or transfer programs, you would list all 66 WTGs across the top of the chart. If your institution only offers the associate and baccalaureate programs, you would list 47 WTGs across the top. (See the Worker Trait Groups Related to Associate and Baccalaureate Programs at the end of this attachment.)

2. Identify occupations related to the subject areas offered at your institution. You can accomplish this task by:

   a. Have faculty members submit a list of occupations pertaining to their subject matter.

   b. Use the alphabetical listing of occupational titles (pages 965-1156) in the Dictionary of Occupational Titles (DOT) and look up each occupational title. Then on a 3 x 5 card list the DOT title and nine-digit DOT code number and major title related to that occupation.

      NOTE: If the occupational title you are looking for does not appear in the DOT, that means it is not a DOT title. To identify the DOT title, follow these steps:

      (1) Turn to the front of the DOT, page xxxvi, to a listing of the occupational groups arranged by the three-digit OGA number.

      (2) Scan the categories and divisions to determine what occupational group pertains to the title you are looking for.

      (3) Using the first three OGA digits, turn to that section in the DOT, and scan the descriptions for the various occupations.

(4) Most of the time you will find the DOT Main Title and description where the material fits.

c. After you have entered all occupational titles and nine-digit DOT codes on 3 x 5 cards, use the Guide for Occupational Exploration (GOE) and find the WTG code.

d. Turn to page 336 in the GOE. This is an alphabetical listing of occupational titles. Use the DOT title on the card and look it up to find the WTG number. This number is a six-digit number that appears at the end of the nine-digit DOT number. Record only the first four digits of the six-digit code. This is the Worker Trait Group number. Enter the four digits on the card.

NOTE: If you have an occupational title you cannot locate in the GOE, scan the various indexes in the Worker Trait Group Index to Occupational Information. Sometimes, the title might be there along with the appropriate nine-digit DOT code and a four-digit Worker Trait Group number.

e. When you have prepared cards for all occupations, put them in alphabetical order by field of study or major. List the majors and titles on the side of the chart.

3. Next, organize the cards by WTG numbers. Record a check mark, x, or dot in the cell of the chart where a relationship occurs between a major and a WTG.

NOTE: If your school offers 30 or more majors, you may want to consider making a chart for each department or division; or each type of degree or level of program.

Worker Trait Groups Related to Associate and Baccalaureate Programs

01.01 Literary Arts

01.02 Visual Arts

01.03 Performing Arts: Drama

01.04 Performing Arts: Music

01.05 Performing Arts: Dance

01.06 Technical Arts

01.08 Modeling

02.01 Physical Sciences

02.02 Life Sciences

02.03 Medical Sciences

02.04 Laboratory Technology

03.01 Managerial Work: Nature

03.02 General Supervision: Nature

04.01 Safety and Law Enforcement

04.02 Security Services

05.01 Engineering

05.02 Managerial Work: Mechanical

05.03 Engineering Technology

05.04 Air and Water Vehicle Operation

05.05 Craft Technology

05.06 Systems Operation

05.07 Quality Control

05.10 Skilled Hand and Machine Work

06.01 Production Technology

06.02 Production Work

07.01 Administrative Detail

07.02 Mathematical Detail

07.05 Information Processing: Records

07.06 Clerical Machine Operation

08.01 Sales Technology

09.01 Hospitality Services

09.02 Barbering and Beauty Services

10.01 Social Services

10.02 Nursing and Therapy Services

11.01 Mathematics and Statistics

11.02 Educational and Library Services

11.03 Social Research

11.04 Law

11.05 Business Administration

11.06 Finance

11.07 Services Administration

11.08 Communications

11.09 Promotion

11.10 Regulations Enforcement

11.11 Business Management

11.12 Contracts and Claims

12.01 Sports

Attachment B to Station 4

INSTRUCTIONS FOR DEVELOPING A COLLEGE MAJOR-OCCUPATION INDEX
FOR YOUR INSTITUTION

Students will use the College Major-Occupation Index to identify occupations related to college majors offered by your institution. This index should have two sections: (1) an alphabetical listing of occupations including the related college major and Worker Trait Group number, and (2) a listing of the majors including the related occupations organized by Worker Trait Group numbers.

You can develop this index by following these procedures:

Alphabetical Index

1. Use the 3 x 5 cards prepared to develop the Field of Study-Worker Trait Group Chart.

2. Arrange the cards in alphabetical order by occupational titles.

3. Prepare the index by typing, into a four column format, the occupational title, Worker Trait Group number(s), related majors, and page numbers where the majors and related occupations are listed.

Index by Major

1. Use the same 3 x 5 cards and arrange them alphabetically by major title.

2. Prepare the index by typing the major title as the heading.

3. Then, list the Worker Trait Group(s), and under each Worker Trait Group title and number list the related occupations along with their DOT number. Do this for each major.

Appendix D:

Occupational Information Summary Sheet

Name _____ Date _____

Instructor _____ Class _____

OCCUPATIONAL INFORMATION SUMMARY

Title of Occupation _____ WTG # _____ DOT # _____

Directions: As you read the information about an occupation, write down a summary of the important points related to the following categories. You may need more than one source to find all the information.

_____ _____ Source/Reference

Specific Work Performed

Specific Skills Required

Work Setting

Employment Outlook

-over-

Advancement
Opportunities

Education,
Training,
And Entry

Other Personal
Qualifications

Salary and
Benefits

Appendix E:

Educational Planning Resource Centers Organized by the Occupational Group Arrangement (OGA) and Other Structures

EDUCATIONAL PLANNING RESOURCE CENTERS ORGANIZED BY THE OCCUPATIONAL GROUP ARRANGEMENT (OGA) AND OTHER STRUCTURES

If your institution's Educational Planning Resource Center is organized by some other structure such as the Occupational Group Arrangement (OGA), the activities in this handbook can still be used. The important thing is to familiarize yourself with the resource center's organizational structure.

When a center uses the OGA for organizing materials, this means that all resources are found under a three-digit code. This three-digit code consists of the first three digits of the nine-digit code used in the Dictionary of Occupational Titles (DOT) to classify occupational titles. The first digit of the OGA code represents the occupational Category, the second digit represents the occupational Division, and the third digit represents the occupational Group.

Therefore, when using the OGA structure, students would use a list of their preferred Worker Trait Groups and identify occupational titles for further exploration listed at the end of each Worker Trait Group description, located in the Worker Trait Group Guide, or occupational titles listed at the end of each Work Group description in the Guide for Occupational Exploration. As students identify occupational titles for exploration, they should make a list of the titles and the nine-digit DOT codes. They would use the first three digits of the nine-digit code to find resources related to a particular occupation. The same procedure holds true no matter how your resource center is organized. Whatever structure is used, students would enter from occupational titles.