A TUTOR TRAINING PROGRAM FOR COMPUTER-ASSISTED INSTRUCTION

by

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of the Requirement for the Degree
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Director of Graduate Studies
ABSTRACT

Research literature was reviewed on the content of a tutor training program for volunteers in a computer-assisted instruction literacy program. Three descriptive methods of research were used to select the content of the training program: a fifteen question survey, thirteen multiple choice and two opened-ended, were presented and data analyzed; tutors were observed while facilitating learning sessions; and interviews were conducted with lab coordinators. Using the collected data two workshops, one basic and one intermediate, were developed, documented and presented to the volunteer tutors.
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CHAPTER 1
THE PROBLEM

Introduction to the Problem

Illiteracy is a national dilemma (Harman 1987). In combat of this condition, organizations such as the Maricopa County chapter of the Literacy Volunteers of America (LVMC), offer beginning and remedial reading and writing skills to adults in the form of literacy programs.

The increasing demands placed on the members of our society to be functionally literate is reflected in the growing use of literacy programs. A monthly report published by Jodi Decker (1993), administrator of the LVMC lab, documented this increased attendance. The LVMC LEARN Lab Fact Sheet reported two hundred eighty one students were enrolled in the LEARN Lab program in the fiscal of 1992-93. In the October 1993, Decker reported "Last month our lab attendance surpassed all records for student enrollment and attendance. We served a total of 173 students!!" (Decker 1993). This increase of student participation preceded a need for more tutors or instructors to facilitate in reading programs (Tutor Tips 1993). What facilitating skills will new tutors bring with them and what will they need to be taught?

"Technological is revolutionizing the workplace; business, industry, and labor organizations use technology to upgrade skills of workers" (Askov 1989a). "Computers offer a face-saving way to learn basic skills..." (Askov 1989a). The use of computers in an instructional setting, such as literacy programs, is referred to as computer-assisted instruction (CAI). Researchers have posed questions on who should administer these CAI programs and what skills
they should have or be taught about computer equipment. The use of volunteers tutors in CAI presents an additional problem because of the unpredictability of their participation and the diverse population they represent. Since the majority of the tutors in the LVMC literacy program are volunteers, their involvement in the a CAI program has become a topic of interest to the administrative staff of the LVMC. Several issues have surfaced concerning the training or lack of training offered these volunteer tutors.

The training concerns of the LVMC staff opened discussion on what actually should be included in training programs for new tutors. Since CAI was the primary method of teaching literacy skills to adults in the LVMC lab, it was necessary to determine what knowledge and skills the tutors brought with them and what they needed to be taught in order to function in the computer lab environment. This project was undertaken to determine the content of a training program for the lab tutors. The method adapted for the research was to survey the tutors using questionnaires, observe them in facilitating duties, and interview lab administrators. The results were then compiled and a training program was developed based on the results.

Background of the Problem

According to Karen Brumhall (1994), Associate Director, the Literacy Volunteers of Maricopa County was established to tutor adults in reading and writing with the objective of raising the grade level achievement of the participants in the program. The organization staff consists of paid administrators and volunteers. The volunteers function in all capacities of the organization with the largest number tutoring participants in the reading program on an individual basis. In addition to offering individual tutoring, LVMC maintains a computer lab environment, known as the LEARN lab, which is equipped with individual and networked computers supporting two computer-assisted instruction software packages, Principle of the Alphabet
Literacy System (PALS) and INVEST in the Future (INVEST). These software applications are specifically designed for the adult learner and provide graduated lessons through the methodology of pretesting, repetitious practice, and posttesting in the basic skills of reading, writing and mathematics. The student signs into the computer using a standard keyboard, "mouse" or the "touch screen" technology and selects a topic from a preprogrammed menu and proceeds into the pretest or lesson. Both CAI applications have companion workbooks for the student which reinforce the computer lessons. In the INVEST system the student's progress and custom designed lessons are recorded in a database and can be reviewed and maintained through the "manager" workstation.

The volunteers participating in the Literacy Volunteers of American individual tutoring program are part of a "...highly centralized and elaborately developed training program" (Tibetts et al. 1991, 6). The LVMC reading training program consists of an eighteen hour workshop, usually spread over four sessions, offering skills and attitudes from the handbook TUTOR: TECHNIQUES USED in the TEACHING OF READING (Colvin and Root 1987). The volunteers facilitating in the LEARN Lab are graduates of the reading workshop, however the LVMC staff offers no formal training on the computer equipment or application software. The volunteer tutors are encouraged to review the material and documentation provided by the computer software and hardware distributors which is in the form of video tapes and manuals on the operation of the applications, and also receive individual assistance from staff members who have attended a training program conducted by the software vendor. Recently the LVMC has encountered enrollment limitations in the vendor's training program and as the trained LVMC staff "turns over" knowledgeable members are being depleted. In addition to printed documentation on-line programmed "help" messages can be accessed by the student and the tutor.

Research shows that the computer technology has become a valuable tool in the adult
literacy program (Mageau 1993). Computer use in a literacy program can provide instruction to meet "...educational goals, personal needs and, in some cases, employment prospects..." (Shephard 1989, 5) of the adult student. However, lack of adequate preparation is a fundamental weakness in adult education (Tibetts et al. 1991). Preservice training will "...equip volunteers with skills needed to perform job responsibilities" (Isley and Niemi 1981, 25).

As volunteers spread into the schools, community, hospitals and penal systems, they will need specific training in the jobs they will perform (Amundson 1991). Some of these jobs are in computer-assisted instructional programs such as the applications used in the LVMC LEARN lab.

**Purpose of the Study**

In response to the need for a training program for the facilitator in the LVMC LEARN Lab, this study defines the content of a training program that meets the needs of the volunteer tutors of a computer-assisted instruction adult literacy program known as INVEST in the Future. This study culminates with the design and presentation of a training program that fulfills the needs of the LVMC LEARN Lab.

**Significance of the Study**

This study will contribute knowledge to the administrators of the program of the Literacy Volunteers of Maricopa County utilizing computer-assisted instruction. Studying the needs of the tutors of the INVEST system has defined the criteria that is incorporated into a training program that will benefit both the participants in the lab program and the tutors who facilitate the instruction. Although the resulting training program product presented in this paper is specific to a particular instructional software, the study has defined goals and procedures that may be used
in other CAI training programs.

Assumptions and Limitations

The researcher in this study has been a volunteer in the LVMC program for four years, three years as an individual tutor and one year as a facilitator in the LEARN Lab. The INVEST in the Future is a registered trademark of Josten’s Learning and will be the focus of the training program. This study concentrates on the subject matter and methodology of a training program for adult volunteers, because the need for a program has already been determined. It is assumed that responses to questions asked during this study will be objective and reflect the true feelings of the participant.

Operational Definition of Terms

**Adult.** According to LVMC guidelines this is anyone over the age of sixteen.

**Application.** Software written to perform specific functions.

**CAI.** Computer-Assisted Instruction also known as Computer-Aided Instruction - when a computer is used as a tool in conjunction with human instruction.

**Hardware.** The physical components of a computer system, e.g. monitor, printer.

**Illiteracy.** Not being able to read or write (Neufeldt 1991).

**Literacy.** Being able to read and write (Neufeldt 1991).

**Network.** When referring to computer network - Individual computers linked together for the purpose of interaction.

**Program.** A series of operations that together constitute the whole event.

**Software.** Programs and or routines written for computer systems.

**Volunteer.** A person who chooses freely to do something (Neufeldt 1991).
Organization of the Study

The remainder of this study is divided into four chapters. Chapter two is the literature review pertaining to the problem and is divided into four sections. Section one will present the history of adult literacy programs, specifically the history of the Maricopa County Chapter of the Literacy Volunteers of America. Section two will present research findings on computer-assisted instruction and its integration into adult literacy programs. Section three researches the role of the volunteer in literacy programs. Section four presents methods and theories used in training volunteer tutors in literacy programs with an emphasis on computer-assisted instruction literacy programs. Chapter three defines the methodology used in the study of the problem and the process of designing the manual. Chapter four is the presentation of the analysis of the data and the documents to assist training, and it also includes the presentation of the training program for the volunteer tutors facilitating in the LEARN Lab on the INVEST software. Chapter five concludes with the summary, conclusions and recommendations.
CHAPTER 2

THE LITERATURE REVIEW

Introduction and Organization

This literature review was conducted on the subjects of adult literacy programs, CAI and its contribution to literacy programs, the role of the volunteer tutor in CAI programs and the methods and theories used in training volunteers. This research was conducted with the intent of gaining knowledge of the materials that might be included in a training manual and methods that could be used in a training program designed for adult volunteer tutors in a CAI literacy program. This literature research concludes with the presentation of a training program that will be presented in chapter four of this paper.

This chapter is divided into four sections. The first section titled **Adult Literacy Programs** reviews the history of literacy programs, the types of programs available, and specifically the history of the Maricopa County chapter of the Literacy Volunteers of America. The second section titled **Computer-assisted Instruction in Literacy Programs** defines computer-assisted instruction, its history, and its involvement in literacy programs. Section three titled **Volunteer Tutors in Literacy Programs** defines volunteerism past and present, its contribution to literacy programs, and the volunteers role in CAI programs. The fourth section titled **Training Volunteers in Literacy Programs** defines training methods and theories used in volunteer based literacy programs and in adult literacy programs utilizing computer-assisted instruction.
Adult Literacy Programs

Many definitions of literacy were found during this research. The one determined descriptive to this study is "literacy might be considered to be proficiency in the production and interpretation of symbols that are used for purposes of communication within one's culture" (Nickerson 1985, 16). The ability to be functionally literate is defined to be "situation specific" and will be perceived as an important issue to an adult when it becomes a factor in their ability to deal with the demands of society and the ability to solve daily problems (Harman 1987). Since adults are discriminating learners, they will become available for reading and writing instruction only when they perceive that the goal they wish to attain can be achieved through a literacy program (Harman 1987).

Research shows there are many providers of literacy services, some in very innovative settings. Some early programs providing literacy programs by the public sector were federal Adult Basic Educations programs (ABE), libraries, and correctional institutions, and programs by the private providers were national voluntary agencies, community-based organizations and churches (Kangisser 1985). Literacy programs have since migrated into industry, such as the workplace literacy program designed by the International Union of Bricklayers and Allied Craftsmen and the International Masonry Institute (Literacy and Trowel Trade Project 1990). Many of the programs provided by community-based organizations are still primarily staffed by volunteers, however, as observed in the newspapers and telephone directories, there is a growing number of companies emerging that provide basic skills on a fee for service basis with contracted or paid instructors. The commonality of these programs is that the student comes voluntarily or involuntarily with the intent of increasing his/her reading and/or writing skills and instruction is provided to guide the learner. This instruction may be provided on a one-to-one basis as is in Literacy Volunteers of America program, through group class settings as in the schools using
ABE programs, or through the use of an instructional tool such as a computer. Traditional literacy instruction has nearly always relied on the presence of a tutor to deliver instruction, however the role of the tutor in the CAI programs is yet to be determined (Bixtler and Askov 1988).

Jodi Decker (1993), reported that in 1980 the LVMC was incorporated with the purpose of providing a literacy program designed within the guidelines specified by the Literacy Volunteers of America, Inc. The traditional one-on-one tutor to student method was used exclusively until 1990 when the PALS computer-assisted software was installed and was followed by the INVEST system in 1991. When the computers were installed a second method of instruction had been introduced into the literacy program and a new department, later to be known as the LEARN lab, was formed.

The role CAI is perceived to pay in the LVMC literacy program is stated in the mission statement distributed from the Literacy Volunteers of Maricopa County LEARN Lab.

The purpose of the LVMC LEARN Lab is to serve students from the pre-literacy and ESOL levels on up through Adult Basic Education and pre-G.E.D., utilizing traditional instructional methodology in combination with computer-assisted technology as a tool for learning. (LVMC Learn Lab Fact Sheet, 1)

and also

The intent of technology integration should be to support the acquisition of basic curriculum skill by reinforcing and expanding learning opportunities within each subject area; it should not be to replace the instructor of tutor-student interaction (LVMC Learn. Lab Fact Sheet, 1)

and also

Additionally the LVMC LEARN Lab will adequately assess each student, track that student’s progress both on and off the computer, and evaluate the student’s progress on and on-going basis and at completion of the program. (LVMC Learn Lab Fact Sheet, 1)

Computer-assisted Instruction in Literacy Programs

Elizabeth Gerver described computerized learning in a paper presented at the Lifelong
Learning Research Conference Proceedings, as "computer-aided or assisted learning, where the computer is used as a resource or a tool rather than as the dominant teaching mode" (1987, 18). Computer-assisted instruction was developed in early sixties with mixed results. The beginning of CAI was reported in a paper titled Computer-Assisted Tutoring by Terilyn C. Turner for the Handbook for Volunteer Reading Aides (Lane 1984). Turner reports the PLATO system developed in 1962 at a cost of $900 million by the Control Data Corporation, University of Illinois and the National Science Foundation was designed to teach reading and math to adults evaluated to read between the third and eight grade levels and the terminals were "on-line" through telephone cables to mainframe computers located across the county. There were technical difficulties with both the hardware and software (Turner 1984). Jerald W. Apps wrote in the forward of the book Microcomputers for Adult Learners: Potentials and Perils (Gueulette 1982), microcomputers were viewed to be used as an 1) appliance to be applied to such tasks as family budgeting, check balancing, controlling home heating systems, assisting the small business owner, and providing entertainment in the form of games, 2) information finder through telephone hookups to provide massive amounts of information, and 3) provide simulations that offer adult learner an opportunity to learn a foreign language, mathematics, writing and other skills (Gueulette 1982). As computer technology changed and the units became self-contained, portable, and less costly they became more desirable.

CAI programs have benefited elementary and secondary schools for many years, however, ABE has only recently become actively involved in exploring the potentials of the computer. The contributing factors have been a scarcity of appropriate software, adult educators have resisted using them, and funding has been insufficient (Jorgenson 1988).

Since the computer was introduced into literacy programs, studies have been conducted to determine their usefulness in adult literacy programs. "It appears that computers have an
immense potential for opening up learning experiences and, indeed, for achieving many of the generally accepted goals of adult education and training" (Gerver 1987, 18). Eunice N. Askov who was the director of the Institute for the Study of Adult Literacy at the Pennsylvania State University, in collaboration with others, cited in several different works, the advantages and disadvantages of computers in literacy programs (Askov et al. 1989; Askov and Turner 1989; Askov and Clark 1991). The advantages are described as privacy in independent work, individualization of study based on the student’s needs, achievement gains related to the re-evaluation of the content of the curriculum, cost effectiveness as a larger number of students can be served, control of learning taken by the adult student contributes to the empowerment for low-literate individuals, flexibility in scheduling for adults juggling multiple responsibilities, open entry, open exit as computers enable teachers and tutors to start where students leave off by storing records on disks, and a modern way to learn the tasks and skills associated with computer technology. Disadvantages are said to be change in technology requires constant upgrading, lack of compatibility between machines, cost which has fortunately come down may be a barrier in purchasing, pressure to make rapid decisions when monies are received as an unexpected windfall, lack of expertise of a trained resource person in computer technology and adult literacy, lack of training of the tutors and teachers using the software, inappropriate instruction for adult learners, curriculum integration inability into a local program, and role changes of feeling of displacement by teachers and tutors when students become more independent (Askov et al. 1989; Askov and Turner 1989; Askov and Clark 1991). Another advantage cited is that the learner is allowed the privacy to make mistakes and while the adult learner is often reluctant to ask for help from a tutor he or she will willingly spend guiltless time redoing problems on the computer (Mageau 1993). CAI also can provide immediate feedback which can result in positive reinforcement and increased motivation and is most effective on the
non- or low-literate adults (Imel 1988).

Adults learning basic reading skills by using a computer also learn operational techniques which become a marketable skill for entry-level word processing jobs and job-training programs (Operation Storefront 1989).

Volunteer Tutors in Literacy Programs

"Voluntarism embodies a spirit of willingness (even eagerness) on the part of volunteers to contribute their time and energies without remuneration and a willingness on the part of paid personnel to collaborate with volunteers in a particular setting" (Isley and Niemi 1981, 1). The unique phenomenon of voluntarism has been involved in building America since its inception and instituted changes in areas such as civic affairs, social welfare, culture, spiritual and educational. The area of literacy voluntarism, however, is considered a fairly recent development evolving in the last twenty five years (Kangisser 1985). The three phases of voluntarism in literacy has been defined as phase one in the late 1950s through the 1960s with the creation of two national organizations, one of which was the Literacy Volunteers of America, phase two in the 1970s to the early 1980s in which other organizational providers evolved, and phase three which begin in the early 1980s--and is still going--can be characterized as the period of the professional volunteer (Kangisser 1985).

The volunteer in a literacy program of today is described to be a fully employed member of the workforce, part of a younger group, well-educated and not likely to be well read in adult education (Tibbits et al. 1991). Even though there is an increase in male volunteerism, women still make up the majority of literacy volunteers as men tend to stay out of the social services (Kangisser 1985). Kangisser also reports the number of hours women spend in volunteer work has decreased from an average of twenty hours a week to five hours per week, based on 1983
poll, which has been determined to be the result of increased number of women working full time (1985). The volunteers of today expect the work to be substantive and challenging bringing a professionalism to voluntarism.

The role of the volunteer tutor in a CAI literacy program is not clearly defined as reported by Brett Bixler and Eunice Askov in 1988. Most literacy programs require a commitment of nine months to a year when working as a tutor in a one-on-one program (Brown 1991). The commitment time needed for a volunteer in a CAI program has yet to be assessed.

Volunteers are considered a valuable resource for an adult literacy program; however if their role is not planned within the framework of the program, they will become liabilities (Imel 1986).

Training Volunteers Tutors in Literacy Programs

The Literacy Volunteers of American is an example of a well developed training program for tutors of literacy on a one-to-one basis. Ruth J. Colvin and Jane H. Root have published a tutor manual defining the techniques used in teaching reading to adults (1987). Training tutors in CAI literacy programs is, however, a different story. Studies define different criteria for the CAI setting and the function of the tutor, but little has been written on what the tutor should know about the computer equipment or the software. Software, such as the LVMC PALS and INVEST applications, differ from each other in the way they function and the instructions needed for their operation. The commonality in all CAI programs is that the considered use of the computer is as an instructional tool. The fact some form of tutor training is needed but not always planned is confirmed by Askov when she wrote that it is only after the decision to purchase software has been made does the realization come that tutors need to be trained (Askov, Kisner and Van Horn 1989).
Jeanne H. Smith (1987) reported that very often tutors and students are learning together and that tutors should know the parts of the computer, various switches and buttons for turning the computer off and on. Smith also reports that one or more staff member paid or volunteer, "should be available to help tutors and students" (1987, 76). Imel (1988) reported, that training and inservice opportunities should be provided to the instructional staff, since they are the key component in the success of CAI and since equipment and software change rapidly they should be kept up on the latest developments.

A two tiered plan of a basic level and a more sophisticated level of staff training was presented by Christina Jagger (1989). The basic level staff member would know how to operate the computer, how to use software and the printer while the sophisticated level member would be able to choose appropriate software dependant on the student’s needs and integrate the software into an instructional session.

Tutors were asked to respond to questions about the program and the training they received in a study by Bixler and Askov (1988) of CAI with displaced workers and volunteer tutors. They received fourteen hours of training and felt that this was not enough as the learning curve using computers was steep. Other conclusions were 1) start with basics, 2) each session should concentrate on one aspect, be slow placed and provide lots of hands-on experiences, and 3) more functional context should be in the material application. This program had an authoring component which allowed the tutor to creative personalized lessons for the student. The response was that the tutors "enjoyed creating lessons, and "being a part of" the software" (Bixler and Askov 1988, 14).

The following steps have been described to be important in designing an adult training program 1) help learner diagnose needs situation, 2) involve learners in mutual planning, 3) creating learning conditions, 4) involve learners in formulating their learning objectives, 5)
selecting the most effective methods, 6) help learners carry out their learning plans, and 7) involve learners in evaluating learning (Knowles 1980, 26-27).

The purposes of inservice volunteer training are defined in nine objectives by Paul J. Isley (1981):

To reinforce skills, knowledge, and/or attitudes.
To introduce new skills, knowledge and/or attitudes.
To plan and manage program changes.
To provide volunteers with opportunities for self renewal and growth.
To provide assurance to paid staff and others that volunteers are receiving professional training.
To increase group rapport and teamwork.
To offer volunteers a forum in which to express their concerns.
To help volunteers and an organization reach their maximum potential.
To ensure, in many ways as possible, that the purpose of the organization are aligned with the needs of volunteers. (70)
CHAPTER 3

METHODOLOGY

Introduction Review

The purpose of this study was to determine the content of a training program that would meet the needs of the tutors who facilitate the students who are using a computer-assisted instructional program known as INVEST. The product of this study is a volunteer tutor training program.

Identification of Methodology

The descriptive method of research was used for this study with the intent of providing a collection of data through detailed responses that would identify and provide the elements needed in the training program that would culminate this study. The data collection methods that were used in this descriptive study were survey through questionnaire, observation and interview.

Questionnaire

A fifteen item questionnaire (see Appendix A) was designed by the researcher to collect data from the tutors already working in the lab and the tutors who expressed an interest in working in the lab in the future. There were fifteen questions, thirteen of which were multiple choice and two of which were open-ended. Questions 1, 3, 4, 5, and 6 on the questionnaire were taken in part from TUTOR QUESTIONNAIRE published by Pasco County District School Board in 1989, Appendix K, in an article titled Operation Storefront: A computer-assisted instruction
component of the Reading Assistance Program (RAP). The first draft was submitted to the
director of the LEARN Lab and revised to include an open-ended question, number fourteen, on
the role of the tutor in a computer lab and question ten was reworded in anticipation of the
limited knowledge the tutors would have of the manager station. Questions 8, 9, 10, 11, 12, and
13 identified skill deficiencies and 1 through 7 provided demographic information on the tutors
and their experiences with computers.

One week prior to the actual sampling, the administrative staff of the LEARN lab tested
the questionnaire to determine its usefulness, relativity and objectivity. The questionnaire was
then distributed to the attendees of the November LEARN Lab tutor meeting to be completed
before the end of the meeting. Anyone not in attendance was given a questionnaire attached to
the monthly bulletin and asked to return it by November 30, 1993. Instructions were clearly
given to the group being surveyed in person. Since the group sampling was small—estimated at
twenty—and of a diverse population, the generalizability of this instrument was questionable. The
questionnaire was evaluated after the initial survey and no revisions were made. This
questionnaire was considered a reliable survey tool for this particular situation and would be used
in future sampling.

Observation

The second data collection method used was the participant observation. The researcher
observed the tutors’ use of the INVEST system in the LEARN Lab during a regularly scheduled
two hour class period. An appointment was made with the instructor and there was full
disclosure as to the intent of the observation. It was emphasized that this was a data collection
observation and not an evaluation of their skills, in order to solicit cooperation which was an
essential component in this method. The research limited the observation to no more than one
hour per class period. This method portrayed "real life" situations and produced reliable
information, as the environment was not hostile so the data collected reflected the actual situation.
All precautions were taken to produce a "friendly" environment.

Interview

The third collection method was the interview. The researcher conducted interviews with
the administrators and training staff of the LVMC program and other learning centers using the
INVEST system and other CAI programs with the intent of collecting data on the content of a
training program. The researcher solicited information on the "hot spots" each group thought
to be important in a training program. The questioning was unstructured with four basic topics
presented: 1) use of the INVEST training material 2) training workshops administrered 3) periodic
review and 4) depth of tutor training on hardware equipment and software.

In addition to the three data collection methods described in this chapter to discover the
tutors topics of interest and skill deficiencies, the researcher reviewed the training video tapes,
manuals published by Josten Learning on the INVEST program, and attended a training program
with the purpose of evaluating the material for inclusion in a training program.

Sources of Collected Data

Questionnaire. Thirty questionnaires were distributed during the survey twenty of which
were returned. The population of the surveyed participants was diverse: ages varied from under
30 to over 65, both genders were represented with a majority being female, and the only
academic requirement was a successful completion of the LVMC tutor training program.

Observation. Three tutors were observed individually facilitating in the LEARN Lab
during a regular scheduled tutoring session. Two observed were staff members and one was a
volunteer tutor.

**Interview.** Interviews were conducted with three lab coordinators. Two interviewees were staff members of LEARN Labs using INVEST software and one interviewee was using another CAI program called PALS.

**Other resources.** The researcher attended a five day training class in January 1994 at the JOSTENS training center in Phoenix and received certification on the completion of forty hours of INVEST training.

**Pilot Implementation of the Workshops**

The first three hour workshop or training session, titled INVEST Basic Workshop, was presented by the researcher on January 29, 1994 and attended by sixteen staff members and volunteers of the LEARN Lab. With information gathered from post training evaluation, the workshop was modified to present a clearer conceptual presentation of the matrix structure of the software and it was determined that in the future more time would be allowed for the "hands on" portion of the workshop extending the total workshop time to four hours.

The second workshop, titled INVEST Intermediate Workshop, was presented by the researcher on April 15, 1994 and again on April 16, 1994. The first session was attended by four staff members and the second session by five volunteer tutors. This workshop was piloted on the first day and the program content was modified through a group consensus to limit access into student records by non-administrative tutors to protect student confidentiality. The second presentation of this workshop was offered in the modified format.
CHAPTER 4

PRESENTATION OF THE DATA AND DESIGN OF THE WORKSHOP

Questionnaire Results

The following are responses to the survey questionnaire (Appendix A) presented to the tutors and staff member of the LEARN Lab. Of the thirty survey forms distributed twenty were returned. Nineteen of the forms were fully completed and one was unfinished with only the first six questions answered. One participant abstained from answering question number two relating to age.

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</tr>
<tr>
<td>2  (Age group)</td>
<td>19</td>
<td>2</td>
<td>9</td>
<td>6</td>
<td>2</td>
</tr>
<tr>
<td>3  (Continue?)</td>
<td>20</td>
<td>17</td>
<td>3</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>4  (Video games)</td>
<td>20</td>
<td>10</td>
<td>10</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>5  (Computer at work)</td>
<td>20</td>
<td>16</td>
<td>4</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>6  (Computer at home)</td>
<td>20</td>
<td>14</td>
<td>6</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>7  (Keyboard)</td>
<td>19</td>
<td>18</td>
<td>1</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>8  (Start PALS)</td>
<td>19</td>
<td>9</td>
<td>9</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>9  (Start INVEST)</td>
<td>19</td>
<td>12</td>
<td>6</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>10 (Review Student)</td>
<td>19</td>
<td>8</td>
<td>7</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>11 (Add topics)</td>
<td>19</td>
<td>9</td>
<td>4</td>
<td>6</td>
<td></td>
</tr>
<tr>
<td>12 (Select workbook)</td>
<td>19</td>
<td>7</td>
<td>4</td>
<td>8</td>
<td></td>
</tr>
<tr>
<td>13 (Print)</td>
<td>19</td>
<td>4</td>
<td>9</td>
<td>6</td>
<td></td>
</tr>
</tbody>
</table>

Of the twenty tutors participating in the survey, ten were new tutors or had been in the program under six months and nine had been active for more than one year. For purposes of forming a logical grouping of the population surveyed, data from the responses in the questionnaire is presented using the two groups of the under six months and the over one year. Two of the over one year group were not sure they would continue in the program.
Approximately fifty percent of each group said they had access to video games, computers at
work and in the home. All surveyed except one was familiar with a typewriter or word
processor. In the under six month group, one knew how to start the PALS system and three
knew how to start the INVEST system. In the over one year group, eight knew how to start the
PALS system and nine knew how to start the INVEST system. In both groups, four knew how
to review a student from the manager’s station.

In the under six month group, four knew how to add a topic to a student’s menu and in
the over one year, five knew the process. In the under six month group, one knew how to select
a workbook and in the over one year, six knew the selection process. In the over one year
group, four knew how to print a letter from the INVEST system and none in the under six
months. In the under six month group consisting of ten tutors, six responded to the open-ended
question of what should be covered in a computer lab workshop. Some of the responses were:

Basic operation of server, student learning level and tier assignments.
Basic operation and familiarity with the PALS system.
Basic operation and familiarity with the INVEST system.
Workbook structure and assignment.
Basics on how to run the computer
Practice time with lessons
Practice time with teacher station
Practice time with the trouble screen
Off-line materials
Assignment areas, monitoring progress on manager station, 3W’s
Learn as a student would
Know how to answer the student questions about the system.

Of the nine tutors in the over one-year group, eight responded to the open ended question with
these responses:

GED instructions
Less lab training more tutor training
How to add and delete topics from students
Group study using off-line material
Curriculum development
PALS training
Word processor training and printing
Technical information about the maintenance of the system
Matching students with computer curriculum
Overview of the content of the system
Entering a new student
Using the Review feature
Checking student trouble spots
Review of the components in INVEST

Data on Interviews

All three coordinators interviewed about training on the INVEST system had some volunteer tutors working in their labs. Only one would be willing to let the tutors access the manager station for the purpose of monitoring student progress and assigning lesson. One coordinator did not conduct training sessions and relied on manuals, formal instruction from vendors and a mentoring program. This coordinator allowed only authorized employed staff members to monitor the manager station. Another coordinator did conduct formal training session on another CAI program, published quick guides and orientation manuals for new tutors. None of the coordinators interviewed conducted workshop training on hardware or did periodic review or surveys on tutor knowledge of the systems being used in their center. New tutor orientation was conducted by two of the coordinators.

Observation

The researcher observed no formalized student orientation on the system by the tutors or staff members. Students’ questions prompted the tutor to attempt to find an answer in the vendor manuals and when unsuccessful went to search out a lab staff member who was performing paperwork in another office. The Review feature on the INVEST system was not being used by the tutor or administrators to familiarize the student with the hardware and software. A new student was started in placement lessons on the computer system without preliminary instructions on functionality of the system. The staff members used the manager station to input new students
and assign a placement component. The researcher did not observe the printing of reports or the clearing of trouble spots during the period of observation. The tutor assigned a workbook to a student, reviewed a completed workbook, and did one-on-one tutoring off-line.

**Workshop Design**

Two workshops were designed with the following objectives:

**INVEST Basic Workshop** (See Appendix B)

After the workshop the participant will:

1) Describe the tutor’s role in the LEARN Lab.

2) Describe the characteristics of the adult learner.

3) Describe the computer’s role in the literacy program.

4) Name the three INVEST tier structures with 100% accuracy.

5) Demonstrate the basic operations of the computer by rebooting the system, using the [ESC] key to go backwards, moving the mouse on the screen, and adjusting the earphones.

6) Demonstrate the start-up and shut-down procedure of the INVEST system with 100% accuracy.

   **Criteria:** Given a student workstation, enter the code and elections to start up the system and then enter the code and selections to shut down the system.

7) Demonstrate the student sign-in procedure in the INVEST system with 100% accuracy.

   **Criteria:** Given a student workstation, sign-in using the student name and password.

8) Sign into the REVIEW program and practice several lessons.

9) Demonstrate a knowledge of the manager station and the procedure of accessing a student record for the purpose of reading the password, and removing a "3W" on a student lesson.
Criteria: Given access to the manager station, a student name and session, look up the student through the view/change window and obtain the password and view the student lesson and change a "3W" to an "A".

**INVEST Intermediate Workshop** (See Appendix C)

The participants will:

1) Use the IMS Key Functions F1, F2, <A>, <N>, <P>, <M>, <INSERT>, <ESC>, <SPACE BAR>, <TAB>, <SHIFT-TAB>, <DELETE>, <HOME>, <END>, <BACKSPACE>, <ENTER> and ARROWS.

2) Describe the four types of help.

3) Describe the functions of a class or group in the IMS SYSTEM.

4) Write the terms associated with the Overview and Detailed grids.

5) Complete the definitions of the Lesson Status Codes.

6) Using the Prescription Menu:

   View student records and tell the meaning of the Lesson Status Codes assigned by the system. U, A, M 1M 2M 3M, C, T, s 1s, W 1W 2W 3W, 1F and A, T, C, S, U, assigned by the instructor.

   Identify exceptional progress branching.

7) Identify a curriculum component prescription.

8) Identify a objective prescription.

9) Build an objective prescription for a student.

10) Using the Reports Menu:

    Print a Student Lab Times Report.

    Print a Trouble Spots Report.

11) Develop a learners education plan.
The workshops are designed with an instructor lesson on the left facing page and a participant workbook page on the right facing page. The participant workbook may be copied separately and distributed to the participant during the workshop. Because the reproduction of the workshop is on single sided pages in this document, it should be noted that every page following a lesson page represents the participant workbook.
Summary

Volunteer tutors in the computer LEARN lab of the Literacy Volunteers of Maricopa County were not receiving formal training on the operation of the INVEST system which is computer-assisted instruction for the adult learner in basic literacy skills. These volunteers perform various tasks in the learning center one of which is to facilitate student using of the computerized program. The tutors could not answer students’ questions about the computers, monitor student progress or create customized curriculum for individual students through the use of the manager’s station. The vendor training enrollment program had been recently restructured and the cost was prohibitive to the non-profit agency and as trained tutors left the agency they were not being replaced. The solution to this problem was determined to be workshops, presented by trained staff, for the tutors on the operation of the system. This paper address the issue of the content of these workshops.

The literature review, using books and periodicals, was conducted on adult literacy programs, computer-assisted instruction in literacy programs, volunteers tutors in literacy programs and training volunteers in literacy programs.

Questionnaire, interview and observation were the methods of research used in this study. Survey questionnaires were presented to the tutors querying their ability to perform specific functions on the INVEST system. They were also requested to comment on what they would like to see presented in a computer lab workshop. The questionnaire showed a natural almost equal
division of the twenty tutors responding, as those under six months and those over one year. Those under six months were knowledgeable about computers in general but knew little about the INVEST system features. The over one year group also was knowledgeable about computers, knew more about the INVEST system, but few know how to print, review a student from the manager’s station or how to add a topic to a student’s menu.

The researcher interviewed administrators of adult literacy computer labs to determine the content of INVEST workshops and discovered two out of three did not conduct formal training on computer systems. The one conducting training was not using the INVEST system but another CAI tool. This training program included an orientation program for new tutors providing information on the facility, user guides for quick reference, and new tutor manuals. Although volunteers were used in all three labs, only one would be willing to allow the volunteer tutor to use the manager’s station for monitoring student progress and developing curriculum. However, this facility did not offer formalized training.

While observing tutors in the INVEST lab the researcher noticed that the tutor lacked both the computer knowledge and INVEST manager station competency which is necessary in facilitating successful student progress. The staff members of the lab demonstrated knowledge about the manager’s station functions of entering students and assigning components and lessons to students. The printing of reports or student letters by either the tutor or the staff was not observed.

Conclusion

The increase of adult illiteracy indicates the growing need for more programs which would mean more volunteers will be needed to administer to the adult learner. Research shows however, that the number of hours per week of volunteer service has declined to an average of
four hours per week putting a strain on the one-to-one method of tutoring the adult learner in a literacy program. The CAI literacy programs have been developed to provide an environment of student to computer interaction with the tutor acting as a facilitator over many students at one time. However, organizations must be made aware that if the CAI programs are going to be successful, the facilitators using the tool must be trained. Since it has been determined that training is necessary, how much and what to include in a training program is the question addressed in this paper.

The data collected in the research of this paper indicates that volunteers with some computer competency are volunteering in the CAI lab. There is also an indication of a gap between the new tutor and the long term tutor. Research indicates that a nine-month commitment is needed from a one-on-on tutor, however a time commitment needed for a CAI tutor has not been determined. It would appear however, that once a volunteer is trained on a CAI program, a commitment longer than six months would be desirable.

There appears to be two levels of facilitation a volunteer tutor can perform in the lab. The first is the basic instructions necessary in assisting students to enable them to complete lessons in the computer programs. The second is the management of the manager’s station with the intent of monitoring student progress, assigning lessons and topics and printing student reports and letters. The bilevel training approach was the one adapted by the researcher when developing workshops for the volunteer tutors. Training at the basic level was presented as a review to the competent user and basic instruction to the newcomer. The second level which required a prerequisite of knowledge included in the first level workshop, presented instruction on the manager station. Both workshops were optional and were not only a source of training but a chance for the volunteers to socialize. Without a social activity, many of the "part time" volunteers do not have an opportunity to meet and interact with other volunteers as their four
hours of service may not coincide with other volunteers.

The volunteer in a literacy program is described as the working professional man or woman who is seeking knowledge and skill to advance professionally. Training programs that adhere to these needs and provide professional development are more likely to attract participants and organization that promote inservice training will be more likely retain trained tutors.

Recommendations

Implementation. The researcher recommends that the workshops developed as a result of this study should be presented to all new users of the INVEST system. The workbook section of the workshop could be used as a self-directed study for individual new tutors or tutors in need of a refresher course.

The two INVEST workshops presented in the paper could be the basis of a series of future workshops based on the requests of the volunteers on the survey. Some of the workshop topics presented in the responses to the survey included: GED instructions, PALS training, entering a new student and system technical maintenance. Meeting the requests of the volunteers and providing potential growth in computer skills and adult education could reduce the under six month turnover rate. In addition to training workshops, it is recommended that facilitated "free" time be allocated to the tutors to "practice" on the lessons and the manager station.

Future Research. Research on determining the training needs in CAI programs, and the depth of training needed should continue. The CAI volunteer tutor field would benefit from knowledge as to whether the six month turnover experienced in the LEARN lab is a standard in the literacy field or is unique to the LVMC lab. In addition, investigating the factors that would influence a volunteer to remain in service for an extended period of time would be of importance.
REFERENCE LIST


Imel, Susan. 1986. *Adult Literacy Volunteers*. Ohio. ERIC Clearinghouse on Adult, Career, and Vocational Education.


LVMC Learn Lab Fact Sheet. Arizona. Literacy Volunteers of Maricopa County.


Mageau, Therese. 1993. Clinic: Computer software applications for adult literacy programs - Teaching with technology. *Instructor* April v102, n8(1), 82.


*Tutor Tips*, Summer 1993, Literacy Volunteers of Maricopa County, Inc.

TUTOR QUESTIONNAIRE

The purpose of this questionnaire is to assist in compiling the curriculum for an in-service workshop and a user's manual for tutors in the LEARN Lab.

Answer all questions as honestly as you can. The answers will be kept confidential, so please do not put your name on this form. Thanks for your help.

Circle the letter that best describes your answer.

1. How long have you been with the LVM program?
   a. 1-3 months
   b. 4-6 months
   c. 7-12 months
   d. More than one year

2. What age group do you represent?
   a. 29 or under
   b. 30 to 49
   c. 50 to 64
   d. 65 and over

3. Do you plan to continue as a tutor in the LVM program?
   a. Yes
   b. No
   c. Not sure

4. Have you ever played any video games?
   a. Yes
   b. No
   c. Not sure

5. Have you ever had any contact with a computer at work?
   a. Yes
   b. No
   c. Not sure

6. Do you have a computer at home?
   a. Yes
   b. No
   c. Not sure

   If yes, who uses it?
7. Do you know how to operate a typewriter or a wordprocessor?  
   a. Yes  
   b. No  
   c. Not sure

8. Do you know how to start the PALS computers?  
   a. Yes  
   b. No  
   c. Need instruction

9. Do you know how to start the INVEST computers?  
   a. Yes  
   b. No  
   c. Need instruction

10. Do you know how to review a student from the INVEST manager station?  
    a. Yes  
    b. No  
    c. Need instruction

11. Do you know how to add a topic of study to a student’s menu?  
    a. Yes  
    b. No  
    c. Need instruction

12. Do you know how to select a workbook that is a companion to a student’s study?  
    a. Yes  
    b. No  
    c. Need instruction

13. Do you know how to write and print a letter in INVEST writing program?  
    a. Yes  
    b. No  
    c. Need instruction

14. What do you think is the tutor’s role in the LEARN lab?
15. What would you like to see covered in a computer lab workshop? Please include any topics or procedures that you think might be of use to you or other tutors. Use additional pages if needed.
APPENDIX B

INVEST LVMC LEARN LAB BASIC WORKSHOP
OBJECTIVES

INVEST Basic Workshop

After the workshop the participant will:

1) Describe the tutor's role in the LEARN Lab.

2) Describe the characteristics of the adult learner.

3) Describe the computer's role in the literacy program.

4) Name the three INVEST tier structures with 100% accuracy.

5) Demonstrate the basic operations of the computer by rebooting the system, using the [ESC] key to go backwards, moving the mouse on the screen, and adjusting the earphones.

6) Demonstrate the start-up and shut-down procedure of the INVEST system with 100% accuracy.

Criteria: Given a student workstation, enter the code and selections to start up the system and then enter the code and selections to shut down the system.

7) Demonstrate the student sign-in procedure in the INVEST system with 100% accuracy.

Criteria: Given a student workstation, sign-in using the student name and password.

8) Sign into the REVIEW program and practice several lessons.

9) Demonstrate a knowledge of the manager station and the procedure of accessing a student record for the purpose of reading the password, and removing a "3W" on a student lesson.

Criteria: Given access to the manager station, a student name and session, look up the student through the view/change window and obtain the password and view the student lesson and change a "3W" to an "A".
# LESSON FRAME A

**Course Title:** INVEST Basic Workshop  
**Date:**

**Frame Name:** Introduction  
**Frame Number:** 1  
**Instructor:**  
**Total Time:** 3 hours

**Objective:** The participants will introduce themselves to each other.

<table>
<thead>
<tr>
<th>TIME</th>
<th>CONTENT/NARRATIVE</th>
<th>METHOD</th>
<th>AIDS</th>
</tr>
</thead>
</table>
| 10 min. | INTRODUCTION/ATTENDANCE  
Introduce Instructor  
Pass out objectives of workshop and reference list. | DISCUSS |  
Fig. 1  
Index Cards |
| 10 min. | PASS out index cards:  
Duplicate numbers on every other card.  
Participants find the person with the index card with the same number.  
**INSTRUCTIONS:**  
Interview your partner. Write on your card the rewarding experience told to by your partner. Now you tell your partner your most rewarding experience. | ICE BREAKER  
BUZZ GROUPS |  |
| 10 min. | DISCUSSION:  
Introduce your partner and tell of the experience written on the card told to you. | PRESENT |  |
1

Name:

Experience:

Write your name and most memorable experience as a tutor, teacher, parent or student.

What made this experience special?

________________________________________

________________________________________

________________________________________

Fig. 1
LESSON FRAME A

Course Title: **INVEST Basic Workshop** Date: ________________________

Frame Name: **Tutor, Adult & Computer Roles** Frame Number: **2**

Instructor: ________________________ Total Time: **3 hours**

Objective: The participants will define the roles of the tutor and the computer in the LEARN Lab and the characteristics of the adult learner.

<table>
<thead>
<tr>
<th>TIME</th>
<th>CONTENT/NARRATIVE</th>
<th>METHOD</th>
<th>AIDS</th>
</tr>
</thead>
</table>
| 10 min. | PRESENT three questions:                                                          | **ASK?** | ![Fig. 2](image)
|       | What is a tutor's role in the LEARN Lab?                                          |        |      |
|       | What is the computer's role in a literacy program?                                |        |      |
|       | What are the characteristics of the adult learner?                                |        |      |
|       | Seating arrangement should provide small group discussion.                        |        | ![Group](image)
|       | Break into small groups to discuss the questions and gather answers to present to the group. |        |      |
What is a tutor's role in the LEARN Lab?

What is the Computer's role in a literacy program?

What are the characteristics of the adult learner?

Fig. 2
LESSON FRAME B

Course Title: **INVEST Basic Workshop**          Date: __________

Frame Name: **Tutor**          Frame Number: **2**

Instructor: __________          Total Time: **3 hours**

**Objective:** Participants will report findings of group discussion on what is the tutor's role in the LEARN Lab, what is the computer's role in a literacy program and the characteristics of the adult learner.

<table>
<thead>
<tr>
<th>TIME</th>
<th>CONTENT/NARRATIVE</th>
<th>METHOD</th>
<th>AIDS</th>
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</thead>
<tbody>
<tr>
<td>20 min.</td>
<td><strong>PARTICIPATION</strong></td>
<td><strong>DISCUSS</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Group report</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>TUTOR</strong></td>
<td><strong>RECORD</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Mentor</td>
<td></td>
<td><strong>Fig. 3</strong></td>
</tr>
<tr>
<td></td>
<td>Facilitator</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Teacher</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Guides</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Listener</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
TUTOR

Who is the Tutor?

<table>
<thead>
<tr>
<th>ROLES</th>
<th>RESPONSIBILITIES</th>
</tr>
</thead>
<tbody>
<tr>
<td>Administrator</td>
<td>Clerical</td>
</tr>
<tr>
<td>Greeter</td>
<td>Student assessment</td>
</tr>
<tr>
<td>Volunteer</td>
<td>Curriculum development</td>
</tr>
<tr>
<td>Teacher</td>
<td>Conduct classes</td>
</tr>
<tr>
<td>Coach</td>
<td>Correct workbooks</td>
</tr>
<tr>
<td>Mentor</td>
<td>Report to other agencies</td>
</tr>
<tr>
<td>Parent</td>
<td>Decorate the room</td>
</tr>
<tr>
<td>Adult learner</td>
<td>Clean equipment</td>
</tr>
<tr>
<td>Motivator</td>
<td>Make coffee</td>
</tr>
<tr>
<td></td>
<td>Assist the learner</td>
</tr>
</tbody>
</table>

TUTOR TIPS:

Remember the Tutor is an Adult Learner.

Do not teach them what they already know. Design your lessons around what they need to know to be successful in their culture.

Help the learner diagnose, plan, and evaluate their learning objectives.

Provide an environment that is both physical and psychological prepared for learning to take place.

NOTES:

Fig. 3
LESSON FRAME C

Course Title: **INVEST Basic Workshop**  Date:____________

Frame Name: **Computer**  Frame Number: 2

Instructor:  Total Time: 3 hours

Objective: Participants will report findings of group discussion on what is the tutor's role in the LEARN Lab, what is the computer's role in a literacy program and the characteristics of the adult learner.

<table>
<thead>
<tr>
<th>TIME</th>
<th>CONTENT/NARRATIVE</th>
<th>METHOD</th>
<th>AIDS</th>
</tr>
</thead>
<tbody>
<tr>
<td>20 min.</td>
<td>PARTICIPATION</td>
<td>DISCUSS</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Group report.</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>COMPUTER</td>
<td>RECORD</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Tool</td>
<td></td>
<td>Fig. 4</td>
</tr>
<tr>
<td></td>
<td>Relevancy</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Privacy</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Control</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Success</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
**COMPUTER**

What are Computers doing in Adult Ed?

<table>
<thead>
<tr>
<th>GENERAL</th>
<th>INVEST</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Privacy</td>
<td>• Single user station</td>
</tr>
<tr>
<td>• Individualization</td>
<td>• Customized curriculum</td>
</tr>
<tr>
<td>• Control learning</td>
<td>• Planned lessons</td>
</tr>
<tr>
<td>• Flexibility</td>
<td>• Component variety</td>
</tr>
<tr>
<td>• Immediate objective feedback</td>
<td>• Offline workbooks</td>
</tr>
<tr>
<td>• Defined objectives</td>
<td>• Visual and audio responses</td>
</tr>
<tr>
<td>• Cost effective</td>
<td>• Self-paced instruction</td>
</tr>
<tr>
<td>• Instructional tool</td>
<td>• Evaluative reporting</td>
</tr>
<tr>
<td>• Logical sequencing</td>
<td>• Manager station custom builder</td>
</tr>
</tbody>
</table>

**TUTOR TIPS:**

CAI - Computer-Assisted Instruction is a tool in the learning process.

INVEST provides for continued assessment of the learner's progress.

The computer should be presented as a supplement to conventional teaching methods and utilizing various off-line material.

Learners who have been unsuccessful in conventional classroom situations may be more comfortable in a CAI environment.

The computer skills developed can be transferred to real-life job experiences.

**NOTES:**

Fig. 4
Lesson Frame D

Course Title: INVEST Basic Workshop

Frame Name: Adult learner

Instructor:

Date: 

Frame Number: 2

Total Time: 3 hours

Objective: Participants will report findings of group discussion on what is the tutor’s role in the LEARN Lab, what is the computer’s role in a literacy program and what are the characteristics of the adult learner.

<table>
<thead>
<tr>
<th>TIME</th>
<th>CONTENT/NARRATIVE</th>
<th>METHOD</th>
<th>AIDS</th>
</tr>
</thead>
<tbody>
<tr>
<td>20 min.</td>
<td>PARTICIPATION</td>
<td>DISCUSS</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Group report</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>ADULT</td>
<td></td>
<td>Fig. 5</td>
</tr>
<tr>
<td></td>
<td>Self-directing</td>
<td>RECORD</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Involvement</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Experiences</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Need-to-know</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Success</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Measurement: The participant will tell the role of the tutor in the LEARN Lab, tell the role of the computer in a Literacy Program and define the adult learner.

Transitions: Now let’s look at the role INVEST plays in our Lab.
How does the adult and child learner differ?

<table>
<thead>
<tr>
<th>ADULT</th>
<th>CHILD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Self-Directing</td>
<td>Dependent</td>
</tr>
<tr>
<td>Intellectually curious</td>
<td>Needs discipline</td>
</tr>
<tr>
<td>Time Conscious</td>
<td>Needs directions</td>
</tr>
<tr>
<td>Reservoir of experiences</td>
<td>Needs emotional support</td>
</tr>
<tr>
<td>Problem-centered</td>
<td>Needs structured activities</td>
</tr>
<tr>
<td>Wants practical application</td>
<td>Acquires subject matter</td>
</tr>
<tr>
<td>Active participant</td>
<td>Needs outside pressures to succeed</td>
</tr>
<tr>
<td>Socially interactive</td>
<td>Peer orientated goals</td>
</tr>
</tbody>
</table>

**TUTOR TIPS:**

People of all ages are capable of learning.

Adults have different styles of learning and require a variety of instructional techniques.

Adults enter into a learning experience with their own personal goals which may be different than the goals of the tutor.

Adults want to apply the skill and knowledge learned as soon as possible in present situations.

Adults are easily threatened and will learn best in a comfortable environment.

**NOTES:**

*Fig. 5*
LESSON FRAME A

Course Title: **INVEST Basic Workshop**  Date:______________________

Frame Name: Objectives review  Frame Number: 3

Instructor: ____________________________  Total Time: 3 hours

Objective: The participants will view an introductory video on the INVEST system.

<table>
<thead>
<tr>
<th>TIME</th>
<th>CONTENT/NARRATIVE</th>
<th>METHOD</th>
<th>AIDS</th>
</tr>
</thead>
<tbody>
<tr>
<td>5 min.</td>
<td>VIDEO</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Jostens' video of the system overview. The first four minutes of tape #9.</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Read handout. The Structure and Format as described by Jostens in the pamphlet</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>INVEST in the Future A program from Jostens Learning. Page 7 and 8.</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Tape 9 Jostens</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Fig. 6</td>
</tr>
</tbody>
</table>
INVEST begins at the foundation level of basic skills and continues through more advanced basic skills education. The INVEST program design stimulates an interest in learning, teaches basic skills, and demonstrates the practical application of those skills. INVEST includes more than 5,000 on-line lessons comprising over 1,800 hours of computer-based curriculum. The program also includes supporting workbooks for many of the learning activities.

INVEST incorporates relevant adult and at risk content with research-based instructional techniques. It uses an interconnected and interactive design format encompassing a variety of subjects and skills presented in a diverse way at many different levels of difficulty. Through this network the learner can follow a broad curriculum of difficulty or focus on a specific skill need.

The curriculum is divided into three levels or tiers of learning achievement:

- **Tier 1** Basic Skill Level 1 to 3
- **Tier 2** Basic Skill Level 4 to 8
- **Tier 3** Basic Skill Level 9 to 11

A learner can enter the program at any level based on the INVEST diagnostic/prescriptive component.

INVEST includes several objectives common to all program tiers. These objectives include Learning How to Learn, Problem Solving, Critical Thinking and Practical Public Writing. Learners are encouraged to acquire these skills regardless of the educational level they possess upon program entry. They are also given the opportunity to apply these skills to life and workplace situations.

Each tier incorporates courses covering reading/vocabulary building, and writing skills, and mathematical/computational skills. The complexity and variety of material within each component changes as learners move through the levels, challenging the learner to acquire more knowledge and a wider range of skills. The structure and numerous courses of INVEST can adapt to meet the specific needs and abilities of each learner. Courses can be used separately for very specific individual learning objectives, or coupled together in a variety of ways to meet different educational program objectives.

INVEST computer lessons use a variety of features including interactive graphics, sound, differential feedback, branching, review/hint screens, vocabulary windows and on-screen calculators. Learners use the computer as tool to work through practical problems. The writing component allows the learner to draft, edit, revise and publish in a wide variety of writing formats, and to develop skills for completing forms. These features provide many advanced, yet easy-to-use tools to meet learning goals.

INVEST provides an integrated structure and format for the difficult task of basic skills instruction. Three tiers of curriculum allow each learner to begin instruction at a level appropriate to their skills and life experiences. Effective diagnostic testing allows accurate placement within the curriculum to allow for immediate success. The extensive curriculum of more than 6,000 computer based and workbook lessons allows a variety of learning experiences for any particular skill at any level.

---


Fig. 6
**LESSON FRAME A**

**Course Title:** INVEST Basic Workshop  
**Date:**

**Frame Name:** INVEST overview  
**Frame Number:** 4

**Instructor:**  
**Total Time:** 3 hours

**Objective:** The participants will name the three INVEST tiers, and have a general knowledge of the INVEST components, levels, strands and lesson clusters.

<table>
<thead>
<tr>
<th>TIME</th>
<th>CONTENT/NARRATIVE</th>
<th>METHOD</th>
<th>AIDS</th>
</tr>
</thead>
<tbody>
<tr>
<td>10 min.</td>
<td>LECTURE</td>
<td>LECTURE</td>
<td>Fig. 7</td>
</tr>
</tbody>
</table>

Think of the base of the structure as being the Tier or a group of grades. Next are the Components which are the subject in the grades. Such as Math and Reading. Next are the topics of study such as fractions, vocabulary, and money management. Within the topics of study the lessons are grouped together in clusters. As the learner advances through a topic or skill strand they pass through levels of achievement.
Lessons are specific to a Skill Strand within a Component of study. A Tier is a major achievement level that may be made up of up to five Components.
LESSON FRAME B

Course Title: INVEST Basic Workshop Date: __________________________

Frame Name: INVEST overview Frame Number: 4

Instructor: __________________________ Total Time: 3 hours

Objective: The participants will name the three INVEST tiers, and have a general knowledge of the INVEST components, levels, strands and lesson clusters.

<table>
<thead>
<tr>
<th>TIME</th>
<th>CONTENT/NARRATIVE</th>
<th>METHOD</th>
<th>AIDS</th>
</tr>
</thead>
<tbody>
<tr>
<td>10 min.</td>
<td>LECTURE</td>
<td>LECTURE</td>
<td>Fig. 8</td>
</tr>
<tr>
<td></td>
<td>Tiers - Major divisions</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>1 2 3</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Component = Subjects of work.</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Reading</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Math</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Writing</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Applied Skills</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Skill Strand - A specific area of study.</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Vocabulary</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Fractions</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Comprehension</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>May run through tiers. Tier 1 Reading Spelling Tier 2 Reading Spelling</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Levels - Minor divisions within an area of study.</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>1.0 1.1 1.2 1.3 1.4 1.5</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>2.0 2.1 2.2 2.3 2.4 4.5</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Lesson Cluster = a group of lessons with one or more objective in a specific skill area. Spelling - contractions</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Fill the term in the box associated with the example.

COMPONENT    TIER     LEVEL  SKILL STRAND  LESSON CLUSTER

Fig. 8
LESSON FRAME C

Course Title: INVEST Basic Workshop  Date: Jan. 29, 1994

Frame Name: INVEST overview  Frame Number: 4

Instructor:  Total Time: 3 hour

Objective: The participants will name the three Tiers, and identify the placement of the component, skill strand and lesson cluster in the INVEST structure.

<table>
<thead>
<tr>
<th>TIME</th>
<th>CONTENT/NARRATIVE</th>
<th>METHOD</th>
<th>AIDS</th>
</tr>
</thead>
<tbody>
<tr>
<td>10 min.</td>
<td>REVIEW</td>
<td>EXERCISE</td>
<td></td>
</tr>
</tbody>
</table>

Instructions:
Complete the review exercise.

Fig. 9

MEASUREMENT: The participants will complete the exercise by writing the correct example in the box next to the term.

TRANSITIONS: Let's take a look at how a learner is placed and tested in the system.
LESSON CLUSTER

LEVEL

SKILL STRAND

COMPONENT

TIER

Placement  USAGE
3  Reading  FRACTIONS
5.8  SYLLABICATION
6.0  2  Dividing Mixed Numbers  MATH

Fill in the blanks with an example of the term.

Fig. 9
**LESSON FRAME A**

**Course Title:** INVEST Basic Workshop  
**Date:**

**Frame Name:** INVEST Placement flow  
**Frame Number:** 5

**Instructor:**  
**Total Time:** 3 hours

**Objective:** Participants will name the three types of tests and identify when they are used.

<table>
<thead>
<tr>
<th>TIME</th>
<th>CONTENT/NARRATIVE</th>
<th>METHOD</th>
<th>AIDS</th>
</tr>
</thead>
<tbody>
<tr>
<td>10 min.</td>
<td><strong>PRESENT PLACEMENT LESSONS</strong></td>
<td>LECTURE</td>
<td>Fig. 10</td>
</tr>
</tbody>
</table>
|         | 1) LOCATOR TESTS  
To place learner in the correct tier, correct components, and correct lesson. |        |      |
|         | 2) PLACEMENT TESTS  
To place learner in the appropriate level within a component. |        |      |
|         | 3) PRETESTS/POSTTESTS  
Determine knowledge/skills before work is started in a cluster. |        |      |
Locator tests place the learner in the appropriate Tier.

Placement Tests place the learner in the appropriate Level of the Strand.

Pretests places the learner in the appropriate Lesson Cluster.

*Fig. 10*
LESSON FRAME B

Course Title: INVEST Basic Workshop Date: ____________

Frame Name: INVEST Placement flow Frame Number: 5

Instructor: ____________________________ Total Time: 3 hours

Objective: Participants will name the three types of tests and identify when they are used.

<table>
<thead>
<tr>
<th>TIME</th>
<th>CONTENT/NARRATIVE</th>
<th>METHOD</th>
<th>AIDS</th>
</tr>
</thead>
<tbody>
<tr>
<td>10 min.</td>
<td>REVIEW PLACEMENT FLOW</td>
<td>PARTICIPATE</td>
<td>![Fig. 11]</td>
</tr>
</tbody>
</table>

Instructions:
Complete the Review exercise by drawing a connecting line between the term and the definition.

MEASUREMENT: The participants will describe the three types of tests in the system with 100% accuracy.

TRANSITIONS: Let's review what we have learned.
Draw a line connecting the term with the definition.

Locator Tests
This test places the learner in the correct level of study.

Pretest
A new learner takes these tests to be placed in the correct tier.

Placement Test
This test evaluates whether a learner has mastered a lesson cluster.

Posttest
This test is taken to find out if the learner needs to work through a series of lessons.

Fig. 11
Lesson Frame A

Course Title: **INVEST Basic Workshop**  
Date: 

Frame Name: **Hardware Components**  
Frame Number: 7  
Instructor: 
Total Time: 3 hours  

Objective: The participants will identify the basic components of the INVEST system.

<table>
<thead>
<tr>
<th>TIME</th>
<th>CONTENT/NARRATIVE</th>
<th>METHOD</th>
<th>AIDS</th>
</tr>
</thead>
<tbody>
<tr>
<td>5 min.</td>
<td>DISCUSSION</td>
<td>READ</td>
<td>Fig. 12</td>
</tr>
</tbody>
</table>

Review handout of the parts of the system.

File Server  
Monitor  
C.P.U.  
Central processing unit  
Printer  
Mouse  
Digi-Speech

The student station performs a different function than the managers station. If the manager's menu appears on a student station the user will be able to view student records only and not add or edit records.

Complete worksheet.

**Measurement:** Given a picture of the hardware components the participants will identify them by writing the name in the box.

**Transitions:** Let's take a look at the keyboard and the special keys the student and manager will use.
Put the name of the hardware item in the box.

File Server  Printer  Digi-Speech
C.P.U.  Mouse  Floppy Drive  Monitor

Fig. 12
LESSON FRAME A

Course Title: INVEST Basic Workshop  Date: 

Frame Name: Keyboard and special keys  Frame Number: 8

Instructor:  Total Time: 3 hour

Objective: The participants will recognize the components of the system. They will describe the use of the special keys and locate them on the keyboard.

<table>
<thead>
<tr>
<th>TIME</th>
<th>CONTENT/NARRATIVE</th>
<th>METHOD</th>
<th>AIDS</th>
</tr>
</thead>
<tbody>
<tr>
<td>5 min.</td>
<td>DISCUSSION</td>
<td>READ</td>
<td>Fig. 13</td>
</tr>
<tr>
<td></td>
<td>Review the Keyboard</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Locate these keys: ESC</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Function keys</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Shift</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>ALT</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Space Bar</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Arrow keys</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Caps Lock</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Num Lock</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>These are the keys the student will need to know when working through lessons.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
LESSON FRAME B

Course Title: INVEST Basic Workshop
Frame Name: Keyboard and special keys
Frame Number: 8
Instructor: 
Total Time: 3 hours

Objective: The participants locate the special keys on the keyboard and describe their function.

<table>
<thead>
<tr>
<th>TIME</th>
<th>CONTENT/NARRATIVE</th>
<th>METHOD</th>
<th>AIDS</th>
</tr>
</thead>
<tbody>
<tr>
<td>5 min.</td>
<td>REVIEW</td>
<td>PRACTICE</td>
<td>Fig. 14</td>
</tr>
</tbody>
</table>

Complete the Review worksheet by filling in blanks with the correct key name.

MEASUREMENT: Given a picture of the keyboard the participants will locate and tell the usage of the named keys.

TRANSITIONS: What do you do if the Managers station is on and the student stations have not been turned on yet?
Find the key on your keyboard. Complete the sentences using the correct key name.

1. The ______ key exits you out of the screen.

2. The ______ key allows you to choose upper case letters or the symbols on the top of the keys.

3. The ______ keys lets you move the cursor up or down through a list.

4. The ______ key moves you to the previously entered letter, number, symbol or space.

5. The ______ key moves you ahead leaving blank space or flags a chosen item from a list.

6. The ______ key locks on upper case entry.
LESSON FRAME A

Course Title: INVEST Basic Workshop

Frame Name: Start-up and Shut-down

Instructor: ________________________ Total Time: 3 hours

Objective: The participants will know the procedures of starting up the student station and shutting down the student station.

<table>
<thead>
<tr>
<th>TIME</th>
<th>CONTENT/NARRATIVE</th>
<th>METHOD</th>
<th>AIDS</th>
</tr>
</thead>
</table>
| 5 min. | DEMONSTRATION
Using the Quick Guide
demonstrate the procedures
for starting up and
shutting down the student
station.                                      | DEMONSTRATION |               |
| 5 min. | PRACTICE
Participants practice
starting up and shutting
down the student stations
using the QUICK GUIDE as
reference.

If more that eight in the
group, they should be
paired up.

This procedure is used for
the student station only.
A different procedure is
used for the manager's
station.                                      | PRACTICE      | QUICK GUIDE    |

MEASUREMENT: The participants
given a workstation and a
copy of the QUICK GUIDE will
demonstrate the procedures
with 100% accuracy.

TRANSITIONS: Now let's
play the role of the student
and sign into the system.
Use the Quick Reference Guide to assist you.

1. Turn on the monitor and the C.P.U. (station).

2. Advance to the Type Your Name: screen.

3. Sign off of the student station.

4. Turn off the monitor and the C.P.U. (station).
LESSON FRAME A

Course Title: INVEST Basic Workshop  Date: 
Frame Name: Student Sign-in  Frame Number: 10
Instructor:  Total Time: 3 hours

Objective: The participants will know the procedures of signing into a student stations.

<table>
<thead>
<tr>
<th>TIME</th>
<th>CONTENT/NARRATIVE</th>
<th>METHOD</th>
<th>AIDS</th>
</tr>
</thead>
<tbody>
<tr>
<td>5 min.</td>
<td>DEMONSTRATION Using the Quick Guide demonstrate the procedures for sign-in.</td>
<td>DEMONSTRATION</td>
<td>QUICK GUIDE</td>
</tr>
<tr>
<td>5 min.</td>
<td>PRACTICE</td>
<td>PRACTICE</td>
<td>DEMO CUPS</td>
</tr>
<tr>
<td></td>
<td>Participants practice starting up and shutting down the student stations using the QUICK GUIDE as reference and signing into the seven dwarfs' sample student programs.</td>
<td>ROLE PLAY</td>
<td>Fig. 16</td>
</tr>
<tr>
<td></td>
<td>If grouped in sign-in continue same grouping.</td>
<td>ROLE PLAY</td>
<td></td>
</tr>
<tr>
<td></td>
<td>ROLE PLAY: Pair up and a &quot;tutor&quot; instruct a &quot;learner&quot; on the procedures of sign-in.</td>
<td>ROLE PLAY</td>
<td></td>
</tr>
</tbody>
</table>

MEASUREMENT: The participants given a student workstation, a QUICK GUIDE and a dwarf cup will sign into the student program represented by the sample "cup".

TRANSITIONS: Next we will have a practice time on time on some sample lessons.
Use the Quick Reference Guide to assist you.

1. Sign in the system as a student. Use a name and ID supplied on the "Demo Cups". Example: Dopey 123456789

2. Note the ICON screen displaying the available Components.

3. Highlight the desired component by using the Arrow Keys. The ICON will be surrounded with a white boarder. Press ENTER.

4. Note the Skill Strands available. Using the Arrow keys choose the topic you which to study.

5. Start to work on the first lesson in that Lesson Cluster. This lesson may be a Pretest.

6. When the lesson is completed choose a new topic or ECS back to the Type your Name: screen.
**LESSON FRAME A**

Course Title: **INVEST Basic Workshop**

Frame Name: **Practice on REVIEW**

Instructor: ____________

Frame Number: **11**

Total Time: 3 hours

**Objective:** The participants will practice lessons by using the REVIEW option.

<table>
<thead>
<tr>
<th>TIME</th>
<th>CONTENT/NARRATIVE</th>
<th>METHOD</th>
<th>AIDS</th>
</tr>
</thead>
</table>
| 5 min. | **INSTRUCTIONS ON USING REVIEW**  
Using the Quick Guide  
sign in as a student except instead of the student name type REVIEW.  
Participants practice the lessons in the Guide, that will include the use:  
of the earphones  
audit/visual instructions  
CTRL R repeat key  
typing spelling words  
on line calculator  
space bar and enter key  
multiple choice  
the mouse  
graphic displays  
These lessons may be used as samples for new students before taking locator tests. | LECTURE | QUICK GUIDE |

**MEASUREMENT:** Participants will sign into REVIEW and work through several lessons using the special functions and components.

**TRANSITIONS:** Instruction on the manager station will be offered to any wishing to continue. Please come to the Manager Station in groups of four.
Use the Quick Reference Guide to assist you.

1. At the **Type Your Name:** screen, type in **REVIEW**.

2. Highlight the desired Component. For example select **Tier 1 Reading**.

3. Type in a desired lesson number. For example type in 18 to practice a lesson on word meaning.

4. Work thorough the chosen lesson.

5. Use the ESC key to exit the **REVIEW practice exercise**.
## LESSON FRAME A

**Course Title:** INVEST Basic Workshop  
**Date:**

**Frame Name:** Manager Station - Intro  
**Frame Number:** 12

**Instructor:**

**Total Time:** 3 hours

**Objective:** The participants will know how to find a class and a student from the Manager Station.

<table>
<thead>
<tr>
<th>TIME</th>
<th>CONTENT/NARRATIVE</th>
<th>METHOD</th>
<th>AIDS</th>
</tr>
</thead>
<tbody>
<tr>
<td>10 min.</td>
<td><strong>INSTRUCTIONS ON USING THE MANAGER STATION</strong></td>
<td><strong>DEMONSTRATION</strong></td>
<td>Fig. 18</td>
</tr>
<tr>
<td></td>
<td>Manager station should be up and setting at IMS menu screen.</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Using the instructions in the QUICK GUIDE step thru the process of accessing a student record.</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Review the Student ID and the lessons currently being worked on.</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>This record will give you the information necessary to assist a student sign onto the system if they have forgotten their Id.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**MEASUREMENT:** Given a class and student name, the participant will find a student record and tell the ID and current lesson.

**TRANSITIONS:** The student tells you the screen says "There are no lessons prescribed. See your your instructor." What do you do?
EXERCISE

Use the Quick Reference Guide to assist you.

1. At the managers station, find a student record in the Demonstration class. Example: Dopey.

3. View the student record and find the Name, Student Id and the lesson the student is currently working on.

4. List the Components assigned to this student.
LESSON FRAME A

Course Title: INVEST Basic Workshop

Frame Name: Student Trouble Spot (3W)  Frame Number: 13

Instructor: ____________________________________________

Total Time: 3 hours

Objective: The participants will be able to find a student record recognize a "3W" and make an adjustment so the student can continue.

<table>
<thead>
<tr>
<th>TIME</th>
<th>CONTENT/NARRATIVE</th>
<th>METHOD</th>
<th>AIDS</th>
</tr>
</thead>
<tbody>
<tr>
<td>5 min.</td>
<td>DEMONSTRATION</td>
<td>DEMONSTRATION</td>
<td>QUICK GUIDE Fig. 19</td>
</tr>
</tbody>
</table>

Find a student record and component and lesson being worked on, and find the grid and look for a "3W".

Change the "3W" by keying in "0A" to reactivate the lesson. Make note of the lesson to review with student or assign additional work.

EXPLAIN

A 3W is an indication of a problem and should not be ignored but some action should be taken.

MEASUREMENT: The participant will change a 3W to a 0A when given a student name and class.

TRANSITIONS: Please complete the evaluation forms and thanks for attending today's workshop.
EXERCISE

Use the Quick Reference Guide to assist you.

1. At the managers station, find a student record in the Demonstration class. Example: Dopey.

3. View the student record and choose a Component under the Prescribed Component section of the record. Highlight a Component and press ENTER.

4. View the Strand Grid. List the Skill Strands available to this student.

5. View the "active" cell and highlight it. Press ENTER.

6. View the Lesson Grid. List the Lesson Clusters in the Lesson Grid.

7. If there is a 3W in the Lesson Grid change it to an A or an S.

8. Return to the manager menu.
Name of Workshop

Presenter's Name __________________________ Date ____________________

Please put an X in the box or boxes that best complete your answer.

1. Why did you come to this workshop?
   □ General interest    □ Part of my professional development
   □ Required           □ Other (Please explain) ______________________

2. Prior to the workshop, how much did you know about the topic?
   □ None             □ Some            □ A great deal

3. Following the workshop, how much did you know about the topic?
   □ None             □ Some            □ A great deal

4. How well did the workshop meet your needs and expectations?
   □ Poorly           □ To some extent □ Well    □ Extremely well

5. What aspect(s) of the workshop was the most successful?
   □ Presenter's knowledge and ability □ Subject matter
   □ Workshop materials and activities □ Group interaction
   □ Other (please explain) ______________________

6. What aspect(s) of the workshop was the least successful?
   □ Presenter's knowledge and ability □ Subject matter
   □ Workshop materials and activities □ Group interaction
   □ Other (please explain) ______________________

7. Please rate the workshop overall:
   □ Poor            □ Adequate        □ Worthwhile      □ Excellent

8. What other comments, criticisms, or suggestions would you like to make?
   ______________________
   ______________________
   ______________________

Thank you for providing this feedback to help improve the workshop in the future.

APPENDIX C

INVEST LVMC LEARN LAB INTERMEDIATE WORKSHOP
INVEST
LVMC LEARN LAB
INTERMEDIATE
WORKSHOP
**LESSON FRAME A**

**Course Title:** INVEST Intermediate Workshop  **Date:** Apr. 15, 1994

**Frame Name:** Introduction  **Frame Number:** 1

**Author:** Judy Thompson  **Total Time:** 3 hours

**Objective:** Introduction of facilitator and participants.

<table>
<thead>
<tr>
<th>TIME</th>
<th>CONTENT/NARRATIVE</th>
<th>METHOD</th>
<th>AIDS</th>
</tr>
</thead>
</table>
| 12:00am  | INTRODUCTION/ATTENDANCE  
Introduce Instructor  
HAND OUT objectives of workshop and reference list. | DISCUSS         | [Image]                  |
| 12:05am  | HAND OUT Network game  
Tell participants they have 5 minutes to get names on their network game sheet.  
INSTRUCTIONS:  
After the time limit or when the first person Shouts I'm Networked have a general discussion on the sections of the game. | ICE BREAKER     | Network Game Sheet       |
PROFESSIONAL NETWORK GAME

Knows what a Component is...
Is actively involved in a professional org.
Knows how to get into Review...

Knows what exceptional progress branching is...
Gives you their business card.
Knows what an objective is...

Write YOUR name here (freebie).
Knows what PLC stands for...
Can find a student record...

RULES:

- You have 5 minutes to get sign-offs (first name) on these squares.

- The person signing, must demonstrate knowledge by telling you the "what" or "who" in the specific square.

- Honest responses.

- No one may sign more than 2 squares, per player/card.

- Winner is FIRST one with all squares signed off: and who shouts "MY NET WORKS!" —or— person with most squares signed off when time is called.
**LESSON FRAME A**

Course Title: **INVEST Intermediate Workshop**  
Date: **Apr 15, 1994**

Frame Name: **Review of Basic Workshop**  
Frame Number: **2**

Author: **Judy Thompson**  
Total Time: **3 hours**

Objective: Using the glossary the participants will match the terms used in the INVEST System with the definition.

<table>
<thead>
<tr>
<th>TIME</th>
<th>CONTENT/NARRATIVE</th>
<th>METHOD</th>
<th>AIDS</th>
</tr>
</thead>
<tbody>
<tr>
<td>12:15am</td>
<td>HAND OUT glossary. and Review Sheet.</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>REVIEW</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Complete the review sheet using the glossary or a friend.</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Discuss the answers and any problems with terms.</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Move to the computers....</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
1. Match the words with their definition:

<table>
<thead>
<tr>
<th>Term</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>strand</td>
<td>one individual assignment</td>
</tr>
<tr>
<td>subject</td>
<td>a major area of study</td>
</tr>
<tr>
<td>lesson cluster</td>
<td>general skills for multiple levels in a component</td>
</tr>
<tr>
<td>level</td>
<td>a row of lessons</td>
</tr>
<tr>
<td>component</td>
<td>range of instructional skill difficulty</td>
</tr>
<tr>
<td>lesson</td>
<td>a grouping of lessons for a subject and level range</td>
</tr>
</tbody>
</table>

2. What are the three levels of tests?

NOTES:
# LESSON FRAME A

**Course Title:** INVEST Intermediate Workshop  
**Date:** Apr. 15, 1994  
**Frame Name:** IMS Key Functions  
**Frame Number:** 3  
**Author:** Judy Thompson  
**Total Time:** 3 hours

**Objective:** Participants will demonstrate the use of the IMS key functions.

<table>
<thead>
<tr>
<th>TIME</th>
<th>CONTENT/NARRATIVE</th>
<th>METHOD</th>
<th>AIDS</th>
</tr>
</thead>
<tbody>
<tr>
<td>12:20am</td>
<td>DISCUSSION</td>
<td>DISCUSS</td>
<td></td>
</tr>
<tr>
<td></td>
<td>HAND OUT the IMS key function sheet.</td>
<td></td>
<td>KEYBOARD</td>
</tr>
<tr>
<td></td>
<td>DEMONSTRATION</td>
<td>DEMO</td>
<td></td>
</tr>
</tbody>
</table>

**MEASUREMENT:** The participant will tell the uses of the key functions.

**TRANSITIONS:** Now lets look at the special functions keys F2 and F1.
<table>
<thead>
<tr>
<th>Key</th>
<th>Function Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt;ENTER&gt;</td>
<td>Accept choices selected (i.e. open menus/screens/text) Move to the next page in an on-screen report</td>
</tr>
<tr>
<td>&lt;SPACEBAR&gt;</td>
<td>Toggle on an item from a list Move through the IMS scope and sequence</td>
</tr>
<tr>
<td>&lt;ESC&gt;</td>
<td>Back up to previous window, screen or menu</td>
</tr>
<tr>
<td>&lt;INSERT&gt;</td>
<td>Toggle between Insert and Overstrike mode when editing Add an element, such as component or learner</td>
</tr>
<tr>
<td>&lt;DELETE&gt;</td>
<td>Remove a student or component Delete a character at the point of the cursor</td>
</tr>
<tr>
<td>&lt;BACKSPACE&gt;</td>
<td>Delete the character to the left when editing date/text</td>
</tr>
<tr>
<td>&lt;TAB&gt;</td>
<td>Move to next field in window or screen</td>
</tr>
<tr>
<td>&lt;SHIFT-TAB&gt;</td>
<td>Back up to previous field in a window or screen</td>
</tr>
<tr>
<td>&lt;PAGE UP&gt;</td>
<td>Move cursor up one page</td>
</tr>
<tr>
<td>&lt;PAGE DOWN&gt;</td>
<td>Move cursor down one page</td>
</tr>
<tr>
<td>&lt;HOME&gt;</td>
<td>Move cursor to top of list or text</td>
</tr>
<tr>
<td>&lt;END&gt;</td>
<td>Move cursor to bottom of list or text</td>
</tr>
<tr>
<td>&lt;F1&gt;</td>
<td>Access Help</td>
</tr>
<tr>
<td>&lt;F2&gt;</td>
<td>Edit Student Information</td>
</tr>
<tr>
<td>&lt;F3&gt;</td>
<td>Lock Keyboard</td>
</tr>
<tr>
<td>&lt;M&gt;</td>
<td>Change the Mastery Percentage for a particular learner In a particular component</td>
</tr>
<tr>
<td>&lt;A&gt;</td>
<td>All - Choose all students</td>
</tr>
<tr>
<td>&lt;N&gt;</td>
<td>Access the Next student in a list</td>
</tr>
<tr>
<td>&lt;P&gt;</td>
<td>Access the Previous student in a list</td>
</tr>
<tr>
<td>↑ ↓</td>
<td>Scroll up and down through a test or test</td>
</tr>
<tr>
<td>← →</td>
<td>Scroll sideways on grids; through text</td>
</tr>
</tbody>
</table>
LESSON FRAME A

Course Title: **INVEST Intermediate Workshop** Date: **Apr. 15, 1994**

Frame Name: **F2 and F1 function keys** Frame Number: **4**

Author: **Judy Thompson** Total Time: **3 hours**

Objective: The participants will demonstrate the use of the F2 and F1 functions keys.

<table>
<thead>
<tr>
<th>TIME</th>
<th>CONTENT/NARRATIVE</th>
<th>METHOD</th>
<th>AIDS</th>
</tr>
</thead>
<tbody>
<tr>
<td>12:40pm</td>
<td><strong>HAND OUT the F2 sheets</strong> <strong>DISCUSS</strong> Tell The F2 function key assess any student on file and display their name, ID and mastery percentage. Press F2 Choose Edit Group of Students or Active Student Highlight and press enter Choose the class Highlight and press enter Choose Select by name Select by characteristics Select by demographics Highlight and press enter Highlight student and press SPACE BAR If you with to edit choose Edit name/ID/Mastery Per. Add Changes/Char View/Edit Demo Highlight and press enter Discuss the used of this key. A quick look up.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Press F2 at any time

Highlight Select Group of Students or Use Active Student from the window and press <ENTER>. If you were viewing a student record, that record is considered the active record.

Select Edit Name/Id/Mastery Percentage to view or change the name, ID or mastery percentage of a student.

Select View/Edit Demographics to view, enter or change the demographics in a student record.
HELP NOTES

1. F1 help messages

2. Bottom line help

3. Videotapes

4. Documentation

NOTES:
**LESSON FRAME B**

Course Title: **INVEST Intermediate Workshop**  Date: **Apr. 15, 1994**

Frame Name: **F2 and F1 function keys**  Frame Number: **4**

Author: **Judy Thompson**  Total Time: **3 hours**

**Objective:** The participants will demonstrate the use of the F2 and F1 function keys.

<table>
<thead>
<tr>
<th>TIME</th>
<th>CONTENT/NARRATIVE</th>
<th>METHOD</th>
<th>AIDS</th>
</tr>
</thead>
<tbody>
<tr>
<td>12:45pm</td>
<td>LECTURE</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Demonstrate the use of the F1 key to access help in the form of a message on the screen giving directions for the input.

**REVIEW:**

Have the participants provide the answers for questions on F2.
What do you see when you use <F2>?

What is Student Information?

How do you use <F2>?

What can you change with <F2>?

How do you select your learners?

What is an active student?

How can you view information on multiple students?

How else can you access Student Information?
LESSON FRAME A

Course Title: INVEST Intermediate Workshop  Date: Apr. 15, 1994
Frame Name: Add a Class  Frame Number: 5
Author: Judy Thompson  Total Time: 3 hours

Objective: Participants will add a new class to the system and assign the Placement component.

<table>
<thead>
<tr>
<th>TIME</th>
<th>CONTENT/NARRATIVE</th>
<th>METHOD</th>
<th>AIDS</th>
</tr>
</thead>
<tbody>
<tr>
<td>1:00pm</td>
<td><strong>HAND OUT</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Distribute the procedures for adding a class.</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Discuss why and when you would add a class to the system.</td>
<td>DISCUSS</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Group students together</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Meeting time</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Similar component study</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Referral group</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>DEMONSTRATE</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>INFORMATION menu</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Highlight Add A Class</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Enter the name and</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Mastery Percentage</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>PRESS Insert to add components</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**MEASUREMENT:** The participants will add a class named Getting Started and assign the Placement Component.

**TRANSITIONS:** Now that we have the class no we need to assign students to the class.
ADD A CLASS

- Use the Arrow keys to move to the Information menu.
- Arrow down to highlight your choice.
- Press <Enter>

NOTES:

Components added from the Information Menu affect FUTURE students!
Add a Class, continued

- Use the Arrow Keys to move to the Information menu
- Arrow down to highlight Add a Class and press <Enter>
- A list of the classes in the system appears
- Press <Insert> to add a new class

```
Class Information
Class Name: [Blank]
Mastery Percentage: [Blank]
```

- Type in the class name: Getting Started
- Press <Tab> to get to the Mastery Percentage box (default is 85)
- Press <Enter> to save

---

**PRESCRIBE COMPONENTS**

- Press <Insert> to add components
- Use the Arrow keys to highlight Placement Lessons.
- Use the <Space Bar> to select component *(notice toggle mark on left)*
- You may continue to add components or...Press <Enter> to save.
- Press <Esc> to add another class. Press <Esc> again to return to the information menu.
LESSON FRAME A

Course Title: INVEST Intermediate Workshop Date: Apr. 15, 1994
Frame Name: Add students to a class Frame Number: 6
Author: Judy Thompson Total Time: 3 hour
Objective: The participants will add students to a class.

<table>
<thead>
<tr>
<th>TIME</th>
<th>CONTENT/NARRATIVE</th>
<th>METHOD</th>
<th>AIDS</th>
</tr>
</thead>
<tbody>
<tr>
<td>1:10pm</td>
<td>HAND OUT</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Distribute the procedures for Adding students to a class.</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>DISCUSS</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Now you can move students from one class to another or add a new student to a class.</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Choose Add Students</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Highlight the class</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Move:</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Highlight the student and press Enter.</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Add:</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Press Insert</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Enter Name, ID and mastery percentage</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

MEASUREMENT: The participants will move two students i.e. Snow White, Sneezy into the Getting Started and add Cinderella, Mother Goose and Mary Poppins.

TRANSITIONS: Next we will edit student characteristics.
ADD STUDENTS TO A CLASS

- Use the Arrow keys to move the Information menu
- Arrow down to highlight Add Students to a Class. Press <Enter>
- At the Choose a Group screen, highlight Getting Started. Press <Enter>
- Press <Insert> to add a new student
- Use <Tab> to move from one field to the next
- Press <Enter> when all information has been entered. Press <Esc> when all students have been entered.

```
<table>
<thead>
<tr>
<th>Students in System</th>
</tr>
</thead>
<tbody>
<tr>
<td>Snow White</td>
</tr>
<tr>
<td>Dopey</td>
</tr>
<tr>
<td>Sneezy</td>
</tr>
<tr>
<td>Sleepy</td>
</tr>
<tr>
<td>Doc</td>
</tr>
<tr>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Students in Getting Started</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
</tr>
</tbody>
</table>

Add Student

Please Enter First Name: [Redacted]
Please Enter Last Name: [Redacted]
Please Enter Student ID: [Redacted]
Default Mastery Percentage: [Redacted]
```

- Enter the following new students and their IDS:
  
  Cinderella       C1234
  Mary Poppins     MP897
  Mother Goose     MG354
LESSON FRAME A

Course Title: INVEST Intermediate Workshop Date: Apr. 15, 1994
Frame Name: Edit Class Components Frame Number: 7
Author: Judy Thompson Total Time: 3 hours
Objective: The participants will add a component to a class.

<table>
<thead>
<tr>
<th>TIME</th>
<th>CONTENT/NARRATIVE</th>
<th>METHOD</th>
<th>AIDS</th>
</tr>
</thead>
<tbody>
<tr>
<td>1:20pm</td>
<td>DISCUSS When would you edit a class component? When you wanted to add or delete a component to a class. This will affect all students in the class. Highlight Edit Class Component press enter Highlight a component press Space Bar to select Press enter DELETE: Discuss your discussion with the lab manager.</td>
<td></td>
<td>ASK</td>
</tr>
</tbody>
</table>

TAKE A BREAK!!!!!
To choose a group use the Arrow Keys to highlight a group and press <ENTER>.

Choose a Group

Getting Started

Monday 8 to 10

Saturday

Getting Started Components

Placement Lessons

Tier 1 Reading

Tier 2 Reading

To assign a component to a class use the Arrow Keys to highlight the selection and press <ENTER>. 
Lesson Frame A

Course Title: INVEST Intermediate Workshop  Date: Apr. 15, 1994
Frame Name: View/Change and Grids  Frame Number: 8
Author: Judy Thompson  Total Time: 3 hour

Objective: Find a student record through View/Change prescription and identify the overview and detailed grid.

<table>
<thead>
<tr>
<th>TIME</th>
<th>CONTENT/NARRATIVE</th>
</tr>
</thead>
</table>
| 1:30pm | REVIEW
Review how to access a students record using the View/Change Prescription in the Prescription Menu
Hand out the V/C sheets
Hand out the Grid sheets
Identify the terms Tier, Strand, Level Lesson cluster, lesson Cell, Pretest, Posttest
Discuss the Hierarchy of Overview Grid to Detailed Grid.
Point out the date and score at the bottom of the grids |

Measurement:  

Transitions:
VIEW/CHANGE PRESCRIPTION

- Use the Arrow keys to move to the Prescription menu.
- Arrow down to highlight View/change Prescription.
- Press <Enter>.

F1-Help F2-Edit F3-Lock ESC ↑ ↓ ← → -Scroll ENTER-Open

- Use Arrow keys to highlight desired class or all students, <Enter>
Use Arrow keys to highlight Select Students by Name. <Enter>

Use Arrow keys to highlight and <Space Bar> to select student(s). Note: You can select All Students by pressing <A>.

Press <Enter> when desired students have been selected.
The Vocabulary skill strand at level 4.0 is represented here by a dot. This dot represents a cell that contains a cluster of lessons.

You can "explode" that cell by highlighting it and pressing <ENTER>.

Label the overview grid using the terms below:

Tier
Strands
Level
Lesson cluster

Lesson
Level
Cell
Label the Detailed Grid using the terms below:

Lesson
Pretest

No lesson
Posttest
LESSON FRAME A

Course Title: INVEST Intermediate Workshop Date: Apr. 15, 1994

Frame Name: Lesson Status Codes  Frame Number: 9

Author: Judy Thompson  Total Time: 3 hours

Objective: The participants will tell the meaning of the Lesson Status Codes.

<table>
<thead>
<tr>
<th>TIME</th>
<th>CONTENT/NARRATIVE</th>
<th>METHOD</th>
<th>AIDS</th>
</tr>
</thead>
<tbody>
<tr>
<td>1:40pm</td>
<td>HAND OUT</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Lesson Status Codes assigned by the System</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>U, A, M, C, T, s, W, F</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Using the glossary fill in the blank descriptions.</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>HAND OUT</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Lesson Status Codes assigned by the Instructor.</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>View several overview and detail grids to determine what the codes are telling you about the student.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
**LESSON STATUS CODES**

### Assigned by the System

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>U</td>
<td>Lessons, tests, skill area are</td>
</tr>
<tr>
<td>A</td>
<td>Lessons, tests, skill area are</td>
</tr>
<tr>
<td>M</td>
<td>Lessons, tests, skill area are</td>
</tr>
<tr>
<td>1M</td>
<td></td>
</tr>
<tr>
<td>2M</td>
<td></td>
</tr>
<tr>
<td>3M</td>
<td></td>
</tr>
<tr>
<td>C</td>
<td>Because the learner has demonstrated competency on a test, this lesson or test is not assigned but credit is given.</td>
</tr>
<tr>
<td>T</td>
<td>Placement test is</td>
</tr>
<tr>
<td>s</td>
<td>Lesson is temporarily unavailable to the learner.</td>
</tr>
<tr>
<td>1s</td>
<td>In placement Lessons component, 1s means</td>
</tr>
<tr>
<td>W</td>
<td>Learner has worked on the lesson or pretest.</td>
</tr>
<tr>
<td>1W</td>
<td></td>
</tr>
<tr>
<td>2W</td>
<td></td>
</tr>
<tr>
<td>3W</td>
<td></td>
</tr>
<tr>
<td>1F</td>
<td>Learner has failed to master the lesson cluster pretest.</td>
</tr>
</tbody>
</table>

### Assigned by the Instructor

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
</tr>
</thead>
</table>
| A    | Assigned  
*Note: Only the first lesson needs to be assigned. There is no reason to assign more than the first one.* |
| T    | Placement Test assigned |
| C    | Comped (Comprehended)  
*Note: The system "comps" a learner when a test is passed, but you can also assign a C whenever you know the learner has mastered the material or skill.* |
| S    | Skip  
*Note: Use S when you don't want a learner to work a lesson or test.* |
| U    | To change a current assignment back to Unassigned status. |
What is Exceptional Progress Branching?

Within a lesson cluster, if a learner masters three (3) consecutive lessons on the first attempt with a designated "exceptional score" (the default is 90%) or better, the learner is advanced to the posttest for that lesson cluster. If the posttest is mastered, the other lessons in that lesson cluster are considered "comprehended" and the learner is advanced to the next lesson cluster pretest.

For Example:

Paul scored 90%, 95% and 90% on three consecutive lessons in the division of fractions lesson cluster. He earned those scores the first time he attempted the lessons.

What happens?

Paul is automatically advanced to the lesson cluster posttest.

If he masters the posttest on the first attempt, he 'comps' out of the remainder of the lessons in that cluster and is automatically assigned the pretest (if available) in the next lesson cluster.

If Paul does not master the pretest on the first attempt, he is returned to the point where he was temporarily advanced and continues to work through the lesson cluster.
LESSON FRAME A

Course Title: INVEST Intermediate Workshop Date: Apr. 15, 1994

Frame Name: Prescribe by Curr. Component Frame Number: 10

Author: Judy Thompson Total Time: 3 hours

Objective: The participants will assign a curriculum component through Prescribe by Curriculum Component.

<table>
<thead>
<tr>
<th>TIME</th>
<th>CONTENT/NARRATIVE</th>
<th>METHOD</th>
<th>AIDS</th>
</tr>
</thead>
<tbody>
<tr>
<td>1:50pm</td>
<td>DISCUSS</td>
<td>DEMONSTRATION</td>
<td></td>
</tr>
<tr>
<td></td>
<td>What is a number of your students in a particular class needed Survival Skills?</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Prescribe by Curriculum Component</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Prescription Menu</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Highlight Prescribe by Curriculum Component</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>press enter</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Highlight the class</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Press enter</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Select method</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Highlight the student</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Press SpaceBar to select</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Press Enter</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Highlight the component</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Press SpaceBar</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Press Enter</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>This process will assign components to a students in a class.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Use the Arrow Keys to highlight and press <ENTER>. 
Use the Arrow Keys to highlight. Press Space Bar to select. Press <ENTER> to accept.

NOTES
LESSON FRAME B

Course Title: INVEST Intermediate Workshop  Date: Apr. 15, 1994

Frame Name: Prescribe a Class  Frame Number: 11

Author: Judy Thompson  Total Time: 3 hour

Objective: The participant will prescribe a component to a class.

<table>
<thead>
<tr>
<th>TIME</th>
<th>CONTENT/NARRATIVE</th>
<th>METHOD</th>
<th>AIDS</th>
</tr>
</thead>
<tbody>
<tr>
<td>2:00pm</td>
<td>DISCUSS</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Would you ever want to assign a component to class and assign pretests on only certain lessons?</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Choose Prescribe a Class Press Enter Highlight the Class Press Enter Highlight the Component Press Space Bar to select Press Enter The Overview Grid appears Arrow through the cells Press enter to get to the Detailed grid Assign the prescription using the bottom line selections.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

MEASUREMENT: The participants will assign a component to the Getting Started class and assign Lesson Status Codes.

TRANSITIONS: Now let's prescribe an individual lesson.
Use the Arrow Keys to highlight and press <ENTER>.
Use the Arrow Keys to walk through the cells in the grid. Assign a prescription by using the Lesson Codes A C F S T U.

NOTES:
LESSON FRAME A

Course Title: INVEST Intermediate Workshop Date: Apr. 15, 1994
Frame Name: Prescribe by Objective Frame Number: 12
Author: Judy Thompson Total Time: 3 hours

Objective: The participants will prescribe lesson by a given objective.

<table>
<thead>
<tr>
<th>TIME</th>
<th>CONTENT/NARRATIVE</th>
<th>METHOD</th>
<th>AIDS</th>
</tr>
</thead>
<tbody>
<tr>
<td>2:10pm</td>
<td>DISCUSS</td>
<td>DEMONSTRATION</td>
<td></td>
</tr>
</tbody>
</table>

What would you do if a student needs work in making change?

Prescribe by Objective
Prescription menu
Highlight Prescribe by
Objective
Press Enter
Highlight the Class
Press Enter
Highlight selection method
Press Enter
Highlight the Student
Press SpaceBar to select
Press Enter
Highlight the
IMS Objectives
Press SpaceBar
next level appears
Highlight the objectives
Press SpaceBar
next level appears

When finished press Enter Objective will be assigned to student in Overriding Objectives.
Use the **Arrow Keys** to highlight and press **<ENTER>**.
Use the Arrow Keys to highlight. Press Space Bar to select. Press <ENTER> to accept.

Use the Arrow Keys to select and press the Space Bar to open the window to display the next level. Continue this process until the lesson objection is displayed then press Space Bar to select and press <ENTER> to accept.
LESSON FRAME B

Course Title: INVEST Intermediate Workshop Date: Apr, 15, 1994
Frame Name: Prescribe by Objective Frame Number: 12
Author: Judy Thompson Total Time: 3 hour

Objective: The participants will prescribe a lesson to a student.

<table>
<thead>
<tr>
<th>TIME</th>
<th>CONTENT/NARRATIVE</th>
<th>METHOD</th>
<th>AIDS</th>
</tr>
</thead>
<tbody>
<tr>
<td>2:20pm</td>
<td><strong>Prescribe by Objectives continued</strong></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

If the parameters are set the lessons assigned in overriding objectives must be mastered before other lesson may be continued.

When would you want to do this?

Prerequisites need to be mastered

**MEASUREMENT:** The participant will assign lessons to a student.

**TRANSITIONS:** Let's look at the report menu.
Prescribe by Objective, continued

Objectives in Letter Sounds

---

Author: Judy Thompson

Total Time: 1 hour

Objectives: The Mattresses will print a Student Lab Times Report and a Temple Score Report.
Objective: The participants will print a Student Lab Times Report and a Trouble Spots Report.

<table>
<thead>
<tr>
<th>TIME</th>
<th>CONTENT/NARRATIVE</th>
<th>METHOD</th>
<th>AIDS</th>
</tr>
</thead>
<tbody>
<tr>
<td>2:30pm</td>
<td>DISCUSS</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Discuss the many report that a student or agency will request.</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>DEMONSTRATION</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Print a Student Lab Times Report</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Report Menu</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Highlight Reports</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Press Enter</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Highlight the report</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Press Enter</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Highlight the output</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Press Enter</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Default LPT1</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Screen print to the screen. You must reselect the report to print it to paper after screen has been selected.</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Print Student Lab Times Report</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Print a Trouble Spots report</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
VIEW AND PRINT REPORTS

- Use the Arrow keys to move to the Reports menu
- With Print Report highlighted, press <ENTER>

Use Arrow keys highlight desired report

Press <ENTER>

Select Report

- Class Student List Report
- System Student List Report
- Overview Grid Report
- Assigned/Mastered Grid Report
- All Grids Report
- Student Total Lab Time Report
- Student Lab Times Report

F1-Help F2-Edit F3-Lock ESC ↑ ↓ ← → PgUp/PgDn,Home/End -Scroll ENTER-Select
• Use the Arrow keys to select where you want your report to print
• Press <ENTER>

NOTES:
**LESSON FRAME A**

**Course Title:** INVEST Intermediate Workshop  **Date:** Apr. 15, 1994

**Frame Name:** Trouble Spots  **Frame Number:** 14

**Author:** Judy Thompson  **Total Time:** 3 hour

**Objective:** The participants will describe the three types of trouble.

<table>
<thead>
<tr>
<th>TIME</th>
<th>CONTENT/NARRATIVE</th>
<th>METHOD</th>
<th>AIDS</th>
</tr>
</thead>
<tbody>
<tr>
<td>2:40pm</td>
<td>DISCUSS</td>
<td></td>
<td></td>
</tr>
<tr>
<td>What trouble spots can you identify?</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>W</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Spelling errors</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**MEASUREMENT:**

**TRANSITIONS:**
NOTES:
**LESSON FRAME A**

Course Title: **INVEST Intermediate Workshop**  
Date: **Apr. 15, 1994**

Frame Name: **Learner's education plan**  
Frame Number: **15**

Author: **Judy Thompson**  
Total Time: **3 hours**

Objective: The participant will develop a learner's plan.

<table>
<thead>
<tr>
<th>TIME</th>
<th>CONTENT/NARRATIVE</th>
<th>METHOD</th>
<th>AIDS</th>
</tr>
</thead>
<tbody>
<tr>
<td>2:45pm</td>
<td>DISCUSS</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

How can all this help us prepare a prescription for a student or a group of students?

Discuss the scenarios and prepare a plan.

Mike has a new job. He is working at a lumber store and needs help in measurement.

A group of city workers will attend a class on Monday 8-12. They read a little English.

Work together (if group is small) and develop a plan for the students.

Present the plan to the other participants. Enter the plan into the system if time allows.
1. **Mike's new job.**

Mike has a new job at the lumber store. He is having trouble measuring the lumber and measuring nails by the fraction of a pound. What would you prescribe for Mike?

2. **City Workers.**

The city is sending a group of workers from the parks facilities. This group speaks broken English. Several accidents have occurred in which danger signs were seemingly ignored. How would you set up this group and what would you prescribe?

3. **Mary Jane's diploma.**

Mary Jane dropped out of school in the eleventh grade. She wants to get her diploma so she can apply to a business school. What would you prescribe for her?

4. **George's community service.**

George has been sent by his probation officer. He has decided to come here instead of manual labor in the park, because he can "do his time" in air conditioning. During an interview he expressed an interest in cars. What would you prescribe for George?
BIографICAL SKETCH

Judy A. Thompson received her Bachelors of Science in Elementary Education from State University of New York at Brockport in 1963. After working in the retail field she moved to Arizona in 1972. She then entered the field of business accounting. After taking computer science courses at Glendale Community College she was employed as an application developer and programmer. She was active in the Literacy Volunteers of Maricopa county for four years. She entered Ottawa University’s graduate program in Human Resources in 1993. She currently holds a position as an Education Specialist in Tucson.