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ABSTRACT

Five part-time adult basic education instructors were trained to develop tutorials for their students by using the SuperPILOT authoring language to insert their own questions, answers, and hints in already existing generic programs. The project involved 18 hours of training and ongoing supervision and review of products. A total of 66 tutorial programs, which are available for dissemination, were completed. It is noted that one outcome of the program has been greatly increased use of computer-assisted instruction in the classroom and that feedback from sites where these programs have been used is encouraging. Listings of the SuperPILOT tutorial programs for two lessons, a partial list of the tutorials that were developed, and evaluations of the training program are appended. Seven references are provided. (MES)

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Training for Development and Use of Generic Software Programs

College of Education
Indiana University of Pennsylvania

June 15, 1987

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"Training for Development
and Use of Generic
Software Programs"

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Copies of this report available from AdvanceE, the PDE Resource Center, 11th Floor, 333 Market Street, Harrisburg, PA 17126-0333.

Abstract

This project trained five ABE instructors in the creation of tutorials for their students using a SuperPILOT generic program. The project completed sixty-six programs, which are available for dissemination. The quality of the programs completed is excellent and feedback on their use at multiple sites is very positive. The project involved eighteen hours of training and ongoing supervision and review of products. The three instructors who were active during the entire project experienced frustration and jubilation as they learned more and more about program development. Overall, in spite of the lower than anticipated number of completed programs, it was a highly successful staff development activity.

Report on Project #99-7003

Introduction

This proposal addressed Priority 10 of the Department of Education's Adult Education Act Section 310 Funds for fiscal year 1986-87. The activity ran from August 1986 to June 1987. Priority 10 supported specific local needs in order to increase the effectiveness of the ABE Program to the benefit of the adult students. Specifically, this proposal addressed the need for local inservice education in computer assisted instruction (CAI). Locally, ARIN Intermediate Unit 28, through its office of Adult Services, administers 306 funded Adult Basic Education programs. Approximately 400 out-of-school residents of Armstrong and Indiana County are served by these programs each year. Computer assisted instruction can enhance and expedite the individualized instruction being provided in these open-entry, open-exit programs. However, as is generally the case, adult educators in Indiana County tend to be part-time salaried employees and not full-time faculty for whom microcomputer based staff development activity could be assumed to be a priority.

Literature Review

A review of the literature supported the value of CAI in the ABE classroom. John Rachal (1984) recently reviewed a number of studies of the impact of computer assisted instruction in the adult education setting. He concluded that, to date, the computer has entered the ABE Classrooms to a limited extent but that, with few exceptions, the CAI instruction has been as effective or more

effective than the traditional means. The author noted that we "... appear to have reason to be encouraged..." with respect to the impact of the computer in ABE classes.

During Spring of 1981 the 310 project "Microcomputer Instruction for GOAL/ABE" was implemented at North Central Technical Institute in Wausau, Wisconsin. Although this project used commercially developed software, the following findings were among those reported: (1) microcomputers are easy to use and enjoyed by both students and instructors, (2) it is very effective to include the microcomputer instruction as a supplement to individualized instruction, (3) use of the computer is very cost effective; it can perform many of the drill and practice functions which take much instructor time with individualized instruction, and (4) students especially like the CAI due to the immediate feedback. The study also concluded that there are bugs in many software programs and that care must be taken that graphics or other feedback in commercially prepared software is not too juvenile for adults.

Antonia Stone (1983) pointed to the applicability of the creation and evaluation of specifically tailored adult educational microcomputer software. She bemoaned the state of the art in such software and called for training of adult educators in software design.

Background of Instructor

For two years Dr. Joan Marshall, Professor of Adult and Community Education and Director of the Center for Community Education at Indiana University of Pennsylvania (IUP), was a part of a federal project at Brooklyn College which involved the training of faculty in microcomputer authoring. As part of that project, she visited and communicated with numerous colleges and staff trainers from across the nation. Many had reached the basic conclusion that faculty, even with release time and training, were not the best mode for delivery of individually developed CAI programs. While the quality of commercial software for adult, non-traditional, students is slowly improving, the Brooklyn project relied heavily on editing generic drills and tutorials, created by Dr. Marshall, for tailored drill programs. Unless a program can afford full-time personnel in groups of subject matter specialist, programmer, and graphic artist, this use of generics has been a cost efficient means of integrating CAI into the ABE classroom.

Statement of Problem

This project proposed to solve the problems of (1) a desire to design appropriate microcomputer drills and tutorials for ABE students; (2) the lack of time and incentive of part-time adult educators to learn programming via a staff development program. This training program, conducted by Dr. Marshall for the instructors of IU 28, trained the instructors to edit generic programs using SuperPILOT. It is to be noted that, although SuperPILOT is a full authoring system, the instructors were not trained to write their own programs from "scratch." They were, instead, trained to edit an already developed generic drill and tutorial programs. This training allows the adult educator to insert his/her own questions, answers and hints into an already existing generic program.

Objectives

(1) At the end of 10 hours of instruction in the editing function of SuperPILOT, the 6 participating ABE Instructors will create a testing/tutoring unit using a generic program.
(1a) Revised. At the end of 18 hours of instruction in the editing function of SuperPILOT, the 5 participants would create a testing/tutoring unit using a generic program. This objective was met as all five trained instructors produced one piece of software. This objective required revision of the hours for training because the ABE instructors needed basic computer literacy training in order to work with SuperPILOT.

(2) By the end of the fiscal year, each of the 6 participating instructors will edit and test at least three SuperPILOT programs each per month for 9 months. This will result in 162 programs for student use in the ABE setting. The instructors will be reimbursed for these completed projects.

(2a) Revised. By the end of the fiscal year each of the 5 participating instructors will edit and test at least three SuperPILOT programs each per month for 9 months. This will result in 135 programs for student use in the ABE setting. The instructors will be reimbursed for these completed projects. After the training period, one instructor was forced to withdraw due to full-time employment and one was unable to complete the program due to frequent site movements and other work related problems. Thus, 60% (3) of those trained partially met this objective. A total of 66 pieces of software were created.

Administration

Dr. Joan H. Marshall coordinated the scheduling of the training with the IU 28 Director Ms. Julie Rettig and cleared the payments to the instructors.

Procedures

A. General Design

In August of 1986 a ten-hour workshop was conducted by Dr. Marshall for ARIN ABE instructors. These instructors were trained in the use of editing functions in the SuperPILOT/System. The

participants were paid on an hourly basis (\$12) for their involvement in this staff development activity. As a further incentive to maintain and use this skill, the instructors were then paid for each completed piece of software that they developed for ABE students (\$10 per drill, \$12 per tutorial later revised to \$15 per drill, \$25 per tutorial).

The instructors met with Dr. Marshall for 10 hours (2 hours daily) for a period of one week. No written material was provided excepting a handout on SuperPILOT commands. This time was inadequate for the instructors needs. The major problem here was failure on the trainers' part to recognize a need for orientation to the computer. Since all but one trainee were totally computer illiterate, time was needed to comprehend how the computer functions as a word processor. A request to expand training time was granted and an additional 8 hours were provided. Also, the instructors were clear about their need to "see" the program in print to allow them to fully comprehend the working of the tutorial. This was provided. It should be noted that this training had two major side benefits. First, by learning how to create their own tutorials, the instructors became very adept at evaluating commercial software. Secondly, because of the high caliber of their own work, they often thought of pitfalls in student approaches to problem solving and incorporated them into non-computer lesson plans. Overall, the experience served to sensitize the participants to the feelings and needs of adult learners in the microcomputer environment.

Conclusion

Although producing fewer products than planned, this project achieved state priority number 10 by meeting the local need for inservice training in computer assisted instruction. It encouraged adult educators, who provide adult basic education instruction for residents of Indiana and Armstrong Counties, to attend inservice training and update their skills. In particular, the project enabled these educators to use computers, that were already in place, to facilitate and enhance learning of ABE students. This ability is particularly desirable in rural areas where the open-entry, open-exit nature of the programs demands individualized instruction. One outcome of the program has been greatly increased CAI use in the classroom.

B. Location

The project took place at IU 28, the Adult Learning Center, (AALC) 220 North Fifth Street, Indiana, Pennsylvania. This location, close to IUP and easily accessible to all participants, houses a computer room and 10 Apple computers (matching costs for room rental and computer use).

C. Methods and Materials

This was a "hands-on" training system using the SuperPILOT program and generic testing and tutorial modules developed by the trainer.

D. Outline of Training

1. Overview and introduction to computers, CAI and SuperPILOT
 - a. booting up and running
 - b. demonstration of sample test disk
 - c. demonstration of sample tutorial disk
 - d. how to evaluate software
2. Moving around the program

- a. cursor
- b. paging
- c. jumps and finds
- 3. CAI Creation Issues
 - a. screen size and appearance
 - b. question design
 - c. construction of hints/guides
 - d. using SuperPILOT copying
- 4. Editing in SuperPILOT
 - a. delete
 - b. insert
 - c. exchange
 - d. saving
- 5. The structure of the generic
 - a. where to insert what
 - b. how to lengthen or shorten generic
- 6. Creation of Programs
 - a. design
 - b. editing
 - c. piloting
 - d. revising

E. Explanation of the "Generic" Tutorial

This program is designed to present a question or passage followed by four choices. When the correct answer is selected on the first try the program scores it as correct on the first try. If the wrong answer is given, a tailored hint is provided to the student and the question or passage is repeated for a second trial. After three wrong answers, the program automatically provides the answer with an explanation. Because this is a generic program it is set to automatically do these things. Once you have a generic tailored to your specifications, then it is a simple matter to create your own programs. The following is a sample of part of the generic (r is a remark not seen on the screen):

```
r: this is question one
ts:es (clears the screen)
t:l. (put in your question)
t:a. (put in answers)
t:b. (answer)
t:c. (answer)
```

```

t:d. (answer)
r: This is where you put the responses you want
the student to see for each choice (C is correct).
m:a
ty:No, (hint)
uy:count
m:b
ty:No, (hint)
uy:count
m:c
ty:Very Good!!
uy:count
m:d
ty:No, (hint)
uy:count
r: This is the correct answer. It appears later
in the program and is displayed after 3 errors are
made.
t: The correct answer is C because (explanation)

```

Using such a generic tutorial you can cut the time needed to create a CAI program to less than 1 hour rather than the original 300 hours for creating the generic. The editing functions needed include a very few commands such as insert, delete, exchange, and the ability to move the cursor through the generic material. These can be taught easily to non-programmers who can then design their own tutorials (or tests) based on the generic program. As a result of this training additional generics were created to have two or three responses.

Materials

Blank disks, Apple Computers with two disk drives, SuperPILOT with log programs, SuperPILOT Generic disks.

F. Evaluation

Evaluation was both formative and summative. Attendance at training sessions and a formal training evaluation form (see attachment) served to evaluate the training sessions. Continued, reimbursed, development of CAI was monitored to guarantee that

application of the training continued. Selected ABE students were asked to evaluate the individual drills and tutorials as feedback to the instructors. The IUP Coordinator/Instructor and the IU Coordinator met at three month intervals to review completed tutorials and evaluations. The IUP Coordinator/Instructor was available throughout the course of the project for advisement and support and met with IU Staff in September and February to measure progress.

G. Time Schedule

The training session took place for 2 hours each day (1-3 PM) from August 11-15, 1986, for a total of 10 hours. Additional training time was added in October. The IU trainees were expected to complete 3 tutorials per month for the following 9 months. All projects were completed by May 31, 1987.

Coordination and Dissemination

The coordination with other IU activities is self-evident in that the end result will be locally developed, educationally sound, computer software for Adult Basic Education students. Software developed using SuperPILOT is stand-alone material will be disseminated through requests from Advance to Ms. Rettig at IU 28. At the completion of the project, the project was evaluated and this written report completed. This written report will be submitted to Advance for distribution. The IUP Coordinator and IU Staff presented the project for as a workshop during the 1987 P.A.A.C.E. Conference in Hershey. This presentation excited interest in the SuperPILOT project and over 20 participants took copies of programs for use at their home sites. Feedback from

these sites has been encouraging. Additional presentations were at the PDE/IU 28 inservice on March 26 and PDE/IU 4 inservice on May 26 disseminating an additional three sets. In addition, Ms. Rettig and Dr. Marshall were invited to present at the Penn State Adult Literacy and Technology Conference in June. Copies of the software can be obtained by sending blank disks to: Ms. Julie Rettig, ARIM Adult Learning Center, 220 N. 5th Street, Indiana, PA 15701. The appendices include: a copy of the SuperPILOT Generic tutorial; a listing of the topics developed; and the evaluations of the training program.


```
r:this is the start
ts:t2
d:n1$(20)
d:a$(1)
d:a1$(1)
d:b$(10)
*tile
ts:es
ts:g1,5
r:insert your program name
t:Title:
ts:g1,10
r:insert your name
t:Instructional Design:
ts:g1,12
t:Programming:          Joan Marshall
t:
t:
t: Developed for Adult and Community
t:          Educators
t:
t:
t: Indiana University of Pa. 1986
w:5
ts:es
*direct
r:fill in missing words
t:OBJECTIVES:
t:
t:By the end of this tutorial the
:student will be able to:
t:
t:
t:
t:Press return when ready to go on.
as:
*first
ts:es
t:Before we begin, I need some
:information.
t:
t:Please type in your first name. DO
:NOT USE A NICKNAME. Don't worry about
:capital letters- this program will
:automatically capitalize.
t:
t:Press return when you are done.
r:n1 is first name
a:$n1$
c:/n1$C
t:Is your first name $n1$ ?
t:Type y for yes and n for no.
as:
m:y!Y
jn:first
r:one is first question
*start
ts:es
t:DIRECTIONS- In this tutorial you will
t:be asked to select an answer from
t:four choices.
t:
```

t:When you have made your choice, type
t:the letter on the computer keyboard
t:then press return.
t:
t:If you choose the correct response we
t:will go on to the next question. If
t:you are not correct, the computer will
t:give you a hint and let you try again.
t:
t:If you make too many mistakes the
t:computer will supply the correct
t:answer and move on.
t:
t:Press return to go on.
a:
ts:es
t:
t: This is the TUTORIAL
t:
t:The tutorial consists of 8 questions.
t:
t:When you finish the tutorial you will
t:be given a score of the number you got
t:correct on the first try.
t:
t:
t:Press return when you are ready to
t:begin.
a:
pr:!
c:c=0
c:s=0
r:s is score
r:c is number of tries.
*pl
ts:es
r:This is designed to give you a page
t:of information followed by a page of
t:questions. If you don't need the page
t:you can simply delete it.
t:
t:
t:
t:Press return when you are ready to
t:give the correct answer.
t:At any time you need to review or
t:reread this page you will be able
t:to do so.
as:
*one
ts:es
c:b\$="j:one"
t:i.
t:
t:a.
t:b.
t:c.
t:d.
t:
t:** \$n1\$
t:Remember to press return after you
t:type in the letter of your choice.
t:To review the paragraph press r.
r:this is where you insert the correct
t:answer

```

c:a!$="d"
r:All answers must stay in order to
: test the program.
a:$a$
m:a!b!c!d!r
tn:Choose only A,B,C, or D.
jn:@a
m:r
j(a$="r"):p1
m:a
r:what you want to tell them if they
: choose a
ty:

```

```

u(a$="a"):wait
uy:count1
j(c=3):cor1
jy:goon
m:b
ty:
u(a$="b"):wait
uy:count1
j(c=3):cor1
jy:goon
m:c
ty:
u(a$="c"):wait
uy:count1
j(c=3):cor1
jy:goon
m:d
ty:

```

```

u(a$="d"):wait
j(a$=a!$):gate1
r:question two
*p2
ts:es
t:
t:
t:
t:Press return to go on.
as:
*two
ts:es
c:b$="j:two"
t:2.
t:
t:a.
t:b.
t:c.
t:d.
t:

```

```

t:Remember to press return.(r=review)
c:a!$="c"
a:$a$
m:a!b!c!d!r
tn:Choose only A,B,C,or D.
jn:@a
m:r
j(a$="r"):p2
m:a
ty:
u(a$="a"):wait
uy:count2
j(c=3):cor2
jy:goon

```

```

m:b
ty:
u(a$="b"):wait
uy:count2
j(c=3):cor2
jy:goon
m:c
ty:
u(a$="c"):wait
j(a$=a1$):gate2
m:d
ty:
u(a$="d"):wait
uy:count2
j(c=3):cor2
jy:goon
r: this is question 3
*p3
ts:es
t:
t:
t:
t:Return
as:
*three
ts:es
c:b$="j:three"
t:3.
t:
t:a.
t:b.
t:c.
t:d.
t:
t:Return      r to review
c:a1$="b"
a:$a$
m:a!b!c!d!r
tn:Choose only A,B,C,or D.
jn:@a
m:r
j(a$="r"):p3
m:a
ty:
u(a$="a"):wait
uy:count3
j(c=3):cor3
jy:goon
m:b
ty:
u(a$="b"):wait
j(a$=a1$):gate3
m:c
ty:
u(a$="c"):wait
uy:count3
j(c=3):cor3
jy:goon
m:d
ty:
u(a$="d"):wait
uy:count3
j(c=3):cor3
jy:goon
m:d
ty:
u(a$="d"):wait
uy:count3
j(c=3):cor3
jy:goon

```

```

t:
t:
as:
*four
ts:es
c:b$="j:four"
t:4.
t:
t:a.
t:b.
t:c.
t:d.
t:
c:a1$="a"
a:$a$
m:a!b!c!d!r
tn:Choose only A,B,C, or D.
jn:@a
m:r
j(a$="r"):p4
m:a
ty:
u(a$="a"):wait
j(a$=a1$):gate4
m:b
ty:
u(a$="b"):wait
uy:count4
j(c=3):cor4
jy:goon
m:c
ty:
u(a$="c"):wait
uy:count4
j(c=3):cor4
jy:goon
m:d
ty:
u(a$="d"):wait
uy:count4
j(c=3):cor4
jy:goon
l:blank2

```

r:at this point we are linked to part2

```

*wait
w:5
e:
*goon
xi:b$
e:
*score1
c:s=s+1
c:c=0
j:c2
e:
*score2
c:s=s+1
c:c=0
j:p3
e:
*score3
c:s=s+1
c:c=0
j:p4

```

```
e:
*score4
c:s=s+1
c:c=0
j:!ink
e:
*gate1
j(c=0):score1
c:c=0
j:p2
e:
*gate2
j(c=0):score2
c:c=0
j:p3
e:
*gate3
j(c=0):score3
c:c=0
j:p4
e:
*gate4
j(c=0):score4
c:c=0
j:!ink
e:
*count1
c:c=c+1
e:
*count2
c:c=c+1
e:
*count3
c:c=c+1
e:
*count4
c:c=c+1
e:
*cor1
r: here is the point for explanation
:t:they only reach this after 3 failures
t:The correct answer is
t:Let's try another question.
w:5
c:c=0
j:p2
e:
*cor2
t:The correct answer is
w:5
c:c=0
j:p2
e:
*cor3
t:The correct answer is
w:7
c:c=0
j:p4
e:
*cor4
t:The correct answer is
w:5
c:c=0
j:link
e:
*link
```



```
*5
ts:es
t:
t:
t:
t:Press return to go on.
as:
*five
r: this is question five
ts:es
c:b$="j:five"
t:5.
t:
t:a.
t:b.
t:c.
t:d.
t:
c:a1$="b"
a:$a$
m:a!b!c!d!r
tn:Chchose only A,B,C, or D
jn:@a
m:r
j(a$="r"):p5
m:a
ty:
u(a$="a"):wait
uy:count5
j(c=3):cor5
jy:soon
m:b
ty:
u(a$="b"):wait
j(a$a1$):gate5
m:c
ty:
u(a$="c"):wait
uy:count5
j(c=3):cor5
jy:goon
m:d
ty:
u(a$="d"):wait
uy:count5
j(c=3):cor5
jy:goon
r:this is question six
*p6
ts:es

t:
t:
t:Press return to go on.
as:
*six
ts:es
c:b$="j:six"
t:6.
t:
t:a.
t:b.
t:c.
```



```

t:d.
t:
c:a1$="b"
a:$a$
m:a!b!c!d!r
tn:Choose only A,B,C,or D.
jn:@a
m:r
j(a$="r"):p6
m:a
ty:
u(a$="a"):wait
uy:count6
j(c=3):cor6
jy:goon
m:b
ty:
u(a$="b"):wait
j(a$=a1$):gate6
m:c
ty:
u(a$="c"):wait
uy:count6
j(c=3):cor6
jy:goon
m:d
ty:
u(a$="d"):wait
uy:count6
j(c=3):cor6
jy:goon
*p7
ts:es
t:
t:
t:
t:Press return to go on.
as:
*seven
ts:es
c:b$="j:seven"
t:7.
t:
t:a.
t:b.
t:c.
t:d.
t:
c:a1$="c"
a:$a$
m:a!b!c!d!r
tn:Choose only A,B,C, or D.
jn:@a
m:r
j(a$="r"):p7
m:a
ty:
u(a$="a"):wait
uy:count7
j(c=3):cor7
jy:goon
m:b
ty:
u(a$="b"):wait
uy:count7
j(c=3):cor7

```

```

jy:goon
m:c
ty:
u(a$="c"):wait
j(a$=a1$):gate7
m:d
ty:
u(a$="d"):wait
uy:count7
j(c=3):cor7
jy:goon
*ps
ts:es
t:
t:
t:
t:Press return to go on.
as:
*eight
ts:es
c:b$="j:eight"
t:8.
t:
t:a.
t:b.
t:c.
t:d.
c:a1$="c"
a:$a$
m:a!b!c!d!r
tn:Choose only A,B,C, or D.
jn:@a
m:r
j(a$="r"):ps
m:a
ty:
u(a$="a"):wait
uy:count8
j(c=3):cor8
jy:goon
m:b
ty:
u(a$="b"):wait
uy:count8
j(c=3):cor8
jy:goon
m:c
ty:
u(a$="c"):wait
j(a$=a1$):gate8
jy:report
m:d
ty:
u(a$="d"):wait
uy:count8
j(c=3):cor8
jy:goon
j:report
e:

```

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*gdn
xi:b#
e:
*score5
c:s=s+1
c:c=0
j:p6
e:
*score6
c:s=s+1
c:c=0
j:p7
e:
*score7
c:s=s+1
c:c=0
j:p8
e:
*score8
c:s=s+1
j:report
e:

*gate5
j(c=0):score5
j:p6
e:
*gate6
j(c=0):score6
j:p7
e:
*gate7
j(c=0):score7
j:p8
e:
*gate8
j(c=0):score8
j:report
e:

*count5
c:c=c+1
e:
*count6
c:c=c+1
e:
*count7
c:c=c+1
e:
*count8
c:c=c+1
e:

*cor5
t:
t:The correct answer is
t:
w:5
c:c=0
j:p6
e:
*cor6
t:
t:The correct answer is
t:
w:5
c:c=0

```
J:p7
e:
*cor7
t:
t:The correct answer is
t:
w:5
c:c=0
j:p8
e:
*cor8
t:
t:The correct answer is
```

```
w:5
c:c=0
j:report
e:
*report
ts:es
t: $n1$ , you have finished the
t:      tutorial.
t:
t:This had 8 questions . You got
: #s right on the first try.
```

```
w:10
e:
*end
ts:es
t:You've reached the end! If you don't
:know what to do next, ask for help.
:Have a good day!
w:10
e:end
```

Subject area: English
Title: End Marks
Author: McCaffrey
Description: end marks and abbreviations
test/tutorial: tut
ABE/GED: abe/ged/esl
Series: no
Run: End1

Subject area: English
Title: Irregular Verb Test
Author: McCaffrey
Description: usage in sentences
test/tutorial: test
ABE/GED: ged/esl
Series: no
Run: Verbs1

Subject area: English
Title: Capitalization Review
Author: McCaffrey
Description: rule review
test/tutorial: tut
ABE/GED: abe/ged/esl
Series: no
Run: Cap

Subject area: English
Title: Subject Verb Agreement I
Author: McCaffrey
Description: "s" forms to be and to have
test/tutorial: tut
ABE/GED: abe/ged/esl
Series: yes
Run: SV1

Subject area: English
Title: Subject Verb Agreement II
Author: McCaffrey
Description: pair words and collective nouns
test/tutorial: tut
ABE/GED: abe/ged/esl
Series: yes
Run: SV3

Subject area: English
Title: Subject Verb Agreement III
Author: McCaffrey
Description: agreement with indefinite pronouns
test/tutorial: tut
ABE/GED: abe/ged/esl
Series: yes
Run: SV5

Subject area: English
Title: Subject Verb Agreement IV
Author: McCaffrey
Description: compound subjects, inverted sentences, intervening p
test/tutorial: tut
ABE/GED: abe/ged/esl
Series: yes
Run: SV7

Subject area: English
Title: Subject Verb Agreement Test
Author: McCaffrey
Description: review test on S/V units
test/tutorial: test
ABE/GED: abe, ged, esl
Series: y
Run: SV9

Subject area: English
Title: Comparing Adjectives
Author: McCaffrey
Description: er, est, more most rules
test/tutorial: tutorial
ABE/GED: abe,ged
Series: n
Run: adj1

Subject area: Generic
Title: Generic Tutorial
Author: Marshall
Description: generic tutorial for use with Superpilot, 4 choices
test/tutorial: tut
ABE/GED:
Series: y
Run: blank1

Subject area: Generic
Title: Generic test
Author: Marshall
Description: 20 question, 4 choice test
test/tutorial: test
ABE/GED:
Series: y
Run: first

Subject area: Generic
Title: Generic test
Author: Marshall
Description: 3 option generic test
test/tutorial: test
ABE/GED:
Series: y
Run: first

Subject area: Generic
Title: Generic Tutorial
Author: Marshall
Description: 3 option tutorial
test/tutorial: tut
ABE/GED:
Series: y
Run: three

Subject area: Generic
Title: Generic Tutorial
Author: Marshall
Description: 2 option tutorial
test/tutorial: tut
ABE/GED:
Series: y
Run: blank1

Subject area: History
Title: American History 20th Century
Author: Becker
Description: Current foreign and domestic policy
test/tutorial: tut
ABE/GED: ged
Series: y
Run: History

Subject area: History
Title: Colonial History
Author: Becker
Description: Amer. exploration to revolution
test/tutorial: tut
ABE/GED: ged
Series: y
Run: Col.his

Subject area: History
Title: American History 1787-1870
Author: Becker
Description: Constitution to Civil War
test/tutorial: tut
ABE/GED: ged
Series: y
Run: Am.con.

Subject area: Math
Title: Sign Numbers
Author: Panchik
Description: Review Sign numbers
test/tutorial: tut
ABE/GED: ged
Series: no
Run: Sign1

Subject area: Math
Title: Your Checking Account
Author: Marshall
Description: Info on Checking
test/tutorial: tut
ABE/GED: ged
Series: no
Run: Check1

Subject area: Math
Title: Fractions II
Author: McCaffrey
Description: + and - fractions
test/tutorial: tut
ABE/GED: abe/ged
Series: yes
Run: Frac3

Subject area: Math
Title: Introduction to Fractions
Author: McCaffrey
Description: 3 types of fractions
test/tutorial: tut
ABE/GED: abe/ged
Series: yes
Run: Frac1

Subject area: Math
Title: Measurement
Author: McCaffrey
Description: number & word problems
test/tutorial: test
ABE/GED: ged
Series: no
Run: Meas1

Subject area: Math
Title: Geometry (Bits and Pieces)
Author: McCaffery
Description: perimeter, area, volume formulas
test/tutorial: tut
ABE/GED: ged
Series: no
Run: Geom

Subject area: Math
Title: Pitfalls in Addition
Author: Robinson
Description: review errors like reversals, carrying etc.
test/tutorial: tut
ABE/GED: abe
Series: no
Run: Add

Subject area: Reading
Title: A-S-H Review
Author: Robinson
Description: review antonyms, synonyms, homonyms
test/tutorial: test
ABE/GED: abe
Series: yes
Run: A-S-H

Subject area: Reading
Title: Homonyms
Author: Robinson
Description: 24 homonyms
test/tutorial: tut
ABE/GED: abe
Series: yes
Run: Homs

Subject area: Reading
Title: Synonyms
Author: Robinson
Description: 20 synonyms
test/tutorial: tut
ABE/GED: abe
Series: yes
Run: Syno

Subject area: Reading
Title: Antonyms
Author: Robinson
Description: explanation and 8 antonyms
test/tutorial: tut
ABE/GED: abe
Series: yes
Run: Anto

Subject area: Reading
Title: Vowel Sounds
Author: Robinson
Description: review of short and long vowel sounds
test/tutorial: tut
ABE/GED: abe
Series: yes
Run: Short

Subject area: Reading
Title: Unusual Vowel Patterns
Author: Robinson
Description: diagraphs for long a and l
test/tutorial: tut
ABE/GED: abe
Series: yes
Run: LongA

Subject area: Reading
Title: Unusual Vowel Patterns II
Author: Robinson
Description: diagraphs long e and u
test/tutorial: tut
ABE/GED: abe
Series: yes
Run: LongE

Subject area: Reading
Title: Prefixes Suffixes and Roots I
Author: Marshall
Description: quiz on basic word parts
test/tutorial: test
ABE/GED: ged
Series: y
Run: affix1

Subject area: Reading
Title: Prefixes Suffixes and Roots II
Author: Marshall
Description: quiz on basic word parts
test/tutorial: test
ABE/GED: ged
Series: y
Run: affix2

Subject area: Reading
Title: Context Clues
Author: Marshall
Description: quiz on using context clues in reading
test/tutorial: test
ABE/GED: ged
Series: n
Run: context1

Subject area: Reading
Title: Getting the Main Idea
Author: Marshall
Description: short reading passages to be used for practice
test/tutorial: tutorial
ABE/GED: ged
Series: n
Run: read1

Subject area: Science
Title: Cells Test
Author: Becker
Description: Quiz on Cells
test/tutorial: test
ABE/GED: ged
Series: yes
Run: Cells

Subject area: Science
Title: Introduction to Chemistry
Author: Becker
Description: Chemistry Vocabulary
test/tutorial: tut
ABE/GED: ged
Series: yes
Run: Chem.in1

Subject area: Science
Title: Cells
Author: Becker
Description: Cells terminology and functions
test/tutorial: tut
ABE/GED: ged
Series: yes
Run: Cells1

Subject area: Science
Title: Science Test
Author: Becker
Description: Quiz on Science Vocabulary
test/tutorial: test
ABE/GED: ged
Series: yes
Run: t-sc-1

Subject area: Science
Title: Science Vocabulary
Author: Becker
Description: Intro to Science Voc.
test/tutorial: tut
ABE/GED: ged
Series: y
Run: s.v.1

The purpose of this questionnaire is to gather information about your inservice experience. The following questions represent an effort to determine your opinion related to the inservice program.

COURSE NAME: Super-pilot
 INSTRUCTOR'S NAME: Joan Marshall
 LOCATION: ARIN Adult Learning Center DATE: 9-12-86

For each of the following statements, (1-10) indicate your reaction by encircling the letter(s) which most nearly reflects your feelings in each case:

- SA denotes strong agreement
- A denotes mild agreement
- N denotes neutral
- D denotes mild disagreement
- SD denotes strong disagreement
- NA denotes not applicable

You are encouraged to elaborate in the space provided after each item, especially if your response is negative. Please attach any additional comments or suggestions.

1. The topic of the in-service workshop/course was significant to me. SA A N D SD NA
2. The workshop title and description accurately described the workshop. SA A N D SD NA
3. The objectives of the course were clear to me. SA A N D SD NA
4. The instructor provided me with the necessary information and guidance for completing my work. SA A N D SD NA
5. There was an atmosphere of mutual respect and cooperation between myself and the instructor. SA A N D SD NA
6. There were available most of the human and material resources I felt necessary for the workshop. SA A N D SD NA
7. I plan to try these ideas in my classroom/position. SA A N D SD NA
8. This course/workshop met my expectations in regard to developing new instructional techniques. SA A N D SD NA
9. Overall, I enjoyed the workshop. SA A N D SD NA
10. I thought the instructor did a good job. SA A N D SD NA

11. What changes or topics would you recommend for subsequent workshops/courses?
 I feel the only thing I would ~~not~~ like to recommend would be more detailed information with the initial writing of the lessons.

The purpose of this questionnaire is to gather information about your inservice experience. The following questions represent an effort to determine your opinion related to the in-service program.

COURSE NAME: Super Pilot

INSTRUCTOR'S NAME: Joan Marshall

LOCATION: ARTN Adult Learning Center DATE: 9-12-86

For each of the following statements, (1-10) indicate your reaction by encircling the letter(s) which most nearly reflects your feelings in each case:

SA denotes strong agreement

A denotes mild agreement

N denotes neutral

D denotes mild disagreement

SD denotes strong disagreement

NA denotes not applicable

You are encouraged to elaborate in the space provided after each item, especially if your response is negative. Please attach any additional comments or suggestions.

1. The topic of the in-service workshop/course was significant to me. SA A N D SD NA

2. The workshop title and description accurately described the workshop. SA A N D SD NA

3. The objectives of the course were clear to me. SA A N D SD NA

4. The instructor provided me with the necessary information and guidance for completing my work. SA A N D SD NA

5. There was an atmosphere of mutual respect and cooperation between myself and the instructor. SA A N D SD NA

6. There were available most of the human and material resources I felt necessary for the workshop. SA A N D SD NA

7. I plan to try these ideas in my classroom/position. SA A N D SD NA

8. This course/workshop met my expectations in regard to developing new instructional techniques. SA A N D SD NA

9. Overall, I enjoyed the workshop. SA A N D SD NA

10. I thought the instructor did a good job. SA A N D SD NA

11. What changes or topics would you recommend for subsequent workshops/courses?
provide for frequent subsequent sessions to answer questions



The purpose of this questionnaire is to gather information about your inservice experience. The following questions represent an effort to determine your opinion related to the inservice program.

COURSE NAME: Learning to Use Super Pilot

INSTRUCTOR'S NAME: Dr. Joan Marshall

LOCATION: ARIN DATE: 9/12/86

For each of the following statements, (1-10) indicate your reaction by encircling the letter(s) which most nearly reflects your feelings in each case:

- SA denotes strong agreement
- A denotes mild agreement
- N denotes neutral
- D denotes mild disagreement
- SD denotes strong disagreement
- NA denotes not applicable

You are encouraged to elaborate in the space provided after each item, especially if your response is negative. Please attach any additional comments or suggestions.

1. The topic of the in-service workshop/course was significant to me.	SA	<input checked="" type="radio"/> A	<input type="radio"/> N	<input type="radio"/> D	<input type="radio"/> SD	<input type="radio"/> NA
2. The workshop title and description accurately described the workshop.	<input checked="" type="radio"/> SA	<input type="radio"/> A	<input type="radio"/> N	<input type="radio"/> D	<input type="radio"/> SD	<input type="radio"/> NA
3. The objectives of the course were clear to me.	SA	<input checked="" type="radio"/> A	<input type="radio"/> N	<input type="radio"/> D	<input type="radio"/> SD	<input type="radio"/> NA
4. The instructor provided me with the necessary information and guidance for completing my work.	<input checked="" type="radio"/> SA	<input type="radio"/> A	<input type="radio"/> N	<input type="radio"/> D	<input type="radio"/> SD	<input type="radio"/> NA
5. There was an atmosphere of mutual respect and cooperation between myself and the instructor.	<input checked="" type="radio"/> SA	<input type="radio"/> A	<input type="radio"/> N	<input type="radio"/> D	<input type="radio"/> SD	<input type="radio"/> NA
6. There were available most of the human and material resources I felt necessary for the workshop.	SA	<input checked="" type="radio"/> A	<input type="radio"/> N	<input type="radio"/> D	<input type="radio"/> SD	<input type="radio"/> NA
7. I plan to try these ideas in my classroom/position.	<input checked="" type="radio"/> SA	<input type="radio"/> A	<input type="radio"/> N	<input type="radio"/> D	<input type="radio"/> SD	<input type="radio"/> NA
8. This course/workshop met my expectations in regard to developing new instructional techniques.	<input checked="" type="radio"/> SA	<input type="radio"/> A	<input type="radio"/> N	<input type="radio"/> D	<input type="radio"/> SD	<input type="radio"/> NA
9. Overall, I enjoyed the workshop.	SA	<input checked="" type="radio"/> A	<input type="radio"/> N	<input type="radio"/> D	<input type="radio"/> SD	<input type="radio"/> NA
10. I thought the instructor did a good job.	SA	<input type="radio"/> A	<input type="radio"/> N	<input type="radio"/> D	<input type="radio"/> SD	<input type="radio"/> NA

11. What changes or topics would you recommend for subsequent workshops/courses?
*The books ~~should~~ ^{could} have been used sooner.
 I enjoyed it after I began to understand some of it.*



The purpose of this questionnaire is to gather information about your inservice experience. The following questions represent an effort to determine your opinion related to the in-service program.

COURSE NAME: Super pilot - Tutorial Writing

INSTRUCTOR'S NAME: Dr Joan Marshall

LOCATION: ARIN Adult Learning Center DATE: 8/19/86

For each of the following statements, (1-10) indicate your reaction by encircling the letter(s) which most nearly reflects your feelings in each case:

- SA denotes strong agreement
- A denotes mild agreement
- N denotes neutral
- D denotes mild disagreement
- SD denotes strong disagreement
- NA denotes not applicable

You are encouraged to elaborate in the space provided after each item, especially if your response is negative. Please attach any additional comments or suggestions.

- | | | | | | | |
|---|------|-----|-----|---|----|------|
| 1. The topic of the in-service workshop/course was significant to me. | (SA) | A | N | D | SD | NA |
| 2. The workshop title and description accurately described the workshop. | SA | A | N | D | SD | (NA) |
| 3. The objectives of the course were clear to me. | SA | A | (N) | D | SD | NA |
| 4. The instructor provided me with the necessary information and guidance for completing my work. | SA | (A) | N | D | SD | NA |
| 5. There was an atmosphere of mutual respect and cooperation between myself and the instructor. | (SA) | A | N | D | SD | NA |
| 6. There were available most of the human and material resources I felt necessary for the workshop. | SA | (A) | N | D | SD | NA |
| 7. I plan to try these ideas in my classroom/position. | SA | (A) | N | D | SD | NA |
| 8. This course/workshop met my expectations in regard to developing new instructional techniques. | SA | (A) | N | D | SD | NA |
| 9. Overall, I enjoyed the workshop. | SA | (A) | N | D | SD | NA |
| 10. I thought the instructor did a good job. | SA | (A) | N | D | SD | NA |

11. What changes or topics would you recommend for subsequent workshops/courses?
 Lengthen workshop if there is no prerequisite computer knowledge. Before students began to write and copy their own tutorials, I might all try to put a sample question on the computer and discuss problems and solutions.

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