

Exploring Computer Applications

20-60 Inservice Points

Component No. 3 007 005

General Objective

This component is designed to provide the participant with an in-depth exploration of computers and their various roles in an applications class. Special emphases include but should not be limited to: word processing, data base management, spreadsheets, telecommunications, desktop publishing, multimedia technologies, graphing and graphics programs.

Specific Objective

Given involvement in this activity, the participant will:

1. Operate a computer and peripheral devices such as printer, modem graphics tablet, scanner, CD-ROM and laserdisc players.
2. Identify the standard features of word processing software.
3. Identify the common applications of word processing software in educational settings and in society in general.
4. Identify the standard features of spreadsheet software.
5. Identify the common applications of spreadsheet software in educational settings and in society in general.
6. Identify the standard features of data base software.
7. Identify the common applications of data bases in educational settings and in society in general.
8. Identify the common applications of telecommunications software in educational settings and in society in general.
9. Identify the common applications of graphics package software in educational settings and in society in general.
10. Define the concept of integrated software.
11. Describe the key features of desktop publishing.
12. Demonstrate the ability to use a word processor by completing a writing assignment given by the instructor.
13. Demonstrate the ability to use a data base by completing an assignment given by the instructor.
14. Demonstrate the ability to use a spreadsheet by completing an assignment given by the instructor.
15. Demonstrate the ability to use a telecommunications program by completing an assignment given by the instructor.
16. Demonstrate the ability to use a graphics program by completing an assignment given by the instructor.
17. Identify the common applications of emergent trends in instructional technology such as multimedia and telecommunications.
18. Revise five (5) existing lesson plans to include instructional technology as an integral part of the lesson, i.e., writing and illustrating Haiku poems using a desktop publishing program, writing a research paper using a hypertext program.

Activities

1. Attend lectures/demonstrations on:
 - A. Operating a microcomputer and selected peripherals. (Sp Ob 1)
 - B. The features of all types of applications software including, but not limited to: word processing, database management, spreadsheets, telecommunications, desktop publishing, graphing and graphics programs (Sp Ob 2, 4, 6 & 11)
 - C. The applications of this software in educational settings and society in general. (Sp Ob 3, 5, 7-9)
 - D. The concept of integrated software. (Sp Ob 10)
 - E. Emergent trends in instructional technologies. (Sp Ob 17)
2. Complete a writing assignment given by the instructor using a word processor. (Sp Ob 12)



3. Complete an assignment given by the instructor using a data base program. (Specific Objective 14)
4. Complete an assignment given by the instructor using a spreadsheet. (Sp Ob 14)
5. Complete an assignment given by the instructor using a telecommunications program. (Sp Ob 15)
6. Complete an assignment given by the instructor using a graphics program. (Sp Ob 16)
7. Revise five (5) existing lesson plans to include instructional technology as an intergral part of the lesson, i.e., writing and illustrating Haiku poems using a desktop publishing program, writing a research paper using a hypertext program.

Evaluation

The instructor will apply predetermined criteria for establishing a successful level of competency for evaluation items 1-5 and 7.

1. Complete a writing assignment given by the instructor using a word processor. (Sp Ob 12)
2. Complete an assignment given by the instructor using a data base program. (Sp Ob 13)
3. Complete an assignment given by the instructor using a spreadsheet. (Sp Ob 14)
4. Complete an assignment given by the instructor using a telecommunications program. (Sp Ob 15)
5. Complete an assignment given by the instructor using a graphics program. (Sp Ob 16)
6. Participants will complete a post-test or other valid measure with 80% accuracy consisting of short answers and multiple choice questions on:
 - A. Operating a microcomputer. (Sp Ob 1)
 - B. The features of all types of applications software including, but not limited to: word processing, data base management, spreadsheets, telecommunications, desktop publishing, graphing and graphics programs.
 - C. (Sp Ob 2, 4, 6 & 11)
 - D. The applications of this software educational settings and society in general. (Sp Ob 3, 5, 7-9)
 - E. The concept of integrated software. (Sp Ob 10)

Dade County, June 1996

