

MICROCOMPUTERS FOR ELEMENTARY TEACHERS

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The objective of this paper is to 1) present a model for teaching computers to elementary teachers and 2) present a survey given to the first year students enrolled in the beginning course concerning the course and their perceptions.

Computer Courses

During the 1982-83 year Ball State University instigated the establishment of computer courses for elementary teachers. The Elementary Education Department collaborated with the Computer Science Department to form courses that would lead to computer endorsements for teachers in Indiana. (18 quarter hours.) The courses consisted of the following:

1. EDEL 598 Microcomputer Workshop
A six week, 2 hour quarter course, to introduce microcomputers to teachers.
2. CS 503 Microcomputer Programming
CS504
A 4 hour quarter course, which meets 11 weeks. The emphasis is on BASIC programming. Students produce one program.
3. EDEL 560 Microcomputers in the Classroom
An eleven week, 4 quarter hour course. Teachers develop three programs they can use in their classroom. They also design a computer curriculum for their grade level, and introduce software to the class that they consider outstanding.
4. CS 505 Advanced Programming
An eleven week, 4 quarter hour course. Teachers learn more advanced programming and develop one long program. Also several small (4) programs are developed.
5. EDEL 590 Practicum
Teachers prepare an 11 week curriculum utilizing the computers with students. The class meets three to four times during the quarter. The instructor visits the classrooms.

The course lectures consisted of an introduction to computers (types, components, computer terms), the history of computers, instructional use of computers in the classroom, computer language, criteria for judging software, and management uses of computers in the schools. During the two and half hours of class, one hour was used for lecture and 1½ hours for direct computer usage.

Approximately 300 students have enrolled and finished EDEL 598 as of November 16, 1984. There have been 60 who have finished all five courses.

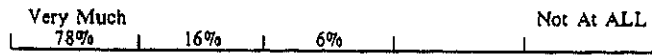
Survey

The author began teaching the beginning courses during the winter and spring of 1983. At that time a survey was taken among the 95 teachers to determine if the course was acceptable by them, and if the teachers were changing their attitudes about computers by enrolling in the class. From the survey we could also determine if the course was meeting the needs

of the teachers.

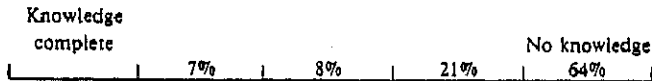
The following survey was developed with teachers enrolled in the EDEL 598 classes of January (winter quarter), and April (spring quarter), 1983. There were 95 teachers who completed the formulative/narrative survey.

1. Are the objectives of this course as stated in realistic terms?



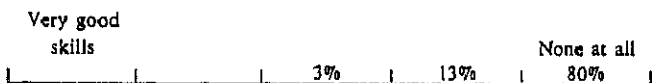
Comments:

2. As a teacher, rate your knowledge (when you began the course) of microcomputers.



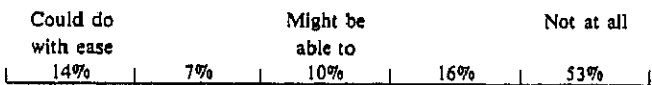
Comments:

3. Did you have programming skills with microcomputers before this class?



Comments:

4. Did you know how to lead programs into the computer with cassettes or discs before this class?



Comments:

5. Did you enroll in this course with a bit of apprehension?



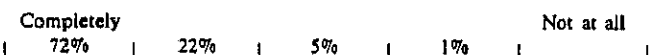
Comments:

6. Did you develop some ideas of using the computer in the classroom as a result of this class?



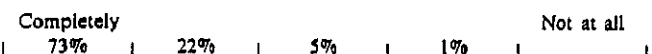
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7. Would you recommend this course to other elementary teachers?



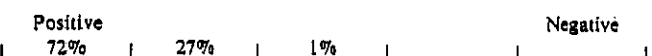
Comments:

8. Have the "hands on" practice work of this course been suitable for elementary teachers?



Comments:

9. My general attitude toward this class is:



Comments:

10. What is there about this class is *least* appealing and rewarding to you?

Testing (35); Not enough time (10); Programming (3); Filmstrips (1)

11. What about this class is *most* appealing and rewarding to you?

Learning BASIC programming (20); "hands on" format work (34); Enthusiastic patient professor (23); Course content (3); Gaining confidence (3); Ideal pace (6); No pressure (1); Learning commands and what they mean (1)

12. What changes would you suggest?

More class sessions (8); More software (6); Practice with discs (5); No tests (3); Have a textbook (3); Homework assignments (2); More programming (4)

From the survey it was found that the teachers did enjoy the course (99%), and would recommend it to other teachers (94%). They liked the lesson "hands-on" work (94%) and did develop some ideas of how to use the computer in the classroom (80%). Few came to the course with microcomputer background (80%), while only a few were apprehensive about taking the course (52%). Overall the survey results were positive concerning the perceptions of teachers toward the EDEL 598 course.