Education 361-4: Contemporary Issues and New Developments in Teaching (S.I.T.E.)

Computers in Education

Summer Session, 1984

Instructor: David Porter

Time/Dates: Tuesday/Thursday, 1:00 - 4:50 p.m.

July 3 - August 10

Location: on campus

OBJECTIVES

Recent developments in microelectronics have hastened the arrival of computers in the classroom. This course will examine the various ways that computers might influence the teaching-learning process and classroom management.

Students in this course will:

- a) develop competencies in the operation of microcomputers.
- b) develop skills related to the selection, evaluation and utilization of computer-based learning materials.
- c) develop an awareness of the ways computers can be used to support the instructional and administrative tasks of teachers.
- d) develop a critical awareness of the role of computers in society and the implication of this for education.

This is an introductory course in which students will develop a level of computer awareness sufficient for the intelligent and critical utilization of existing microcomputer hardware and software. It is not a course designed to prepare teachers to teach computing science courses nor will it prepare teachers to write computer-assisted learning materials.

OUTLINE OF TOPICS:

- 1. Operation of Microcomputers
 - a) components and their function
 - b) connecting peripheral devices
 - c) programs and programming

- 2. Modes of computer utilization
 - a) the computer as instructor
 - b) the computer as laboratory
 - c) the computer as object of study
 - d) the computer as teacher's aide
- 3. Selection and utilization of software
 - a) sources of materials
 - b) evaluation of courseware
 - c) integrating computers in the curriculum
- 4. Computer literacy
 - a) print and non-print materials on computers
 - b) role of computers in schools and society
 - c) status of computers in B.C. schools
 - d) use and misuse of computers in education

COURSE ACTIVITIES:

Course activities will consist of lectures, demonstrations, readings and laboratories.

EVALUATION:

Evaluation will be based on:

- a project which demonstrates or explores the use of computers in a selected curriculum area <u>or</u> a paper which reviews the application of computers in a selected curriculum area.
- a critical evaluation of a piece of software (software review).
- short assignments or tests related to the lectures and readings.
- demonstration of computer operating skills involving both hardware and software.

REQUIRED TEXTBOOKS:

Bitter, G. & Camuse, R. <u>USING A MICROCOMPUTER IN THE CLASSROOM</u>. Reston: Reston Publishing, 1984.

Moursund, D. <u>Introduction to Computers in Education for Elementary and Middle School Teachers</u>. Eugene: ICCE (University of Oregon), 1981.