

SIMON FRASER UNIVERSITY

S.85-51

MEMORANDUM

To: Senate

From: Senate Committee on
Undergraduate Studies

Subject: Faculty of Education -
Curriculum Changes

Date: November 13, 1985

Action undertaken by the Senate Committee on Undergraduate Studies at its meeting of November 12, 1985 gives rise to the following motion:

MOTION:

"That Senate approve and recommend approval to the Board of Governors, as set forth in S.85- 51, the proposal

(1) to split EDUC 406-5 into two courses:

EDUC 406-5 Supervised observation and teaching; and
EDUC 407-5 In-service practicum

(2) new courses: EDUC 448-4 Law in the curriculum

EDUC 482-4 Designs for learning: educational uses
of computers"

Subject to approval of courses by Senate and the Board of Governors the Senate Committee on Undergraduate Studies approved waiver of the normal two-semester time lag requirement to permit first offering of EDUC 448-4 and EDUC 482-4 in Summer 86-2.

FOR INFORMATION

Acting under delegated authority at its meeting of November 12, 1985, the Senate Committee on Undergraduate studies approved -

Change of title for EDUC 474-4

SCUS 85-37

**SIMON FRASER UNIVERSITY
FACULTY OF EDUCATION
MEMORANDUM**

TO: Ron Heath
Registrar

From: Stan Shapson
Acting Dean
Faculty of Education

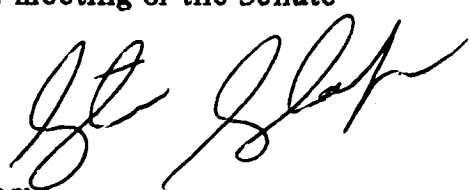
Subject:

Date: October 28, 1985

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The Faculty of Education at its meeting today approved a change of title for EDUC 474-4 (from "Designs for learning: social sciences" to "Designs for learning: social studies"), a split of EDUC 406-5 (Professional in-service practicum) into EDUC 406-5 (Supervised observation and teaching) and EDUC 407-5 (In-service practicum), and new course proposals EDUC 448-4 (Law in the curriculum), and EDUC 482-4 (Designs for learning: educational uses of computers) as per attached.

Please include them on the agenda of the next meeting of the Senate Committee on Undergraduate Studies.



cc: Sandy Dawson, Director Professional Programs
Stan Shapson, Director, Undergraduate Programs
Stan Kanehara, Administrative Assistant to the Dean

SENATE COMMITTEE ON UNDERGRADUATE STUDIES

NEW COURSE PROPOSAL FORM

UPC 85-20

*Change in course title
only FE 85-9

1. Calendar Information

Department: Education

Abbreviation Code: EDUC. Course Number: 474 Credit Hours: 4 Vector: _____

Title of Course: Designs for Learning: Social Studies

Calendar Description of Course:

Nature of Course

Prerequisites (or special instructions):

What course (courses), if any, is being dropped from the calendar if this course is approved: Change in course title only from: Designs for Learning: Social Sciences to: Designs for Learning: Social Studies.

2. Scheduling

How frequently will the course be offered?

Semester in which the course will first be offered?

Which of your present faculty would be available to make the proposed offering possible?

Objectives of the Course

4. Budgetary and Space Requirements (for information only)

What additional resources will be required in the following areas:

Faculty

Staff

Library

Audio Visual

Space

Equipment

5. Approval

Date: Oct 28/85

Oct 28/85

Department Chairman

Dean

Chairman, SCUS

SIMON FRASER UNIVERSITY

MEMORANDUM

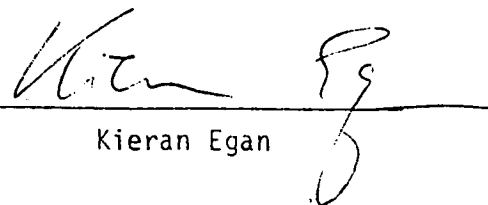
To..... Stan Shapson

From..... Kieran Egan

Subject..... EDUC 474 Title Change

Date..... September 10, 1985

I would like to recommend that we change the name of EDUC 474 from "Designs for Learning: Social Sciences" to "Designs for Learning: Social Studies." This might seem trivial -- probably is -- but will make our title accord better with what is done in the curriculum in B.C. and elsewhere. There was a period when Social Studies was considered by many to be properly made up of material from the Social Sciences. This is no longer the case in general; the present title suggests a rather old fashioned view and causes some confusion for Social Studies teachers. I'd be grateful if you will put this on your next U.P.C. agenda. I raise it now because I'm writing DISC 474, and in dealing with the past emphasis on deriving content from Social Sciences there is some embarrassment having our course name suggesting such an orientation.


Kieran Egan

KE:em

RECEIVED

SEP 11 1985

**Undergraduate Programs
Faculty of Education**

Proposed Split in EDUC. 406-5 Into Two
Course Numbers

It is proposed to split EDUC. 406-5 Professional In-Service Practicum into two course numbers. This will avoid any confusion and better communicate the intent of the course for the two distinct groups of students for whom the current offering is intended.

CURRENT CALENDAR ENTRY

EDUC 406-5 Professional In-Service Practicum

Education 406 is designed for two distinct groups of teachers:

- (1) for those who need to meet B.C. certification requirements and familiarize themselves with the B.C. school system, a supervised practicum in an accredited instructional setting is provided. (Please refer to Professional Programs section of the calendar for further information and procedures).
- (2) for practising teachers who wish to implement new curriculum or instructional techniques in their own classrooms, a supervised practicum is offered in conjunction with other University coursework. (Please refer to Undergraduate Programs section of the calendar for further information and procedures. Permission of the Director of Undergraduate Programs is required).

Prerequisites: Education 405 or equivalent. Permission will not be given to students without previous teaching experience. Grading will be on a Pass/Withdrawal basis.

Proposed Course Numbers and Titles:

EDUC. 406-5 Supervised Observation and Teaching (see SCUS form attached)

EDUC. 407-5 In-Service Practicum (see SCUS form attached)

SENATE COMMITTEE ON UNDERGRADUATE STUDIES

NEW COURSE PROPOSAL FORM

1. Calendar Information

Department: Education
 Abbreviation Code: EDUC. Course Number: 406 Credit Hours: 5 Vector: _____

Title of Course: Supervised Observation and Teaching

Calendar Description of Course:

Education 406 is designed for those who need to meet B.C. certification requirements. It is a supervised orientation/observation/teaching sequence of a minimum of eight weeks, in a B.C. public school. This practicum is designed as an opportunity to familiarize students with the British Columbia School system and/or update their teaching skills.

Nature of Course

Prerequisites (or special instructions):

Education 405 or equivalent. Permission will not be given to students without previous teaching experience. Grading will be on a Pass/Withdraw basis. Permission of the Director of Professional Programs is required.

What course (courses), if any, is being dropped from the calendar if this course is approved: None

2. Scheduling

How frequently will the course be offered?

Semester in which the course will first be offered?

Which of your present faculty would be available to make the proposed offering possible?

Objectives of the Course

4. Budgetary and Space Requirements (for information only)

What additional resources will be required in the following areas:

Faculty

Staff

Library

Audio Visual

Space

Equipment

5. Approval

Date: Oct 28/85

Oct 28/85

[Signature]
 Department Chairman

[Signature]
 Acting Dean

 Chairman, SCUS

NEW COURSE PROPOSAL FORM

Number Only from
EDUC. 406-51. Calendar Information

Department: Education

Abbreviation Code: EDUC. Course Number: 407 Credit Hours: 5 Vector: _____Title of Course: In-Service Practicum

Calendar Description of Course:

Education 407 is designed for practising teachers who wish to implement new curriculum or instructional techniques in their own classrooms. This supervised practicum is offered in conjunction with other University coursework. (Please refer to Undergraduate Programs section of the calendar for further information and procedures). Permission of the Director of Undergraduate Programs is required).

Nature of Course

Prerequisites (or special instructions):

Education 405 or equivalent. Permission will not be given to students without previous teaching experience. Grading will be on a Pass/Withdrawal basis.

What course (courses), if any, is being dropped from the calendar if this course is approved:

2. Scheduling

How frequently will the course be offered?

Semester in which the course will first be offered?

Which of your present faculty would be available to make the proposed offering possible?

Objectives of the Course4. Budgetary and Space Requirements (for information only)

What additional resources will be required in the following areas:

Faculty

Staff

Library

Audio Visual

Space

Equipment

5. ApprovalDate: Oct 28/85Oct 28/85St. Glap
Department ChairmanSt. Glap
Acting Dean

Chairman, SCUS

SCUS 73-34b:- (When completing this form, for instructions see Memorandum SCUS 73-34a. Attach course outline).

SIMON FRASER UNIVERSITY

MEMORANDUM

To..... S. Shapson, Director
..... Undergraduate Programs
..... Undergraduate Programs Committee

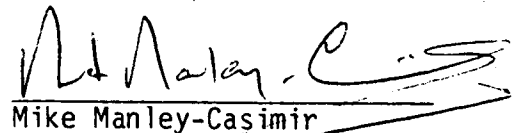
From..... Michael Manley-Casimir
..... Associate Professor

Subject Funding Arrangements

Date..... September 2, 1985

Attached to this memorandum is the new course proposal "Law in the Curriculum". This is a course that the Faculty agreed to develop and offer on a regular basis through the Law Related Teacher Education grant from the B.C. Law Foundation. We are now nearing the end of the second full year of the grant. As part of our commitment to the Law Foundation, we have developed this new course proposal for approval by the Undergraduate Programs Committee and by the Faculty, before being sent on for university approval.

I must clarify that the Law Foundation has provided "in principle" approval for four years of funding. These funds, inter alia, provide for all the direct instructional costs -- stipends for sessional instructors, honoraria, xeroxing, library development costs, and general program support costs. So for the current and following two years (January 1986 - December 1987) this course will be offered at no cost to the university. At that time the fiscal responsibility for offering this course will revert to the Faculty of Education, subject to the usual constraints of sufficient enrolment and other fiscal exigencies.


Mike Manley-Casimir

MMC:em
Encl.

PROPOSAL

We request that the course "Law in the Curriculum" be granted permanent status in Undergraduate Programs in the Faculty of Education.

RATIONALE

- 1) Legal topics, concepts and skills currently form a substantial component of the B.C. school curriculum -- in particular through the new Consumer Education courses, the recently revised K-12 Social Studies curriculum, and the Law 11 course (the second most popular secondary elective). Teachers of these subjects, however, are not adequately prepared to teach law. Only a few short-term workshops are offered by legal organizations. Implementation of the credit courses described below will substantially improve this situation.
- 2) The faculty has offered differing versions of this course four times before as "Special Topics" courses. It was first offered as EDUC 487-4: Curriculum Development in Legal Education in the "Summer Institute on Training Teachers to Teach Law" held in July/August, 1981 (see attached brochure). Through the grant from the Law Foundation it was again offered in the 1984 Summer Session as EDUC 487-4: Law in the Curriculum as part of the "Summer Institute on Law" (see attached brochures); as EDUC 487 (same title) in the Fall '84 semester evening program and, most recently, it was offered in the 1985 Summer Session as part of this year's Summer Institute (see attached brochure).
- 3) The agreement between Simon Fraser University and the Law Foundation of British Columbia provides that this course will be forwarded for approval to the appropriate committees and to Senate so that it can become a formal part of the course offerings of the Faculty of Education.
- 4) The course will appeal to both prospective and practising teachers. Students will take this course during the on-campus portion of the Professional Development Program. It will also be taken to fulfill part of the requirements of a Bachelor's Degree in Education or as part of a minor concentration in Education. Practising teachers will also take this course to increase their qualifications and to broaden their professional background.

SENATE COMMITTEE ON UNDERGRADUATE STUDIES

NEW COURSE PROPOSAL FORM

FE85-12

1. Calendar Information

Department: Education
Abbreviation Code: EDUC. Course Number: 448 Credit Hours: 4 Vector: _____

Title of Course: Law in the Curriculum

Calendar Description of Course: The justification and practise of law-related education is the subject of this methodology course. Students will examine the place of law in the curriculum and have the opportunity to develop unit plans and curriculum materials, teaching strategies, and skills in legal research. Emphasis is on developing and implementing law-related programs in the classroom.

Nature of Course Seminar

Prerequisites (or special instructions):

EDUC 401/2 or equivalent.

What course (courses), if any, is being dropped from the calendar if this course is approved: None

2. Scheduling

How frequently will the course be offered? A minimum of once per year

Semester in which the course will first be offered? Spring Semester 1986

Which of your present faculty would be available to make the proposed offering possible?

Faculty

3. Objectives of the Course

Please see attached sheets

4. Budgetary and Space Requirements (for information only)

What additional resources will be required in the following areas:

Faculty

Staff

Library The B.C. Law Foundation has provided money for purchase of necessary references.

Audio Visual

Space - Classroom in Multipurpose Complex

Equipment

5. Approval

Date: Oct 28/85

St. Glop
Department Chairman

Oct 28/85

St. Glop
Acting Dean

Chairman, SCUS

COURSE OBJECTIVES

EDUCATION 448 Law in the Curriculum

At the end of the course the students will:

- * have developed a personal rationale for the teaching of law in the schools;
- * know where law and law-related learning exists in present B.C. school curricula;
- * have used their understanding of the purpose of legal education in schools to select and develop a focussed program of law-related activities for their own use;
- * be able to employ different classroom strategies for teaching the law to children;
- * have gained first hand experience of selected legal institutions and be able to use knowledge gained in curriculum planning;
- * be able to perform simple research tasks in the law and in related teaching areas;
- * have developed a unit of instruction complete with student materials for teaching the law in the public schools.
- * have demonstrated knowledge of the theory and practice of legal education in the schools.

COURSE TOPICS

EDUCATION 448: Law in the Curriculum*

Theory: (approximately one third course)

- * Justification for Teaching Law in Schools
- * Law in the Formal and Hidden Curricula of the School
- * Focussing on Legal Concepts and Principles in Curriculum Planning

Classroom Application: (approximately two thirds course)

- * Using Community Resources in Unit Planning
- * Assessment, Adoption and Development of Curriculum Materials in Law
- * Classroom Strategies: Mock Trials/Moot Appeals; Case Studies; Using Statutes to Discuss Current Issues; Law in Literature
- * An Introduction to Legal Research
- * Curriculum Development in Law-Related Education
- * Evaluation of Law-Related Learning

- * (The focus of the course is on learning through participation -- thus assignments include participation in a school board presentation simulation, mock trial and/or moot appeal, case and statute discussion and analysis, field resource interactions and development of a curriculum plan that incorporates ideas learned in the course.

SUGGESTED READINGS

EDUCATION 449: Law in the Classroom

Binder of Readings produced by Wanda Cassidy (1985) (approximately 300 pages).

- Topics include:
- Justification for law related education;
 - Law in the formal curriculum
 - Law in the informal curriculum
 - Teaching concepts of law
 - Mock trials and role play
 - The case method
 - Using statutes to teach issues
 - Using literature to teach law
 - Evaluation of legal education
 - Law related education in elementary school
 - Other teaching ideas

Case, R. (1983). On the Threshold: Canadian Law-Related Education. (Available from the University of British Columbia, Faculty of Education, Vancouver, B.C.).

Falkenstein, L.C., & Anderson, C.C. (eds.). (1980). Daring to Dream: Law and the Humanities for Elementary Schools. Chicago: ABA Press.

Gerlach, R.A., & Lamprecht, L.W. (1975). Teaching About the Law. Cincinnati: The W.H. Anderson Company.

Gibson, D. (1977). All About Law: Exploring the Canadian Legal System. Toronto: Wiley Publishers of Canada Ltd.

Ianni, R. (1979). "Reflections on the State of Public Legal Education in Canada." Canadian Community Law Journal, 3, 20-25.

Jarman, F.E. (1976). In Pursuit of Justice. Toronto: Wiley Publishers of Canada Ltd.

Kindred, H. (1975). "Legal Education in Canadian Schools?" Dalhousie Law Journal, 5, 534-42.

_____. (1979). "The Aims of Legal Education in High School." Canadian Community Law Journal, 3, 20-25.

Liepner, M. (1981). Applying the Law. Toronto: McGraw-Hill Ryerson Ltd.

Sussman, F.B., & Morse, B.W. (eds.). (1981). Law and the Citizen: Looking to the 80's. Ottawa: University of Ottawa Press.

Spetz, S.N., & Spetz, G.S. (1984). Take Notice: An Introduction to Canadian Law. Toronto: Copp Clark Pitman Ltd.

Turner, Mary Jane. (1979). Law in the Classroom: Activities and Resources. Boulder: Social Science Education Consortium.

White, C. (ed.). (1981). Building Bridges to the Law. Chicago: ABA Press.



EDUCATION 488-4
SPECIAL TOPICS: LAW IN THE CURRICULUM

Summer Session
July 3-August 7, 1985
Mon. & Wed., 1:00-4:50 p.m.

Instructor: Wanda Cassidy
Phone: 291-4484/3395
Location: On Campus

"Just as we recognize that every student has a right to read, so we should recognize that every student has a right to be 'legally literate', to possess that minimum amount of information needed by citizens to understand how their legal system works and how it can work for them."

(D. Schimmel)

Law-related topics, concepts and skills can be found in the elementary and secondary school curriculum in B.C. in subjects such as Language Arts, Social Studies, English, Consumer Education and, of course, Law 11. Teachers also teach legal concepts through the informal curriculum - the way classrooms are managed, conflict is resolved and student participation is sought.

Education 488-4, "Law in the Curriculum" is a methodology course. Its purpose is to provide teachers and prospective teachers with an overview of law's relationship and importance to the curriculum and to provide the opportunity for educators to examine and participate in a wide variety of strategies useful for teaching legal topics and concepts in the classroom. The course is suited to both elementary and secondary school teachers and those experienced and inexperienced in teaching law.

- Topics will include:
- 1) justification for teaching law in the schools
 - 2) law and the curriculum, formal and informal
 - 3) unit development in law
 - 4) basic skills of legal research
 - 5) classroom strategies such as: mock trials, simulations, case law method, debate, use of a-v, concept presentation
 - 6) community resources
 - 7) materials review and development
 - 8) evaluation in law-related education

The occasional field trip will also occur and participants will have the opportunity to work with a group of school children.

Requirements: Simulation and mock trial participation. Development of a short curriculum unit on law. A couple of short, written assignments related to class topics. Readings and attendance.

Materials: A source book of readings will be made available at a cost of \$20.00.

Eligibility: Educ. 401/2 or the equivalent of a first teaching practicum or permission from the instructor.

SIMON FRASER UNIVERSITY

MEMORANDUM

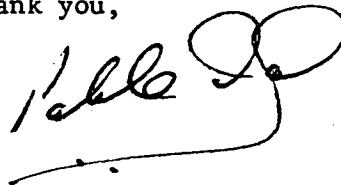
To... STAN KANEHARA, Administrative Assistant
...to the Dean of Education.....
Subject... NEW COURSE PROPOSALS.....

From... PABLO DOBUD, Administrative Assistant
...to the Dean of Science.....
Date... October 25, 1985.....

Please be advised that the following Faculty of Education courses do not overlap with course offerings in the Faculty of Science:

EDUC 447-4 LAW FOR THE CLASSROOM TEACHER - *NOT FORWARDED AT THIS TIME*
EDUC 448-4 LAW IN THE CURRICULUM *W.R. 91.*
EDUC 482-4 DESIGNS FOR LEARNING: EDUCATIONAL USES OF COMPUTERS

Thank you,



cc: R. Heath, Secretary to Senate
R. Frindt, Chairman, Faculty of Science
Undergraduate Curriculum Committee

/wy

SENATE COMMITTEE ON UNDERGRADUATE STUDIES
NEW COURSE PROPOSAL FORM

FE 85-13

1. Calendar Information

Department: Education

Abbreviation Code: EDUC. Course Number: 482 Credit Hours: 4 Vector: _____

Title of Course: Designs for learning: Educational uses of computers

Calendar Description of Course:

Students will develop a critical understanding of the role of computers in education and will learn how microcomputers can be used. The course focuses on learning about computers and software and provides experience with courseware designed for instruction and software tools designed to facilitate the task of teaching.

Nature of Course Lecture/lab

Prerequisites (or special instructions):

What course (courses), if any, is being dropped from the calendar if this course is approved:

2. Scheduling

How frequently will the course be offered? Each semester

Semester in which the course will first be offered:

Which of your present faculty would be available to make the proposed offering possible?

Wolfgang Rothen, A.J. Dawson

Objectives of the Course

Students will: a) develop competencies in the operation of microcomputers; b) develop skills in the selection, evaluation, and effective-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, and develop a critical awareness of the role of computers in education (outline attached)

4. Budgetary and Space Requirements (for information only)

What additional resources will be required in the following areas:

Faculty

Staff

Library

Audio Visual

Space

Equipment

5. Approval

Date: Oct 28/85 Oct 28/85

[Signature]
Department Chairman

[Signature]
acting Dean

[Signature]
Chairman, SCUS

1: Learning about the Computer

1.1.1 History of computers

1.1.2 History of computers in education

1.2: Computers in the School

1.2.1: Social & Legal Implications

1.2.2: Roles of the computer

1.2.3: Uses and abuses of computers

1.2.4: Integrating computers in classrooms

1.2.5: Changes in the teacher's role

1.3: Experience with Microcomputers

1.3.1: Hardware Components (Computer-related vocabulary)

1.3.2: Microcomputer Operating Skills

1.3.3: Connecting Peripheral Devices

1.3.4: Elementary programming

2: Learning with the Computer

2.2: Tutorials

2.3: Educational games

2.4: Modeling & simulations

2.5: Empowering environments (idea processors)

3: Computers as Educational Tools

3.1: Word processors

3.2: Data bases

3.3: Spread sheets

3.4: Communication devices & message sending

3.5: Testing & Administrative uses of Computers

3.5.1: Item banking

3.5.2: Record Keeping

3.5.3: Test scoring & generation

4: Hardware & Software as Objects of Study

4.1: Elementary software review & evaluation

4.2: Hardware & software procurement/resources/costs

Education 486-4 Special topics:
Microcomputers in Education

Fall, 1985

Instructor: David Bell

Monday, 4:30 - 8:20

Location: MPX 8651

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 literacy 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:

1. a paper reviewing the application of computers in a selected curriculum area (10 pages)
2. a critical evaluation of a piece of software (software review) (2-3 pages)
3. short tests related to the lectures and readings
4. demonstration of computer operating skills

REQUIRED TEXTBOOKS:

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

PREREQUISITES:

Education 401/402 or equivalent.

EDUC 486-4 SPECIAL TOPIC: MICROCOMPUTERS IN EDUCATION

Instructor: David Bell
Office: MPX 8513
Phone: 291-4259

Tentative Lecture/Lab Schedule

DATE	LECTURE	LAB
Sept. 9	Overview/Meet the Machine	Intro. to Apple Operations
Sept. 16	Computer as Object of Study (Bitter, Ch.1 & 2)	Apple Operations & Troubleshooting & BASIC Programming
Sept. 23	Computer as Instructor (Bitter, Ch.3)	Wordprocessing
Sept. 30	Software Evaluation (Bitter, Ch.6)	CAI Materials
Oct. 7	Computer as Laboratory	LOGO 1
Oct. 21	Computer as Mind Extender	LOGO 2
Oct. 28	Hardware Issues (Bitter, Ch.7 & 9)	LOGO 3
Nov. 4	Curriculum Integration (Bitter, Ch.5 & 8)	Authoring Languages
Nov. 18	Computer as Teacher's Aid (Bitter, Ch.4)	Teacher Utilities
Nov. 25	Intelligent CAI	Hardware/Software Demos
Dec. 2	Computers in Society (Bitter, Ch.10)	Hardware/Software Demos

Reading List

Bitter, G.G., & Camuse, R.A. Using a microcomputer in the classroom. Reston, VA: Reston Publishing Co., 1984.

Bolter, J.D. Turing's man: Western culture in the computer age. Chapel Hill: The University of North Carolina Press, 1984.

Bork, A. Learning with computers. NY: Harper & Row, Publisher's Inc., 1981.

Flake, J.L., McClintock, C.E., & Turner, S. Fundamentals of computer education. Belmont, CA: Wadsworth Publishing Co., 1985

Lechner, H.D. The computer chronicles. Belmont, CA: Wadsworth Publishing Co., 1984.

Papert, S. Mindstorms: Children, computers, and powerful ideas. NY: Basic Books, 1980.

Poole, L., McNiff, M., & Cook, S. Apple II user's guide (2nd Edition). Berkeley, CA: Osborne/McGraw Hill, 1983.

Steinberg, E.R. Teaching computers to teach. Hillsdale, NJ: Lawrence Erlbaum Publishing Co., 1984.