

# ***Reports and Announcements***

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Two successful mathematics conferences were held recently:

## ***Regina (NCTM)*** ***October 23-25, 1980***

Many mathematics teachers from western Canada and some from eastern Canada and the United States met in Regina in late October for an NCTM name-of-site meeting. NCTM President Max Sobel and several current members of the board of directors were joined by two former presidents, Glenadine Gibb (Texas) and John Egsgard (Ontario), and by several past board members.

Chuck Allen from California was the keynote speaker. The program featured 77 sessions, which enabled participants to pick sessions which were of interest to them.

## ***Red Deer (MCATA)*** ***November 7 and 8, 1980***

Over 270 mathematics teachers from all parts of Alberta gathered at the Capri Motor Lodge for the 20th Annual Conference of MCATA. Dr. Robert E. Reys, from the University of Missouri, was the feature speaker. He brought us up-to-date on some of the results of the second mathematics assessment in the United States. He also spoke on some issues involving the use of calculators in schools.

Thirty-four other sessions and workshops provided a wide variety of topics and issues for teachers to think about, as well as ideas to use.

N E X T   M E E T I N G



P L A N   T O   A T T E N D

## **Report on the First Annual Conference of the Alberta Association for Computers in Education**

- by Ron Cammaert

The conference held October 24 and 25 at the University of Alberta was designed to provide an introduction to microcomputers and their application in education within Alberta. A major thrust of the conference was to determine the direction which the development of computers in education should take and the role each agency (government, university, colleges, and the school system) should play in this development.

Dr. Berthofer, Assistant Deputy Minister of Advanced Education and Manpower, pointed out that there seemed to be a diminishing return on money put into education and that there was some question as to the ability or political desire to increase allocations of money to education. He mentioned the rapid change occurring in society due mainly to the development of electronic communication (telephone, radio, T.V., and computers). Through this change, the individual has access to more and more information and on an individual basis rather than in a broadcast mode. He contends that this will cause a demand for a shift from teacher-centred to student-centred education and that use of computers will help facilitate this change.

The government, Dr. Berthofer felt, should provide incentive and regulation to provide this change in technological base. The government should coordinate efforts in the field, should establish guidelines for hardware, and help move to standardization of software. He felt the issue was not hardware, but the software and the delivery system for these.

Dr. Gene Romaniuk, Division of Educational Research Services, University of Alberta, gave a short history of computers and then explained the various uses for computers in education. The shortage of software for microcomputers is not surprising in light of the fact that Apple, Pet, and TSR-80's were only introduced in 1977. Some of the applications he mentioned included the following:

- Administration - scheduling, report cards, attendance, payroll, inventory, purchasing, security, information service, and library. (It is not likely that a micro would be able to cover all of these areas.)
- Subject of study - literacy, data processing.
- Computer-assisted instruction (CAI) - drill and practice, tutorial, Socratic, gaming, simulation, diagnosis and prescription.
- Computer-managed instruction (CMI)
- Testing - item bank, test generation, test scoring and analysis, printing and graphics.
- Guidance

### Rationale for CAI:

1. individualization - speed, curriculum, method, depth, remedial, diagnosis of errors, immediate feedback
2. available outside working hours
3. possible cost saving

Why has there been a slow growth of CAI?

1. cost
2. incentive
3. lack of skilled personnel
4. program exchange
5. protection for publishing
6. technological problems

Margaret Penney, Co-ordinator of Instructional Development, Grant MacEwan College, said that when using a computer for CAI, the teacher should ask the following questions:

1. What is the best way to teach a given skill or concept to a given student?
2. How can the computer aid in this process?

Ms. Penney added that teachers should apply a systematic problem-solving method to their teaching, including assessing, planning, implementing, and evaluation. Teachers should use media, including computers, in the implementation and evaluation segments to allow them to spend more time with those students needing teacher attention and have more time for planning.

### ***Establishment of a Society***

An executive was selected to establish a name, the objectives of the

society and committees. The executive is as follows:

- President: *Russ Sawchuk*  
Grant MacEwan College
- Vice-President: *Peter Wright*  
Edmonton Public School System
- Secretary: *Dale Bent*  
University of Alberta
- Treasurer: *Steve Hunka*  
University of Alberta
- Editor: *Ed Carriger*
- Directors: *Jim Thiessen*  
Alberta Education
- Doug Crawford*  
Advanced Education  
and Manpower
- Ron Cammaert*  
(MCATA representative)  
Taber School Division
- Hank Boer*  
Lethbridge Public  
School System
- Al Stamp*
- Nelly MacEwan*  
Edmonton Separate  
School Board
- Teresa Gatien*

## ***Short Courses in Calgary and Edmonton***

### ***Calgary Invades Edmonton***

The Stampeders invaded Commonwealth Stadium and beat the Eskimos twice in 1980. The Flames could do the same to the Oilers. What the Boomers will be able to do to the Drillers is an open question. Since

there is no professional baseball team in Calgary, the new Edmonton franchise should be safe.

The University of Calgary also invaded Edmonton in 1980. The invasion was a co-operative venture between the University of Calgary and

the Edmonton Public School Board. The venue was Satoo Elementary School; the venture was an in-service course entitled Innovations in Mathematics in Primary Grades: An Activity Approach to Teaching Numeration, Addition, and Subtraction. The delivery mode was the neighborhood teacher centre.

Mr. Rick Johnson of Satoo and Mr. Sid Rachlin of the University of Calgary were the leaders. Dr. George Cathcart of the University of Alberta assisted with the course.

The 13 registered students were given experiences with a variety of concrete aids for teaching numeration, addition, and subtraction in the primary grades and then were encouraged to take the aids to their own classroom, try them, and report their impressions. Successful participants received credit for a quarter course at the University of Calgary.

For further information about this or other in-service courses at the University of Calgary, contact Mr. Jack Loughton, In-service Co-ordinator, Faculty of Education, University of Calgary.

## *Edmonton Fights Back*

The mathematics staff in Elementary Education at the University of Alberta have designed a special continuing education offering for summer 1981. Six one-credit courses will be offered which have been especially designed for practising elementary school teachers. The six topics that have tentatively been scheduled include problem solving, diagnosis, calculators, microcomputers, enrichment, and geometry.

For the time being, these topics will be offered as Ed. CI 501, Current Developments in Elementary School Mathematics, which is a three-credit course. Therefore, registrants must select three of the six topics (all six for six credits). The course will be offered during the first three weeks of summer session by the elementary mathematics education staff. Three credits could be taken in either a two-week or three-week block.

For further information, contact:

Dr. Joan Worth  
Department of Elementary Education  
University of Alberta  
Edmonton, Alberta T6G 2G5

### **NOTICE:**

The Canadian Inventory of Historic Building is about to begin a study on early schools in Canada. As a base for this work, we would like to locate any buildings constructed as schools in Canada before 1930. If there is such a building in your area and you would like to see it included in the study, please write to:

School Study, Canadian Inventory of Historic Building  
Parks Canada  
Ottawa, Ontario K1A 1G2

## ***Monograph on Problem Solving***

Readers will be interested to learn of the publication of a monograph entitled "Studying Problem Solving Behavior in Early Childhood," by Doyal Nelson, a mathematics education professor in the Department of Elementary Education, Faculty of Education, University of Alberta.

The monograph provides valuable insights and speculations of relevance for classroom practice about the problem-solving strategies of young children, and suggests a promising methodology for research in problem solving.

Cost of this publication is \$9. per single copy, \$8. for five or more copies. It is available from:

Office of the Dean  
845 Education South  
Faculty of Education  
University of Alberta  
Edmonton, Alberta  
T6G 2G5

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### PRIMARILY TIME

(for primary classes)

-Soderstrom

This book contains 24 duplicating masters to aid in the teaching of time. These can be used with or without teacher direction, depending on the child's age.

Hours, half-hours, quarter-hours, and five-minute intervals are presented in a variety of ways. Exercises include matching, writing the times, drawing hands, and coloring corresponding clocks. Each page includes clocks which review the concepts previously taught. Activities have been designed to be fun and to increase in difficulty throughout the book. The pages have been illustrated with large, basically uncluttered illustrations to allow for easy coloring when the exercises have been completed. Cost is \$8.95.

Available from:

Western Educational Activities Ltd.  
Box 3806  
Edmonton, Alberta T5H 2S7

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