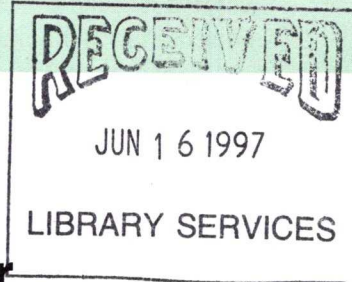


Mathematics Council NEWSLETTER

The Alberta Teachers' Association

Volume 15

Number 6



June 1997

From the Editor

Providing leadership to encourage the continuing enhancement of teaching, learning and understanding mathematics.



I thought that this story would be an excellent way to introduce the last newsletter of the year. Each of us in his/her own small way really can make a difference.

The Young Man and the Starfish

A Story Inspired by Loren Eiseley

A wise man was taking a sunrise walk along the beach. In the distance he caught sight of a young man who seemed to be dancing along the waves. As he got closer he saw that the young man was picking up starfish from the beach and tossing them gently into the ocean.

"What are you doing?" the wise man asked.

"The sun is coming up and the tide is going out; if I don't throw them in they'll die."

"But young man, there are miles and miles of beach with starfish along it. You can't possibly make a difference."

The young man bent down, picked up another starfish, and threw it lovingly back into the ocean past the breaking waves.

"It made a difference for that one," he replied.

That young man's actions represent something special in each of us. We are all gifted with the ability to make a difference. Each of us can shape our own future. Each of us has the power to help our organization reach its goals.



Vision without action is merely a dream.
Action without vision just passes the time.
Vision with action can change the world.

—Joel Arthur Barker

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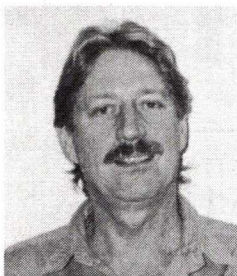
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Week Can Be
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Safe and Caring
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Conference

—Art Jorgensen

From the President's Pen



The Mathematics Council of The Alberta Teachers' Association (MCATA) executive has had representation at a number of conferences, symposiums and events over the past few months. Our representation at these functions has been in

support of the general MCATA membership. The functions include the Safe and Caring Schools Conference, the Mathematics Symposium, a Consultation with Alberta Education to review the current calculator policy for Diploma Examinations, the Annual National Council Teachers of Mathematics (NCTM) Conference in Minneapolis and the Annual Representative Assembly (ARA) (observer status), to name only a few. These functions allow our work and accomplishments within the MCATA to be justly recognized.

A number of local initiatives including meetings and professional development opportunities in the form of mini-conferences have also taken place throughout the province. These initiatives support our focus to provide leadership and coordinate professional development opportunities to all our members.

We welcome Florence Glanfield to the position of president-elect for the Council. Florence will take over the position as of July 1, 1997. The remainder of the table officers are in place for the 1997-98 school year. They include George Ditto, past president; Cynthia Ballheim and Betty Morris, vice presidents; Donna Chanasyk, secretary; Doug Weisbeck, treasurer; and Dave Jeary, ATA staff advisor.

The general membership of the MCATA has had a very busy year. Much has been accomplished and for that each and every member should feel very proud. Although sometimes the worth of our work may seem diminished in the everyday operation of classrooms, schools and districts, we must all continue to forge ahead, knowing that what we do is valuable to the educational opportunities for our learners.

The MCATA executive invites input from all our members. If you have identified any issues, suggestions, questions or comments, please feel free to contact any member of the executive.

—George Ditto

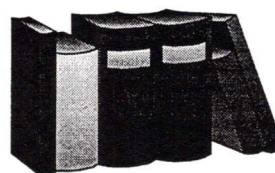
Be a Public Relations Pro or a Legislative Leader

NCTM Communications and Government Relations Handbooks Tell You How . . .

NCTM's "Communications Handbook" provides valuable information on enhancing communications skills and perfecting mathematics- and education-related presentations. The handbook includes information on shaping a message, giving an effective speech or presentation, responding to questions by members of the media, writing letters-to-the-editor and op-ed pieces, and nurturing a relationship with local reporters. Sample press releases and responses are provided (stock #6505).

The "Government Relations Handbook" helps AGs (Affiliate Groups) and others understand legislative processes and provides information on how an AG can influence the development of local, state or provincial or national legislation that directly affects mathematics education. Operations of rule-making bodies, from local school boards to legislatures, are included (stock #035). Every AG should have a government relations committee and become active in monitoring the rule-making processes in its geographic area.

Copies of both books are available from NCTM for U.S.\$25 each by calling 1-800-235-7566 (orders only). Specify the stock number.



Have You Time for an Excellent Summer Conference?

Announcing NCSM's First Leadership Academy

The National Council of Supervisors of Mathematics (NCSM) will be holding their first Leadership Academy this summer near Chicago, July 17-20, 1997. Topics will include "The Art of Leadership in Mathematics," "Mathematics and the Change Process," "Mathematics Leadership as Understanding and Managing Perspectives" and "Creating and Articulating a Mathematical Vision for Change." The academy will be held on the campus of McDonald's Hamburger University in Oak Brook, Illinois.

For more information, contact the conference director, Jerry Cummins, 5340 Wolf Road, Western Springs, IL 60558, phone (708) 246-5325 or e-mail jcltmath1@aol.com.

1998 NCTM/MCATA Regional Conference

The NCTM/MCATA Regional Conference is being held in Calgary on October 23-24, 1998. The theme is "Mathematics Education: Living the Challenge." When professional development days are being scheduled for the 1998-99 school year, you may wish to suggest Friday, October 23, 1998, so that you and your colleagues can attend the conference and take advantage of the group-discount rate.

If you are interested in presenting a session at this conference, please complete the attached speaker information form and fax it to Richard Kopan at 777-7529.



Two New Resources for the Classroom

IDEAS: NCTM Standards-Based Instruction, Grades K-4; compiled and edited by Michael C. Hynes

A compelling collection of 45 classroom-ready activities for K-4 students in a convenient, reproducible format. Includes items from the popular "IDEAS" department of the *Arithmetic Teacher* (predecessor of *Teaching Children Mathematics*). Also supplies a reference page that relates the activities to specific NCTM Standards. Features a matrix with activity titles, dates of publication and grade levels of students targeted for each activity. Excellent help for planning activity-based lessons. 1995, 8 1/2" x 11" 119 pp., ISBN 0-87353-422-0, #554AGN, U.S.\$11.50 list price.*

IDEAS: NCTM Standards-Based Instruction, Grades 5-8; compiled and edited by Michael C. Hynes

Helpful time-saver for middle-school math teachers. Presents 47 lessons compiled from the popular "IDEAS" department of the 1991-94 *Arithmetic Teacher*. Supplies student-activity sheets and teacher directions in convenient, easily reproducible format. Includes lessons incorporating communication, connections, reasoning and problem solving. Features reference pages that help teachers find activities by grade level, date of publications and NCTM Standards. 1996, 8 1/2" x 11" 129 pp., ISBN 0-87353-426-3, #555AGN, U.S.\$11.50 list price.*

Package price available for both *IDEAS* books, U.S.\$20,* ISBN 0-87353-427-1, #624AGN

For more information, contact the NCTM, 1906 Association Drive, Reston, VA 20191-1593; phone (703) 620-9840 or fax (703) 476-2970. For orders only, call 1-800-235-7566 or e-mail orders to @nctm.org. Check out our Web site at <http://www.nctm.org>.

***20 percent discount to NCTM individual members**

Publication Dates for MCATA Publications

Klaus Puhmann will prepare two issues of *delta-K* during the 1997–98 school year. Deadlines for receiving material for these issues are

- August 31, 1997 and
- December 15, 1997.

Art Jorgensen is planning five issues of the newsletter. Deadlines for receiving materials for these issues are

- September 15, 1997,
- November 15, 1997,
- January 15, 1998,
- March 15, 1998 and
- May 15, 1998.

Special newsletter issues will be published if necessary. We really encourage our members to submit material for publication. It need not be lengthy—a picture, a problem, a joke, a poem, would be just be fine.

Membership Director's Report

Three lucky MCATA members came away winners by renewing their memberships, or becoming new council members:

- | | |
|-----------|---|
| 1st Prize | One MCATA Conference Registration, Edmonton, November 1–2, 1997
Wendy C. Campbell, Calgary |
| 2nd Prize | One-Year MCATA Membership
Cynthia Kissel, Glendon |
| 3rd Prize | \$25 NCTM Gift Certificate to be redeemed through MCATA,
Valerie Wooders, Edson |

If *your* membership is about to expire, be sure to renew for the next draw to be held in the fall.

Living with Numbers

What Should a Math Classroom Look Like?

Imagine that you revisit your elementary school or high school and observe a mathematics classroom that reflects practices recommended by the National Council of Teachers of Mathematics. Would the class be different from your school experience? The answer is yes. For example:

The Classroom. The desks are not always facing the front. Students may be working together in small teams, as done in business and industry, to solve problems or complete mathematical projects. Individuals or groups may be using computers and graphing calculators. Projects and problems solved by groups of students may be displayed.

The Students. The students take greater responsibility for their own learning and are challenged to meet higher expectations. They engage in important mathematical tasks while interacting with the teacher and each other. They begin to see mathematics as a living discipline that they can understand rather than as a collection of rules they have to memorize.

The Teacher. Although he or she may at times begin a lesson with a brief lecture, the teacher is no longer always in the front of the room. Depending on the mathematical task, the teacher may walk around the room, helping teams when they have questions, working individually with students, and, when necessary, clarifying ideas and concepts at the chalkboard or computer.

Homework. Assignments are more than sheets of routine exercises where students have to follow the examples given in class. They are problems that students have to solve—problems that may relate to their own lives and environment. Depending upon their grade levels, students may be asked to respond to questions and activities like these:

- How much food should be purchased for a class picnic?
- What is the average height of a fourth grader?

- How much lumber can be cut from an acre of forest?
- Using the Internet to access census data, predict population changes in the congressional district in which you live.

Tests and Grades. Assessment is a varied and ongoing process not limited to timed paper-and-pencil tests at the end of a unit of learning. Course grades reflect performance on projects, tests, classwork and homework to furnish a more complete picture of students' understanding.

Today's mathematics class excites, invigorates and encourages further learning. It is grounded in the belief that all students can and must learn mathematics to become productive citizens in the future.

For a complimentary copy of NCTM's *Mathematics: Making a Living, Making a Life*, write to NCTM, 1906 Association Drive, Dept. I-NEWS, Reston, VA, U.S.A. 20191-111593.

—Gail F. Burrill,
President, NCTM

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**"The shortest distance between two points is always under construction."
—Noelie Alito**

Recognizing One of Our Own

Kopan Elected to NCTM Board of Directors

The National Council of Teachers of Mathematics has announced the election of Richard J. Kopan to a three-year term on its Board of Directors. The announcement was made today at the keynote general session of NCTM's 75th Annual Meeting.

A resident of Calgary, Alberta, Kopan is a middle school teacher and coordinator at R. T. Alderman Junior High School.

"Being a classroom teacher, I hope to bring 'grassroots' input to our association. This input will, I hope, lead to decisions and actions that will benefit the people in the classroom and further enhance the teaching of mathematics to our students," stated Kopan.

Kopan's involvement in NCTM has included serving as the chairperson for the Regional Services Committee; member of the task force that restructured NCTM's Affiliated Group regions; planner for several NCTM Affiliated Group leadership conferences; and a speaker at numerous regional and annual meetings.

Kopan has held numerous leadership positions in the Mathematics Council of The Alberta Teachers' Association; served as a member of the provincial curriculum committee and on the administrative coordinating group for the Calgary Board of Education; coauthored the *Junior High Curriculum Guide* for Alberta Education (1988, 1994); and was both a writer and contributing writer for achievement tests and a teacher's resource manual.

Kopan holds a bachelor's degree from the University of Saskatchewan and a diploma in education in administration from the University of Calgary. He is the recipient of the Calgary Board of Education service award (1992).

With more than 110,000 members and 260 affiliated groups located throughout the United States and Canada, NCTM is the world's largest organization dedicated to improving mathematics education. NCTM's *Curriculum and Evaluation Standards for School Mathematics* (1989), *Professional Standards for Teaching Mathematics* (1991) and *Assessment Standards for School Mathematics* (1995) support a vision of national expectations in which students use mathematics to solve problems, communicate, reason and make mathematical connections.

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**"Education's purpose is to replace an empty mind with an open one."
—Malcolm S. Forbes**

Ode to π

Editor's Note: The following poem was sent to me by Cynthia Ballheim. It was written by one of her students. How about encouraging your students to write a poem or story?

Oh, symbol in math class and letter of Greek,
Close to our hearts, your value we keep,
Your irrationality helps us to see
The kinship twixt circles and their properties.

Oh, where would we be without π in our lives?
There would be no pizza, no blueberry pies,
No straw to drink juice from, no lamp shade to hide
The glare of a light bulb from our squinting eyes.

There would be no wine glass, no round tops to spin.
No glass bulbs for Christmas, no baseball to win,
And if not for π , much to his chagrin,
King Arthur's round table would never had been!

No chocolate chip cookies, no wheels on a car,
No compass to tell us if we're near or far,
No CDs to play, no bright distant star,
No donuts, no cupcakes, no round candy jars.

No happy face stickers, no tennis to play,
No puddles to jump in on grey rainy days,
No glasses to see with, no chocolate cream cake,
No reinforcements, no twoonies to break.

No flashlight batteries to see in the dark,
No retracting roof-top at Sky Dome park,
No one hundred percents when we get a mark,
No giant redwoods with ancient old bark.

We'd never go places if there were no wheels,
And would not go fishing without rod and reel,
There would be no halos, no aspirin to heal,
Or mysterious circles, in farmers' fields.

Oh, π , what a glorious letter of Greek,
Your irrationality helps us to see
That without your helpful and glad company,
Much of this world would cease to be.

—Mary Chan

Mathematics Week Can Be Made Exciting

Celebrate Mathematics

This April, students and teachers at Strathcona High School enjoyed their fifth-annual Math Week. Designed to involve as many students as possible in having fun doing mathematics, a variety of activities have been organized over the years.

Speakers from the Association of Professional Engineers, Geologists and Geophysicists of Alberta (APEGGA), the University of Alberta Hospital and local businesses have been invited to let students know how math is used in various occupations in the real world. Professors from the U of A Departments of Mathematical Sciences and Secondary Education have given workshops on chaos theory and fractals. Sessions have been given to describe first-year math courses and programs. Students and teachers particularly appreciated receiving samples of university calculus exams.

Lunch-time activities have included a math rally, a math scavenger hunt and a math murder mystery with prizes for the winners, of course. Every day throughout the week, there is a new "Problem of the Day." Students put their answers in a box, and at the end of the day a winner is chosen from the correct solutions. On the final noon hour of the week, Scona traditionally holds its "Last Chance Saloon," where students and staff alike can try to make their fortune (in bingo chips) at games of probability.

The Euclid and Descartes Math Contests usually fall in Math Week. One year, we even had Math Cheerleaders to encourage participants at a pep rally. This spring, a math contest for junior high students from feeder schools was organized. Four students from each school were invited to participate in a team competition. Math 31 students moderated and scored the solutions.

Other departments in the school support Math Week by organizing their own activities. A display of "Math Art" is set up and a "Math Poetry" contest is run in English classes. The business education department holds computer programming competitions to solve math problems. Clubs have held contests like "Guess the Number of Jelly Beans in the Jar" and math T-shirts have been raffled off as

fund-raisers for grad. One year, the home economics department even sold "Math Food"—squares and circular cookies. Students learned from personal experience what a torus is.

Math Week has been successful in helping students at Scona to see that mathematics is useful and can be fun. If you would like some help organizing your own Math Extravaganza, contact Elizabeth Mowat or Bob Frizzell at Strathcona High School in Edmonton, phone 439-3957.

—Elizabeth Mowat

Math Symposium

May 9, 1997

The 8th Semi-Annual Alberta Mathematics Leaders Symposium was a huge success. Our two presentations, Mike Williams' "Bones, Brass and Bucky Balls: Mathematical Instruments Through the Ages" and Phil Radomsky's "Using Magic to Motivate Students" were well received and proved very interesting and most entertaining. As always, Alberta Education's presentation by Hugh Sanders provided us with up-to-date information.

A departure from previous symposiums, the Explorations Workshops provided all of us with hands-on experience—actually doing mathematics! Mike Stone, Sharon Friesen, Claude LaFlamme, Robert Woodrow and Indy Lagu did a super job leading us in these explorations which included Bean Pi, Markov Processes, Black and White, and Just Zeros and Ones.

The day ended with small-group discussions which are always informative and provide an excellent opportunity for sharing.

The general consensus was that the activities of May 9 were varied, well paced and interesting. The day provided for an outstanding variety of entertainment, information and applications.

Watch for more information concerning the 9th Semi-Annual Mathematics Leaders Symposium to be held in the fall!

—Cynthia Ballheim

Mini-Conference: A Real Success

The Calgary and area elementary mini-conference was a great success. We had just under 200 teachers attend. The mini-conference ran from 9:00 a.m. to 2:30 p.m. on Saturday, April 26. Teachers registered for three sessions, each lasting one and a half hours. We were able to offer about six to eight choices for each session, thanks to some very devoted teachers who were willing to share their classroom expertise with their colleagues. Sessions made connections to the new elementary math *Program of Studies* scheduled to begin this fall. Participant feedback expressed appreciation for the "practical and interesting sessions," "excellent, right-on-target ideas" and the "enthusiastic presenters."

If you are interested in setting up a mini-conference for teachers in your area and would like some help in organizing or someone to bounce ideas off, contact Sandra Unrau at 284-2642.

—Linda Brost
Public Relations Director

What's New?

In December 1996, all NCTM individual members were mailed a complimentary copy of *Mathematics: Making a Living, Making a Life* with their news bulletin. The reader-friendly brochure provides an overview of the central concepts in the three Standards books of the NCTM.

Mathematics: Making a Living, Making a Life is a means to inform the community of the changes taking place in mathematics education. Parent groups, school boards, business leaders and local policymakers may find the brochure insightful and informative.

The price for additional copies is U.S.\$1.30 each for 110–49 copies; \$1.20 each for 50–99 copies; and \$1.00 each for 100 or more brochures. For more information, contact NCTM, Dept. 1, 1906 Association Drive, Reston, VA 20191-1593; or call to order additional copies at 1-800- 235-7566 (orders only).

Mathematics Education Trust

Established by the NCTM

Alberta teachers are encouraged to apply for these awards.

Clarence Olander Grants for Inservice Training

Elementary schools receive up to \$2,000 for support of their inservice programs. Costs may include honoraria and expenses for consultants, materials, substitute time and conference registrations.

Dale Seymour Scholarships

Scholarships of up to \$2,000 are provided to K-12 teachers who are interested in improving their mathematics background to enhance their mathematics instruction.

Ernest Duncan Scholarships

Scholarships of up to \$1,000 are granted to people currently working at the K-6 level to improve their own professional competence as classroom teachers of mathematics. This may include the improvement of the teacher's background or curriculum improvement projects directed at the teacher's classroom.

Future Leaders Annual Meeting Support (FLAMeS) Project Awards

Up to \$1,000 is provided for travel and subsistence expenses of full-time K-12 teachers who have never attended an NCTM annual meeting, are NCTM members, and have taught for 3-10 years.



Implementing the NCTM Standards in Your Classroom Awards

Awards of up to \$2,000 are provided to K-12 teachers to carry out a plan that implements some aspect of the NCTM standards. This award program is funded by the E. Glenadine Gibb Endowment Fund.

Mary Dolciani Scholarships

Awards of up to \$1,500 are granted to people currently working at the K-12 level to improve their own professional competence as classroom teachers of mathematics. This may include the improvement of the teacher's background or curriculum improvement projects directed at the teacher's classroom.

For additional information regarding these grants, contact the NCTM office, 1906 Association Drive, Reston VA 20191-1593; phone (703) 620-9840 ext. 113; or visit the NCTM Web Site at <http://www.nctm.org>. Applications must be postmarked no later than December 1, 1997.

Safe and Caring Schools Conference

April 27-28, 1997

This two-day conference focused on the current research going on in Alberta regarding the attributes of a "safe and caring school."

The initiative focuses on the positive. It suggests that educators should spend more time on issues of fairness, should value the perceptions of their students and should listen to their students' voices. Understanding students' interpretative frameworks and adopting a zero tolerance for objectional or violent behavior that violates another are key requirements of such a nurturing environment.

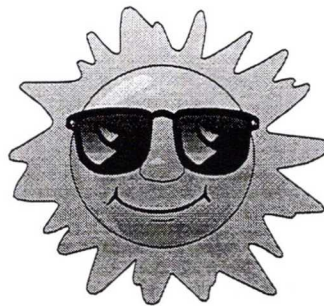
Research presented included the following topics:

1. *School Violence*. How do students see it? Alberta and international perspectives on school practices and policies.
2. *School Violence*. The stories of teachers and principals.
3. *Voices from the Audience*. Students make connections between a performance on violence and their own lives.
4. *Mentoring Students*. A community response to violence amelioration.
5. *Dominance and Subordination*. How do difficult students respond?
6. *Promoting Understanding and Nonviolence*. What can school programs do?
7. *Facilitating Self-Control*. An applied approach to decreasing violence in Alberta schools.
8. *Programs and Resources for Reducing Disruptive Behavior*. A scan of Alberta.

Robert Brooks' closing presentation discussed factors that contribute to the creation of a positive school climate for all students. In particular, he discussed the importance of empathy, the role that self-esteem plays in the lives of all students and the lifelong impact that educators have on students.

This conference was really just the beginning of the safe and caring schools movement. We should be hearing more about it in the future.

—Cynthia Ballheim





SPEAKER PROPOSAL FORM

The 1998 Calgary Regional Program Committee is interested in sessions that highlight mathematical processes. Proposal submissions should be guided by, but not limited to, the framework outlined below:

Mathematics Education: Living the Challenges

These are the critical components as outlined in the Western Canadian and the NCTM Standard Documents that students must encounter in order to achieve the goals of mathematics education and to encourage lifelong learning in mathematics.

- Communication** - Communicate mathematically.
- Connections** - Connect mathematical ideas to other disciplines, everyday experiences, and other areas of mathematics.
- Estimation** - Use estimation where appropriate.
- Problem Solving** - Relate and apply new knowledge through mathematical problem solving.
- Reasoning** - Reason and justify thinking technologies as tools to solve problems.
- Visualization** - Use visualization to assist in processing information.

MATH PROCESSES	CURRICULUM STRANDS	OTHER DIMENSIONS OF TEACHING & LEARNING MATHEMATICS
<ul style="list-style-type: none"> ■ Communication ■ Connections ■ Estimation and Mental Math ■ Problem Solving ■ Reasoning ■ Technology ■ Visualization 	<ul style="list-style-type: none"> ■ Number ■ Patterns and Relations ■ Shape and Space ■ Statistics and Probability 	<ul style="list-style-type: none"> ■ Equity and Gender Issues ■ Assessment ■ Integrated Units ■ Thematic Units ■ Literature ■ Parent/Community Relations ■ Computer ■ Calculator ■ Multimedia

Please help us create a topical index for the program book by selecting one or more topics from the list above that BEST describe your session:

Please print or type important information on reverse side. Please copy both sides when distributing.

SPEAKER PROPOSAL FORM: NCTM REGIONAL CONFERENCE

22 - 24 October 1998

Calgary, Alberta

Proposal Cut-off Date: August 31, 1997

Name: _____

Address: _____

Telephone: (W) _____ (H) _____

E-Mail: _____ Fax: _____

Level of responsibility:

Classroom Teacher (Grades _____)

University/College Teacher

Supervisor/Administrator

Consultant

Other: _____

NCTM encourages broad participation in its meetings. We appreciate your providing this voluntary information:

Gender: Female Male Ethnicity: _____

Specify three recent speaking experiences (give topic, location, and date for each):

1. _____

2. _____

3. _____

Circle the audience range your presentation will cover.

Pre-K K 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 Teacher Education Research

Poster Demonstration - Speaker presents innovative ideas using a visual display or model and an informal discussion. (Displays will be available for viewing on Friday and Saturday. Each speaker will be assigned a 90-minute time slot during which he or she will be available).

60-Minute Session

- Regular** -- Speaker engages participants in thinking about important mathematical topics
- Interactive** -- Speaker provides hands-on activities that involve a large group of participants.
- Teacher-to-Teacher** -- Speaker engages participants in discussion on classroom issues.
- Reflecting on Practice** -- Speaker discusses own research and relates it to classrooms.

90-Minute Extended Session (ticketed, limited seating) -- Speaker provides hands-on experiences with materials in a workshop format.

180 Minute Minicourse (ticketed, limited seating) -- Speaker provides an in-depth examination of a topic that actively engages participants.

Conference Within a Conference (Full day) - Ticketed, Limited

30-Minute Math Fair Presentation -- Informal presentation about an activity or assignment that has been successful in the classroom.

WOULD YOU BE WILLING TO DO A REPEAT SESSION?

Yes

No

TITLE (maximum 110 characters):

Description of proposed presentation (must be limited to this box space):

Presider (please provide the name of the person you desire to preside for your session):

Name: _____

Address: _____

Telephone: (W) _____ (H) _____

School or Professional Affiliation: _____

Signature: _____

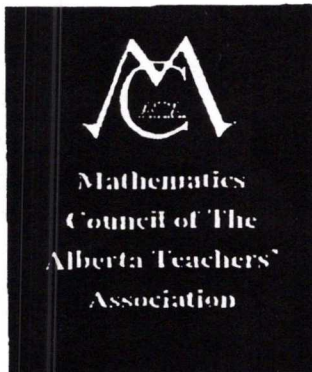
Date: _____

Send three(3) completed copies of the attached form, by August 31, 1997, to:

Richard Kopan
72 Sunrise Crescent S.E.
Calgary, AB T2X 2Z9
Canada

Fax: (403) 777-7529
rjkopan@cbe.ab.ca

DOING MATHEMATICS



NOVEMBER 1 & 2, 1997

MATHEMATICS COUNCIL

THE ALBERTA TEACHERS' ASSOCIATION

ANNUAL CONFERENCE

**THE EDMONTON INN
EDMONTON, ALBERTA**

MCATA is the Mathematics Council of the Alberta Teachers' Association and its mission is to provide leadership to encourage the continuing enhancement of teaching, learning and understanding.

HIGHLIGHTS

Friday, October 31

Math Leader Symposium

An informal gathering where conference delegates (and guests) can mix and mingle and talk to friends and colleagues. A cash bar and complimentary snacks will be available for everyone's convenience and enjoyment. After you register Friday evening, join us from 7:00 pm on to prepare for the conference.

Saturday, November 1 & Sunday, November 2

Come and see!

Publisher's Displays & Exhibits

Bright Ideas

Mini Sessions

Computer Sessions

New Curriculum

***** Draws & Prizes *****

Overview:

Friday, October 31	1900 - 2100	Registration
	1900 - 2200	Informal Gathering
Saturday, November 1	0800 - 0900	Registration
	0900 - 1015	Opening Session - Keynote Speaker
	1030 - 1600	Sessions & Workshops
Sunday, November 2	0830 - on	Information Desk
	0900 - 1110	Sessions
	1115 - 1230	Keynote Speaker & Draws

There will be sessions and workshops all day Saturday and Sunday morning. The sessions will be fifty minutes in length and the workshops one hour and twenty minutes.

ACCOMMODATIONS

A block of rooms has been reserved at the conference site,

The Edmonton Inn

11830 Kingsway Avenue T5G 0X5

Telephone: (403) 454-9521

Fax: (403) 453-7360

Toll Free (Reservation Line): 1-800-661-7264

For conference delegates registered at the Edmonton Inn and flying into the International Airport, the Edmonton Inn has a rate of \$11 per person with Co-op Taxi Service. The taxi driver will accompany you to the hotel registration desk and the hotel will issue a voucher.

Delegates are asked to make their own reservations directly with the hotel and indicate the name of the conference. All reservations must include a deposit in the amount of one night's accommodation. You are encouraged to book early.

Rates: \$65 + tax (Single or Double) (+ \$10 extra for 3rd person)

CANCELLATION

If it becomes necessary for you to cancel your registration, please contact Patricia Chichak 1826 - 51 Street, Edmonton, AB, T6L 1K1 in writing prior to October 21st. A \$40 administration fee will be levied on refunds issued prior to this date. No refunds will be issued after this date.

REGISTRATION FORM (Please Print)

Name: _____

Home Address: _____

City: _____ Postal Code: _____

Home Phone #: _____ School Name: _____

School Phone #: _____ School Fax #: _____

Teaching Certificate #: _____

REGISTRATION FEES:

Prior to October 15

After October 15

MCATA Members Including Institutional Member (elementary) \$110 \$135

MCATA Members (Saturday only) Including Institutional Member (elementary) \$85 \$110

Non-Member \$140 \$165
Non-Member (Saturday only) \$115 \$140

Student (includes MCATA membership) \$35 \$35
MCATA Membership (GST N/A) \$30 \$30

TOTAL ENCLOSED: _____

Mail Registrations to: Patricia Chichak 1826 - 51 Street, Edmonton, AB T6L 1K1