Mathematics Council NEWSLETTER
The Alberta Teachers' Association

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

A Thought from Art

Wisdom

God bless everyone who has wisdom and common sense.
Wisdom is worth more than silver, it makes you richer than gold.
In her right hand
Wisdom holds a long life,
and in her left hand
are wealth and honor.
Wisdom makes life pleasant
and leads us safely along
Wisdom is a life giving tree,
the source of happiness
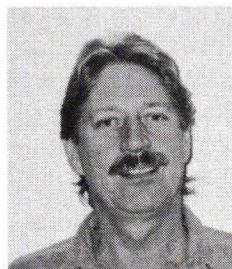for all who hold on to her. ▲

—Art Jorgensen

From the President's Pen

Welcome back from what we hope was a very delightful winter break. Although the weather was uncooperative for many of us, the change in pace is always welcome.

Congratulations to two of our executive members. *Richard Kopan* has been elected to the NCTM board of directors for a three-year term, and a solid vote of support and thanks go to *Graham Keogh* and his committees for organizing the fantastic 1996 MCATA conference in Red Deer.

At the annual general meeting in Red Deer, proposed constitutional amendments were accepted by the membership. These changes were subsequently ratified by table officers of the ATA.

The MCATA executive met January 17 and 18. We renewed our commitment to enhance our public relations initiatives, provide leadership to our members, and support professional development opportunities and publication materials. Additional and ongoing plans to accomplish these were put in place.

Again, we solicit input from all our members. If you have identified any issues, suggestions, questions or comments, please feel free to contact any MCATA executive member. ▲

—*George Ditto*

Conferences

☞ *Mini-conference*, Calgary, April 1997, elementary math. Contact Sandra Unrau at 777-6110, fax 777-6112, e-mail sunrau@cbe.ab.ca.

☞ *Mini-conference*, Edmonton, April 1997, K–9. Contact Betty Morris at 441-6104.

☞ *Mini-conference*, Edmonton, April 1997, Grades 7–12. Contact Betty Morris at 441-6104.

☞ *NCTM annual conference*, April 17–20, 1997, Minneapolis, Minn., K–university. Theme: Choices and Challenges in Mathematics Education. Contact NCTM, P.O. Box 25405, Richmond, VA 23260-5405; fax (703) 476-2970. Registration form enclosed.

☞ *MCATA annual conference*, November 1–2, all grades. Contact Marge Marika at 462-3332.

☞ *Mini-conference*, Calgary, Spring 1998, elementary. Contact Sandra Unrau at 777-6110, fax 777-6112, e-mail sunrau@cbe.ab.ca.

☞ *NCTM Canadian Regional*, Calgary, October 22–24, 1998, K–elementary. Theme: Mathematics Education—Living the Challenge. Contact George Ditto at 777-7860, fax 686-1055, e-mail gditto@che.ab.ca. ▲

Membership Report

Currently our membership stands at 465. We would certainly like to see this number increase. Our new membership brochure and registration form are attached to this newsletter. If you do not need to renew your membership at this time, pass it on to a colleague and encourage him/her to join. He/she could win a worthwhile prize.

The winning members for October, November and December follow:

★ First Prize: Eldon Krikke from Barrhead won a 1997 MCATA conference registration

★ Second Prize: Joan Rogers from Lethbridge won a one-year MCATA membership

★ Third Prize: John McClintock from Calgary won a $25 NCTM gift certificate to be redeemed through MCATA

Another similar draw will be held in April, so please make sure that you or a friend use the registration form. If you have ideas for increasing membership, please let me know. ▲

—*Daryl Chichak*

Math Projects for Science Fairs

Katherine Heinrich, president, Canadian Mathematics Society, has put together a list of very challenging mathematics activities that would be interesting to include in a mathematics science fair. A couple of the activities are listed below. I shall include others in future newsletters.

1. Investigate "big" numbers. What is a big number? The following examples might guide your investigation. A bank is robbed of 1 million loonies. How long would it take to move them? How much would they weigh? How much space would they take up? How big a swimming pool do you need to contain all the blood in the world? Is 10^{100} very big? What is the biggest number

anyone has ever written down (check the *Guinness Book of World Records* over the last few years)? How did this number come about?

2. Find out all you can about the Fibonacci numbers, 0, 1, 1, 2, 3, 5, 8, ... In particular, where do they arise in nature? For example, look at the spirals on a pinecone—following the pattern of the cone, one spiral will go left, the other right. The cone will be covered by "parallelograms," the number of seeds on each side of the parallelogram will (always?) be two neighboring Fibonacci numbers. For example, 5 and 8. Similarly for pineapples, petals and leaves on plants. ▴

Call for Presenters

Presenters are required for the MCATA conference to be held November 1–2, 1997. An application form is attached to this newsletter. How about you or a colleague making a presentation? We would like to have you.

Congratulations!

Congratulations to principal Lou Yaniw and staff at Lorelei Elementary School in Edmonton for the excellent test scores their Grade 6 students received. These results have come about through a dedicated staff working with parents to motivate the students. An environment has been created in which students feel important and are motivated to do an excellent job.

I am also impressed with the concept where each teacher involved teaches all the students in the teacher's area of expertise, whether it be math, science or social studies. ▴

—Art Jorgensen

A Great Idea!

Do your students know that if

▲ they have finished Math 31 and are still in high school, they can take a mathematics course at the University of Alberta as an Open Studies (Unclassified) student. Students may do this to get a head start on their programs or just for the experience of challenging a university course.

▲ they have completed an AP or IB program in mathematics and plan to come to the U of A, the Department of Mathematical Sciences can give them a placement exam, without charge, to assess whether they can skip a course as a prerequisite or actually receive university credit for a course.

Interested students can call the Department of Mathematical Sciences, U of A, at 492-3395 for information on courses, such as descriptions, textbooks and sample examinations. Which introductory courses would be the most appropriate for them can also be discussed. ▴

NCTM Canadian Regional Update

The organizing committee is busy putting together an interesting program, both professionally and socially. Over 200 sessions are being planned. The conference will run from Thursday evening until Saturday afternoon, October 22–24, 1998.

A speaker proposal form was included in the last newsletter. I know the program committee would like to hear from you. ▴

It's never too late to make a new start. 1997 is a good time to try it. Good luck!

Educational Research Grants

The Alberta Advisory Committee for Educational Studies (AACES) jointly funded by The Alberta Teachers' Association and the Faculties of Education at Alberta's three universities provides funding of up to $5,000 for research studies in the education field. The main purpose of AACES is to encourage and provide financial support for studies and research in education. AACES also supports publications designed to disseminate the results of education studies. Educators at all levels are encouraged to apply for grants. Funding guidelines may be obtained by contacting Doreen Link, Southern Alberta Regional Office (SARO) at 265-2672 (Calgary) or 1-800-332-1280 (elsewhere in Alberta). ▲

A summary of two pieces of interesting research done in the area of mathematics will be included in the next delta-K.

Set your goals
Dream your dreams
Determine what you want
Then make it happen.

Math Leadership Institute

The third annual Math Leadership Institute for K–5 teachers sponsored by Educational Enrichment of Norman, Oklahoma, will be held July 14–17 on the campus of Western Washington University in Bellingham, Washington.

Kathy Richardson, institute leader, is the creator of the Math Time workshops offered to elementary teachers nationwide. She has also produced a variety of videos, books and teaching resource materials, primarily in the area of building number concepts and assessing students' understanding. Richardson's first book, *Developing Number Concepts Using Unifix Cubes*, has been adopted by school districts across the country. Her newest book, *Math Time: The Learning Environment*, released this year is destined to be another classic. One of the nation's most respected educators, Richardson has worked with teachers for over 20 years and has played a major role in mathematics education through her work as a writer, curriculum developer, inservice leader and classroom teacher.

Institute participants will have the opportunity to talk with Richardson, her associates and other classroom teacher-leaders.

In addition, participants will examine beliefs, attitudes and practices in light of developing understanding of how children think and learn mathematics, strengthen their beliefs about the direction math reform should take, confront hard issues in mathematics education and consider the reality of the change process.

For more information on the Math Leadership Institute or to receive an application form, write Educational Enrichment at P.O. Box 1524, Norman, OK 73070, call 1-800-292-6022 or e-mail sheryl@telepath.com. The application deadline is June 13, 1997. Enrollment is limited.

MCATA Executive 1996–97

President
George Ditto
610 18 Avenue NW
Calgary T2M 0T8
Res. 289-1709
Bus. 777-7860
Fax 686-1055
gditto@cbe.ab.ca

Past President
Wendy Richards
12207 Jasper Avenue NW Suite 705
Edmonton T5N 3K2
Res. 482-2210
Bus. 483-3415
Fax 489-2192

Vice Presidents
Florence Glanfield
8215 169 Street NW
Edmonton T5R 2W4
Res. 489-0084
Fax 483-7515

glanfield@gpu.srv.ualberta.ca

Richard Kopan
72 Sunrise Crescent SE
Calgary T2X 2Z9
Res. 254-9106
Bus. 777-7520
Fax 777-7529
rjkopan@cbe.ab.ca

Secretary
Donna Chanasyk
13307 110 Avenue NW
Edmonton T5M 2M1
Res. 455-3562
Bus. 459-4405
Fax 459-0187

Treasurer
Doug Weisbeck
49 Westwood Drive
St. Albert T8N 3M1
Res. 459-8464
Bus. 434-9406
Fax 434-4467

NCTM Representative
TBA

Communications Director
Betty Morris
10505 60 Street NW
Edmonton T6A 2L1
Res. 466-0539
Bus. 441-6104
Fax 425-8759

Newsletter Editor
Art Jorgensen
4411 5 Avenue
Edson T7E 1B7
Res. 723-5370
Fax 723-2414

Journal Editor
Klaus Puhlmann
PO Box 6482
Edson T7E 1T9
Res. 795-2568
Bus. 723-4471
Fax 723-2414
klaupuhl@gyrd.ab.ca

Department of Education Representative
Kathleen Melville
Student Evaluation Branch
11160 Jasper Avenue Box 43
Edmonton T5K 0L2
Res. 458-6275
Bus. 427-0010
Fax 422-3206
kmelville@edc.gov.ab.ca

Conference Director
Cynthia Ballheim
612 Lake Bonavista Drive SE
Calgary T2J 0M5
Res. 278-2991
Bus. 228-5810
Fax 229-9280
ballheimcj@aol.com

1997 Conference Chair
Margaret Marika
9756 73 Avenue NW
Edmonton T6E 1B4
Res. 433-0692
Bus. 462-3322
Fax 462-7803

1998 Conference Chair
Bob Michie
149 Wimbleton Crescent SW
Calgary T3C 3J2
Res. 246-8597
Bus. 289-9241
Fax 777-7309
bmichie@cbe.ab.ca

Mathematics Representative
Michael Stone
472 Math Sciences Building
University of Calgary
2500 University Drive NW
Calgary T2N 1N4
Res. 286-3910
Bus. 220-3964
Fax 282-5150
mgstone@acs.ucalgary.ca

Faculty of Education Representative
Dale Burnett
Faculty of Education
University of Lethbridge
Lethbridge T1K 3M4
Res. 381-1281
Bus. 329-2416
Fax 329-2252
burnett@hg.uleth.ca

Membership Director
Daryl Chichak
1826 51 Street NW
Edmonton T6L 1K1
Res. 450-1813
Bus. 463-8858
Fax 461-0414

Education Director
Cindy Meagher
8018 103 Street
Grande Prairie T8W 2A3
Res. 539-1209
Bus. 539-0950
Fax 539-4709
meagfam@terranet.ab.ca

Public Relations Director
Linda Brost
151 Country Club Lane
Calgary T2M 4L4
Res. 239-3432
Bus. 294-8616
Fax 294-6301

Regional Activities Director
Sandra Unrau
11 Hartford Place NW
Calgary T2K 2A9
Res. 284-2642
Bus. 777-6110
Fax 777-6112
sunrau@cbe.ab.ca

PEC Liaison
Carol D. Henderson
860 Midridge Drive SE Suite 521
Calgary T2X 1K1
Res. 256-3946
Bus. 938-6666
Fax 256-3508

ATA Staff Advisor
David L. Jeary
SARO
540 12 Avenue SW Suite 200
Calgary T2R 0H4
Bus. 265-2672
or 1-800-332-1280
Fax 266-6190

SPEAKER FORM: **MCATA MATHEMATICS CONFERENCE '97**

EDMONTON, ALBERTA

SATURDAY NOV 1, 1997 and SUNDAY AM NOV 2, 1997

If you would like to volunteer to make a presentation at this year's conference, please complete the following information and send to: SANDRA CARL TOWNSEND
11335 64 Street
EDMONTON AB   T5W 4H6
Work: (403) 429-8329 Fax: (403) 426-0098
Home: (403) 471-6148

PLEASE RETURN COMPLETED FORM BY FEBRUARY 28, 1997

Name: _____

Address: _____

_____ Postal Code _____

Home: Phone: _____ Fax: _____

Work: Phone: _____ Fax: _____

SESSION: (50 minutes)

TOPIC: _____

BRIEF DESCRIPTION: _____

_____

_____

Session would be of interest to teachers of:

K-3 ___   4-6 ___   Jr. High ___   Sr. High ___   General ___

EQUIPMENT REQUIRED: VCR ___   OVERHEAD ___   OTHER _____

WORKSHOP: (80 minutes)

    TOPIC: _____

    BRIEF DESCRIPTION: _____

    _____

    _____

    Workshop would be of interest to teachers of:

    K-3 ___   4-6 ___   Jr. High ___   Sr. High ___   General ___

    EQUIPMENT REQUIRED: VCR __   OVERHEAD __   OTHER _____

MINI SESSIONS: (20 minutes round table presentations)

    TOPIC: _____

    BRIEF DESCRIPTION: _____

    _____

    _____

    Session would be of interest to teachers of:

    K-3 ___   4-6 ___   Jr. High ___   Sr. High ___   General ___

ADDITIONAL INFORMATION or REQUESTS:

    _____

    _____

If you would like to present additional sessions/workshops,
provide information below.

Please photocopy as needed.

NATIONAL COUNCIL OF TEACHERS OF MATHEMATICS

Advance Registration Form—75th Annual Meeting   Minneapolis–Saint Paul, Minnesota   17–20 April 1997

To register before the deadline, fax your completed form to NCTM (703) 476-2970 anytime or call (800) 235-7566 weekdays 8:30 a.m.–4:30 p.m. eastern time (8:30 a.m.–7:30 p.m. eastern time from 27 February–27 March 1997) with your credit card information. You can also mail this form and payment to NCTM, P.O. Box 25405, Richmond, VA 23260-5405.

Personal Information

Name: _____ Nickname: _____

❏ Home   ❏ Institution   Mailing Address: _____

City: _____ State/Province: _____ ZIP+4/PC: _____

Work Phone: (_____)_____ Home Phone: (_____)_____ Fax: (_____)_____ E-mail: _____

Institution Name: _____ NCTM Member No.: _____

Registration Fees

	Advance (prior to 27 March)	On Site (after 27 March)
Individual/Institutional Member	❏ $85	❏ $95
*One day	❏ $50	❏ $60
Student Member	❏ No Charge	❏ No Charge
Nonmember** Full Conference	❏ $142	❏ $152
*One Day	❏ $75	❏ $85
Student Nonmember (full time; ID required)	❏ $42.50	❏ $42.50
Guest (nonteaching person)*** Name of Guest: _____	❏ $35	❏ $35

*If attending one day, specify which day:_____
**Nonmembers can sign up for membership and register at member rates.
***Guests may not receive session tickets.

Membership Fees

	Individual	Student	Institution
Membership w/one journal*	❏ $57	❏ $28.50	❏ $62
Membership w/two journals*	❏ $75	❏ $37.50	❏ $124
Membership w/three journals*	❏ $93	❏ $46.50	❏ $186
Membership w/four journals*	❏ $111	❏ $55.50	❏ $248

*Please choose the appropriate number of journals:

❏ *Teaching Children Mathematics*
   (for pre-K and elementary grades—9 issues)

❏ *Mathematics Teaching in the Middle School*
   (for middle grades—6 issues)

❏ *Mathematics Teacher*
   (for secondary grades—9 issues)

❏ *Journal for Research in Mathematics Education*
   (all levels—5 issues)

For mailing outside the U.S., add $8 (U.S.) for the first journal subscription and $4 (U.S.) for each additional subscription.

Special Information

❏ I have special needs as defined by ADA: _____
_____

■ Please indicate your professional level:
❏ Grades K–4 ❏ Grades 5–8 ❏ Grades 9–12 ❏ College
❏ Supervisor ❏ Exhibitor ❏ Other _____

■ Affiliated Group Membership
A complete list of more than 260 affiliated groups will be available on site at the membership area.

Charter Number	Affiliated Group	Dues
	Host Group	
079	Minnesota Council of Teachers of Mathematics	$15
	Nonregional Groups	
225	National Council of Supervisors of Mathematics	$40
287	Women and Mathematics Education	$10
347	International Study Group on Ethnomathematics	$15
356	Society of Elementary Presidential Awardees	$15

To join an affiliated group (AG), please complete the charter number, AG name, and AG dues information below:

_____ $ _____
Charter #   Name

_____ $ _____
Charter #   Name

_____ $ _____
Charter #   Name

❏ Please send me the 75th Annual Meeting program book.

Method of Payment

Return this form with a check made payable to NCTM or credit card information to NCTM, P.O. Box 25405, Richmond, VA 23260-5405. Canadians, please enter "U.S." after the amount on personal checks. Purchase orders are accepted; please send a copy with registration.

❏ Check/M.O.   ❏ American Express   ❏ MasterCard   ❏ Visa

Acct. No.: _____ Exp. Date: _____

Signature: _____

Amount of Payment

A. Registration Fees	$_____
Less Group Discount (registration fees only)	($ _____)
Total Registration Fees	$_____
B. Membership Fees	$_____
C. Other Fees	$_____
D. Foreign Postage	$_____
TOTAL AMOUNT in U.S. $	$_____

Advance registration must be received no later than 27 March 1997. NCTM will refund fifty percent (50%) of the advance registration fee on cancellations received prior to the conference after we receive your badge. Cancellations received after 16 April 1997 will not be eligible for refunds.

If you are not ready to register but would like a program book, you can request a copy on this form.

Group Discounts

The NCTM offers discounts for group registrations paid by schools or school districts, parent-teacher associations, or companies. *To qualify as a group, submit all individual registration forms together with one payment.* Group registrations must be received no later than the established advance registration deadline of 27 March 1997.

Discounts will be based on the appropriate registration fee for each teacher. If a teacher is joining the NCTM, the group discount will apply to the teacher's $85 registration fee only and not to the membership fee. (For example, if a district registers six teachers together and four decide to join NCTM at that time, the registration fee is 10% off the $85 member rate for the four members and 10% off the $142 nonmember rate for the two nonmembers.)

The group discounts are as follows:

6–10 teachers	10%
11–20 teachers	15%
21 or more teachers	20%

Cancellations

If, for some reason, you must cancel your registration and sleeping accommodations, please notify the NCTM and Rogal America, Inc., as soon as possible. Call the NCTM at (703) 620-9840, ext. 350, between 8:30 a.m. and 4:30 p.m. eastern time (8:30 a.m.–7:30 p.m. eastern time from 27 February–27 March 1997). Please return your badge for the appropriate refund or credit. After we have received your badge, 50% of the advance registration fee will be refunded on any cancellation received prior to the annual meeting. If a cancellation is received after 16 April 1997, we cannot honor the request for a refund. All changes or cancellations for hotels must be made directly with Rogal America, Inc., at (800) 775-0505.

On-Site Registration

Registration will be open as follows:

Wednesday, 17 April 1997, from 12:00 noon to 5:00 p.m.
Thursday, 18 April 1997, from 7:30 a.m. to 5:00 p.m.
Friday, 19 April 1997, from 7:30 a.m. to 5:00 p.m.
Saturday, 20 April 1997, from 7:30 a.m. to 3:00 p.m.

On-site registration will be $95 for members and $152 for nonmembers, $10 more than the advance registration fee.

Official Travel Agency

Austin Travel is ready to help you with your reservations. It is committed to finding the best fares. Please call as far in advance as possible, and keep in mind that fares are affected by times of departure and arrival as well as by days of the week. Call (800) 291-NCTM weekdays between 8:30 a.m. and 6:00 p.m. eastern time. After office hours and on weekends, call (800) 858-6319, using code #S7TG2. These numbers are accessible from the U.S., Canada, and Mexico only.

NATIONAL COUNCIL OF TEACHERS OF MATHEMATICS

1906 Association Drive
Reston, VA 20191-1593

(703) 620-9840
Fax (703) 476-2970

annlmtg@nctm.org
http://www.nctm.org

Fax on Demand
(800) 220-8483