

# Mathematics Council NEWSLETTER

The Alberta Teachers' Association

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

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## Greetings from Art

Food for thought for the month:

"The reason people blame things on past generations is that there is only one other choice."

—Doug Larson

## President's Report

*Presented at the Annual General Meeting,  
Edmonton Inn, Edmonton, November 1, 1997*

It has been a pleasure to serve as president of Math Council of The Alberta Teachers' Association (MCATA) for the past two years. The annual conference in Red Deer in November 1996, the Resource Fair in Calgary in May 1997, and the publications of *delta-K* and the MCATA newsletters were the main services and activities to our membership which currently stands at 570. MCATA continues to financially support three mathematics contests—junior high contests in Edmonton and Calgary, and the Alberta High School Mathematics Contest; teacher inservice projects; and teaching and learning materials.

The executive met three times during the year. We established and worked on goals that we felt were imperative for the successful operation of the Council throughout the year. A revised constitution was approved by the general membership and ratified by the Table Officers of the ATA. The MCATA executive feels that the revised constitution better reflects the realities of this Council now and in the future.

Challenges faced by the executive have been interesting, informative and enjoyable. We continually find opportunities to address and provide input into issues that directly affect mathematics learning and learners in the province. These have included input into a calculator policy with Alberta Education, observer status at the Annual Representatives Assembly, mini-conferences, input into the Western Canadian Protocol for Mathematics, "Safe and Caring Schools Conference" participation, "Math Talk About" sessions for our

members, revision to the Alberta Mathematics Educator Awards and Friends of MCATA certificate formats, new membership initiatives, continued development of the MCATA Home Page on the Web, and curriculum inservice and professional development of our colleagues.

The opportunity to work with this dedicated group of professionals has been personally rewarding. A number of people have been influential to the success of the Council over the past year. My personal thanks to Dave Jeary, ATA staff advisor, who has provided needed direction and guidance when requested. Donna Chanasyk, MCATA secretary, and Doug Wesibeck, MCATA treasurer, continue to be totally committed to the positions that offer very little in profile but are necessary to the smooth functioning of the Council.

Directors responsible for assignments from professional development to public relations and publications, Cynthia Ballheim, Linda Brost, Daryl Chichak, Cindy Meagher, Betty Morris, Sandra Unrau, Graham Keogh and Richard Kopan, have unselfishly given their time and talents to support the efforts of the executive. The publication editors, Art Jorgensen and Klaus Puhlmann, have provided expert publications for our membership.

Conference Chair Marge Marika directed the successful "Doing Mathematics" conference, demonstrating her ongoing dedication to the professional development of our colleagues. The National Council of Teachers of Mathematics (NCTM) Calgary Regional Conference has already confirmed a number of speakers and activities for the 1998 conference. Additional representatives and advisors, Dale Burnett, Mike Stone, Kay Melville and Carol Henderson (PEC Liaison), have each contributed valuable input and guidance in our work over the past year. Congratulations to Richard Kopan, a MCATA vice president for the past two years, who was elected as director with the NCTM.

Members of your MCATA executive attended a number of different conferences during the year. I was honored to represent MCATA at the NCTM Annual Conference and Delegate Assembly in Minneapolis in April. Florence Glanfield successfully completed her term as chair of the Regional Services Committee of the

NCTM. Cynthia Ballheim and Betty Morris were heavily involved in the planning and running of the Math Symposium in Calgary in May. Cynthia and Sandra Unrau attended the NCTM Canadian Leadership Conference in Moncton in July. Marge Marika attended the ATA Summer Conference in Banff in August. Thanks to all the executive members who gave up their valuable holiday time to attend these conferences. In closing, I wish to thank all MCATA members and the executive. We can all be very proud of what has been accomplished. ▲

—George Ditto

## MathCounts— Would You Like to Be Involved?

I attended the British Columbia Association of Mathematics Teachers' annual conference this year. While there, I met Andrew Wong, a B.C. math teacher, who is the current chairperson for MathCounts in B.C. He asked if Alberta might be interested in getting involved. At MCATA's last executive meeting, we briefly discussed this and decided that we would like to know more about MathCounts. Andrew gave me the following information about the program.

MathCounts is an enrichment, coaching and competition program that promotes Grades 8 and 9 math achievement by challenging students with stimulating and thought-provoking questions, and by having school math teams compete with each other at regional provincial tournaments. The program originates in the United States, where it is recognized and participated in widely. B.C. currently is the only Canadian province unofficially involved (they are not permitted to participate in the U.S. national finals). In B.C., MathCounts is sponsored and supported by the Association of Engineers and Geoscientists of B.C., and B.C. Association of Mathematics Teachers, Simon Fraser University and University of British Columbia.

MathCounts promotes student interest in math by making math achievement as challenging, prestigious and exciting as a school sport might be. Teachers, volunteers and former student participants coach "mathematics" beginning each fall and continuing throughout the year, either as part of in-class instruction or as an extra-curricular activity. Then, in the spring, in-school competitions are held to determine the four-member school team(s) that will compete at the regional tournament. The teams from the regional tournaments around the province then advance to the provincial finals, where the B.C. school team and individual champions are crowned! At each tournament level, students participate

in two individual contest rounds, then in a team round, and finally in a head-to-head buzz-in question-and-answer session (similar to the TV quiz show "Jeopardy"), where the overall individual champion is decided. Trophies and awards are given to the top finishers at each tournament.

All of MathCounts' questions and materials are created by the NCTM and problem emphasis is on team-work and real-world situations. In keeping with NCTM guidelines, students are encouraged to use calculators (although the initial round is calculator-prohibited).

Here are three sample questions from the 1992-93 B.C. Provincial Countdown Round:

- ▲ A certain job can be done by 3 people in 3 weeks and 3 days (assume a 7-day work week). How many days would it take 4 people to do the same job?
- ▲ What is the 40th term of the sequence: 1,2,2,3,3,3,4,4,4,4,5,5,5,5,6,6,6,..., in which each positive integer  $k$  appears  $K$  times?
- ▲ Find an integer between 100 and 200 where each of the digits are odd and the sum of the cubes of the digits is the original 3-digit number.

Answers: 18 days; 9; 153.

MCATA is looking for an individual who would be interested in investigating the possibility of Alberta participating in MathCounts. Please contact Florence Glanfield (see executive list) if you would be interested in learning more about this and doing some investigating. ▲

—Florence Glanfield

## Math/Science Symposium

Watch for information about the annual Calgary Area Elementary Math/Science Symposium to be held April 22 (Division I) and April 23 (Division II) at James Fowler High School 4:30-9:00 p.m. Contact Cathy Taylor at 230-1431 for more information. ▲

—Sandra Unrau

### New High School Math Program

The Curriculum Standards Branch will be hosting information seminars on the new High School Math Program. For information, contact Shirley VanOene or Jack Edwards at the Curriculum Standards Branch, Alberta Education, at 310-000 (toll free) or fax 422-3745.

## Alberta Education News

### High School Math News

For the applied math resources, Alberta Education will be entering a contract with Addison-Wesley. More information will be released at the end of January.

The Curriculum Standards Branch will be hosting information seminars throughout the province with regard to the high school math program. ▲

—Daryl Chichak

## Canadian Regional MCATA/NCTM Conference

**"Mathematics Education: Living the Challenge"**  
Calgary, October 23–24, 1998

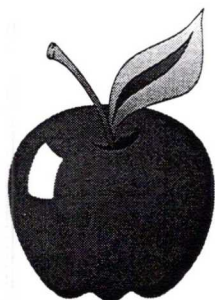
Math teachers from across Alberta are invited to submit proposals to present at the Math Fair, to be held on Friday and Saturday at the conference. This is an opportunity for practising teachers to share their experiences, learning and developing expertise as we implement the new Mathematics Program. Sessions are 20 minutes in length and proposals (short-description and grade level) can be sent to Richard Kopan, by fax at 256-9618 or e-mail [kopanr@cadvision.com](mailto:kopanr@cadvision.com). ▲

## Upcoming Conferences

There is still time to register for the *NCTM 1998 annual conference* in Washington, D.C.!

The *Canadian Regional MCATA/NCTM Conference* is to be held in Calgary, October 23–24, 1998. Over 150 sessions have been arranged. (For fun lovers, many interesting social activities are also in the works.)

The *1999 MCATA annual conference* is to be held at the beautiful Jasper Park Lodge, October 22–23, 1999. Get ready for a super conference! ▲



## Have I Earned My Apple Yet?

Rushing through the front doors of my new school, I was certain that my first day had become my last. Being a preparation day, as well as an official staff day, true to character, I had arrived late. It was just after 9 a.m. and I expected that the staff would be part way through a meeting that was bound to be occurring. Lucky for me, as I tripped up the stairs, I ran headlong into what would eventually become the other member of the math department and who inhabited the classroom next to mine. Being a kind and friendly soul (or so I thought at the time), he calmly informed me that the meeting was not until 10 a.m., giving me plenty of time to gather my wits about me. We never spoke of the incident again, but he has ever since had the distinction of calling me "Rookie" and I have not argued.

Being a first-year teacher required a great deal of adjustment on my part. Not only did I have to learn to be on time, but I also had to be awake. University classes that began at 11 a.m. were not good training for a budding teacher who has to be at school by 8 a.m. One of the biggest transitions I had to make, though, was working in conjunction with other people. As a student, I could go to school, sit anonymously in a classroom or visit with my friends. I did not have to know my professors, nor they me. Most of the work that needed to be done was my responsibility alone, and the consequences of my actions were generally also mine. In a school setting, there are so many other elements to consider. I had a staff to share my space and ideas with, as well as learn a great deal from. I no longer had total autonomy over my efforts as administrators became a vital part of the picture. Lastly, there were the students, who were my ultimate consideration and commanded most of my attention. And command it they did!

My students have had the pleasure of informing me that I am too young, too old (I am only 23), the coolest teacher in the school (of which there are 12 teachers total) and crazy for becoming a teacher. I found that students are capable of coming up with the most incredible ideas and opinions when you don't want them to. I learned that I am capable of coming up with some interesting thoughts myself when required. In my classes, we have done everything from playing fraction games to baking cookies to learning about ratios. I teach math and science to junior/senior high students, incidentally. Many things the kids had me learn the hard way. For example, mathematics is not obvious, Le Chatelier's Principle does not make sense in any language, do not let your Grade 8 student walk down the hallway with cookies when the bell goes and always at least pretend to have control even when you

are having fun. I also found that I am not always right and do not have all the answers—but I will try my best to find them! Most importantly, I found that I have never stopped learning and I hope that I never will.

I did receive my first apple this Christmas; an ornamental gift from family. It was gold and shiny, representing the attitude I carry with me every time I walk into my school. It also indicated the faith my family has in me and that I have in myself. After all, I made it this far! ▲

—Brenda Healing

*Brenda Healing is a first-year teacher at Bentley School in Bentley.*

## Stats Can Initiative

Statistics Canada is currently undertaking an initiative to develop classroom activities that give students practical experience with statistics. Stats Can has recently put on the Internet a graphing exercise which collects heights in a class to calculate averages, and will soon release an activity that uses various sites on the Internet to collect information for the creation of bar, line and circle graphs. A Web page building contest will be held for classes, the main criterion being that the page contains data from the StatsCan Web site. There will be a \$100 prize to the winning class. If any teachers are interested in obtaining further information, please e-mail me or visit the Stats Can Web site at

<http://www.statcan.ca/english/kits> (this will take you directly to the educational section of the StatsCan site). ▲

—Alanna MacDougall, [macdala@statcan.ca](mailto:macdala@statcan.ca)

## Virtual Resource Centre

The University of Alberta Mathematics Department is in the process of setting up a virtual resource centre for mathematics (VRCM for short) on the Internet to be utilized by both teachers and students of mathematics.

On our Web site, we would like to include these areas of interest—whether they be matters of curriculum or of pedagogy. Our fledgling sight is already up and running: <http://www.ualberta.ca/dept/math/gauss/vrcm>. We would appreciate MCATA members looking over this site and sending us their comments. Please include any input as to what you, or others, think should be included on a site of this nature. ▲

—Julie Peschke, VRCM Site Coordinator

## Membership Director's Report

As of January, our membership totals 750 (including a new 157 members from the conference!). Thank you to all of you who have been promoting membership in MCATA. Keep up the good work.

The winners to date for renewing membership are as follows:

*July, August, September 1997 winners:*

1st prize: MCATA Conference registration for the Calgary Conference on October 23–24, 1998: James Johnson, Edmonton

2nd prize: 1 Year Membership to MCATA: Betty Shulba, Mundare

3rd prize: \$25 NCTM Gift Certificate to be redeemed through MCATA: Rita Paquette, Mundare

*October, November, December 1997 winners:*

1st prize: 1 MCATA Conference Registration for the Calgary Conference on October 23–24, 1998: Linda Atwood, Bow Island

2nd prize: 1 Year Membership to MCATA: Peggy Dowell, Edmonton

3rd prize: \$25 NCTM Gift Certificate to be redeemed through MCATA: Alexandra Luckhurst, Calgary

Please renew your membership so you too can be eligible for any of the above prizes. Draws are held every three months. ▲

—Daryl Chichak

## Competition Winners

Congratulations are due to winners of Part 1 of the 1997–98 Alberta High School Mathematics Competition held on November 18, 1997. MCATA makes a contribution toward these prizes. Prize winners were as follows:

*First prize:* Eddie Ng—Bishop Carroll High School, Calgary; Brian Tsai—Western Canada Senior High School, Calgary; Gilbert Lee—McNally School, Edmonton. They were accorded the title of the 1997–98 W.H. Freeman Scholar.

*Grade 11 prizes:* Filip Crnogorac—Western Canada Senior High School, Calgary; and Roger Huang—Western Canada Senior High School, Calgary.

*Grade 10 prize:* Titus Young—Harry Ainlay School, Edmonton. ▲