



Mathematics Council NEWSLETTER

The Alberta Teachers' Association

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

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From the Editor's Pencil

This issue of *Mathematics Council Newsletter* asks you to consider nominating someone for an award. This year, instead of glancing at the request and then dismissing it out of hand, please take a moment to really consider it.

As teachers, we often work in isolation in our classrooms, and only our students (and sometimes not even them!) know how much effort we put into our teaching. How good it feels when someone notices this effort or comments about one of our classes or lessons, or when a student is really

excited by something! That's all the reward we ever hope for. However, I believe that we should encourage fellow teachers by giving them public and tangible rewards for the dedication they bring to their schools and workplaces every day.

Look around you. In the midst of all the Sturm und Drang, can you not think of one person who deserves to be recognized for his or her outstanding work? I would think it more likely that you'd have a difficult time narrowing it down to only one!

So, please take half an hour to write a letter. Celebrate the talent and dedication of a teacher you know!

—Anne MacQuarrie

President's Message

Last year's Mathematics Council of the Alberta Teachers' Association (MCATA) president, Cynthia Ballheim, has moved to Columbus, Ohio, to teach math at a Catholic high school. Because of the distance and logistic problems, Cynthia found it too difficult to continue to serve as president. She intends to stay in touch with MCATA, and we will consult her as needed. I have agreed to move from vice-president to serve as president until June, when the executive positions will be reviewed.

I have been a math teacher for 29 years with Edmonton Catholic Schools, except for a secondment of a year and a half with Alberta Learning. Currently, I am coordinator of mathematics and sciences at Holy Trinity High School in Edmonton. I have served on the MCATA executive for four years, and I hope to continue to provide the kind of leadership that

Cynthia demonstrated during her many years of service for MCATA.

MCATA hosted a successful National Council of Teachers of Mathematics (NCTM) regional conference in Edmonton in November. More than 1,300 people attended, despite severe weather conditions. Comments about the sessions and the organization of the conference have been very positive.

We are planning a spring symposium for Friday, May 14, at the Calgary Winter Club. Watch for the registration form.

MCATA continues to plan for the annual fall conference. "Math Literacy: Shaping the Future" will be held October 28-30 at the Westin Hotel in Calgary. Preliminary information, including the registration form, will soon be posted on the MCATA website (www.mathteachers.ab.ca).

—Len Bonifacio

Awards

Dr. Arthur Jorgensen Chair Award

Are you a student teacher with a specialization in math or a driving desire to expand mathematics knowledge at the elementary level? If so, we urge you to apply for the Dr. Arthur Jorgensen Chair Award. More details and the application form are available at www.mathteachers.ab.ca/artaward02.htm. The application deadline is **April 30, 2004**.

MCATA Grants

MCATA grants of up to \$500 are available to educators designing, facilitating or participating in math-education initiatives that support current learning and teaching practices and priorities as outlined by Alberta Learning, local school districts, MCATA, NCTM, the ATA or other reputable education associations. More information and the application form are available at www.mathteachers.ab.ca/mcata_grants.htm. The deadline for applications is **May 1, 2004**.

Mathematics Educator of the Year Award

Do you know a teacher who does an outstanding job in the math classroom? This is your opportunity to give that teacher the recognition he or she deserves. MCATA will once again recognize the Mathematics Educator of the Year at the annual conference in October. The deadline for nominations is **July 15, 2004**.

Nominations must include the following:

- Name, address and phone number of the nominee
- Name, address and phone number of the school at which the nominee has taught for the past year
- Grade(s) taught by the nominee in the past year
- Letter(s) from the administrator and/or colleagues who want to nominate the teacher
- Detailed statement of why the nominee deserves to be recognized as the Mathematics Educator of the Year

Send nominations to Geri Lorway, c/o MCATA Executive, 11010 142 Street, Edmonton, AB T5N 2R1; e-mail glorway@telusplanet.net.

TERM Meeting

The next meeting for Teachers of Mathematics in the Edmonton Region (TERM) is Monday, May 3, at 5 p.m. at Paul Kane High School in St. Albert. If you would like to attend or would like more information, contact Donna Chanasyk at donnjc@telus.net or (780) 459-4405.

PSAC Grant Program for Schools in Small Communities

The Petroleum Services Association of Canada (PSAC) will award five school grants of \$1,000 each in 2004!

For the second year, PSAC is awarding \$5,000 in grants to enhance educational opportunities in rural schools. The PSAC Grant Program for schools in small communities provides funds to elementary and junior high schools in communities in western Canada with populations below 15,000.

Highlights of the 2004 PSAC Grant Program are as follows:

- Five awards of \$1,000 will be awarded instead of 10 awards of \$500. Math, science and computer expenditures are often very high and require more than \$500. To keep within a \$5,000 annual budget, PSAC has increased the amount of each grant to \$1,000 but reduced the number of grants to five.
- Junior high and elementary schools may apply. This year, junior high schools are included to ensure that students at all levels have access to the PSAC Education Fund.
- There is a western Canada focus. Schools must be located in British Columbia, Alberta, Saskatchewan or Manitoba or in First Nations communities.
- The focus is on math and science. Funds must be applied to a project or purchase relating to math, science, computers, or the oil and gas industry. Schools are also encouraged to apply for funds to use for field trips.
- Schools may reapply. School representatives who applied for a PSAC Grant in 2003 may reapply this year, even if they were awarded funds last year.

The 2003 PSAC grant recipients were as follows:

- Dr. Ismon Elementary School, Wolseley, Saskatchewan
- Ecole Mallaig School, Mallaig, Alberta
- Lochearn Elementary School, Rocky Mountain House, Alberta
- Penson Elementary School, Grovedale, Alberta
- Red Earth School, Red Earth, Alberta
- River Valley School, Sundre, Alberta
- Springfield Elementary School, Peace River, Alberta
- St. Gabriel the Archangel School, Chestermere, Alberta
- St. Matthew School, Rocky Mountain House, Alberta
- Stettler Elementary School, Stettler, Alberta

The deadline for 2004 grant applications is **April 30, 2004**. Rules, releases, application forms and promotional posters can be downloaded from the PSAC website at www.psac.ca/education_fund/.

For more information, contact PSAC at info@psac.ca, (403) 264-4195 or 1-800-818-PSAC (toll free).

Highlights of the MCATA Executive Meeting

An MCATA executive meeting was held January 16–17.

Cynthia Ballheim has resigned as MCATA president, and Len Bonifacio has agreed to serve as president for the rest of the year. Doug Weisbeck has submitted his resignation as treasurer, effective June 30. Janis Kristjansson will be the program chair for the 2005 Edmonton conference.

The agenda included the following items:

- Promoting the Dr. Arthur Jorgensen Chair Award for student teachers
- Selling NCTM products at the conference and from the MCATA website
- Forming an ad hoc committee to review the *Position Paper of the MCATA Regarding Use of Calculators in Provincial Assessment Programs*
- Drafting a letter regarding 2003/04 diploma exams
- Passing a motion that MCATA reaffirm its affiliation with NCTM
- Starting the process of making *delta-K* a refereed journal
- Noting that *Mathematical Literacy* (an MCATA brochure) has been edited and is ready for distribution
- Reviewing details for the upcoming conferences

The last executive meeting of the year will be held May 14–15 in Calgary. If you have any concerns, issues, suggestions or comments, contact an executive member (contact information is available at www.mathteachers.ab.ca/exec03-04.html) so that the item can be added to the agenda.

Canadian Organization for Mathematics Teachers

Since the Canadian Mathematical Society's (CMS) Canadian School Mathematics Forum in May 2003, meetings, talks and e-mails from coast to coast have focused on the formation of an organization that would represent mathematics teachers in Canada. Each provincial mathematics organization and each province without a mathematics organization has been asked to name a contact person. Donna Chanasyk is MCATA's representative.

Dale's Delights

The Computational Beauty of Nature: Computer Explorations of Fractals, Chaos, Complex Systems, and Adaptation

By Gary William Flake
Cambridge, Mass.: MIT Press, 1998
493 pages, ISBN 0262062003

At the last MCATA executive meeting, Indy Lagu showed me this delightful book full of superb graphs and quotations. In places, the book gets technical, but as the author explains, the reader can replace the technical details with the words "blah, blah, blah" and still enjoy the book.

Mathematics Methods and Modeling for Today's Mathematics Classroom: A Contemporary Approach to Teaching Grades 7–12

By John A. Dossey et al.
Pacific Grove, Calif.: Brooks/Cole, 2002
632 pages, ISBN 053436604X

Elementary Mathematical Modeling: A Dynamic Approach

By James Sandefur
Pacific Grove, Calif.: Thomson/Brooks/Cole, 2003
414 pages, ISBN 053437803X

These two books detail how one might provide a high school or undergraduate course with an emphasis on the mathematics needed for designing simulations. I dream of the day when we have such courses in Alberta!

The Number Sense: How the Mind Creates Mathematics

By Stanislas Dehaene
New York: Oxford University Press, 1997
274 pages, ISBN 0195110048

This book was noted by a number of speakers at the recent NCTM conference in Edmonton. It is well worth reading!

The Glass Wall: Why Mathematics Can Seem Difficult

By Frank Smith
New York: Teachers College Press, 2002
163 pages, ISBN 0807742414

This is a thought-provoking book by a well-known reading specialist.

You can find more information on these books on the Web or at your nearest bookstore. Enjoy!

—Dale Burnett

Alberta Learning Update

Curriculum

- Richard DeMerchant, on a two-year secondment from the British Columbia Ministry of Education, is the new program manager for K–12 mathematics. Richard can be reached at (780) 427-5628 or Richard.DeMerchant@gov.ab.ca.
- Tabulation of the survey results for the first phase of the Western and Northern Canadian Protocol (WNCP) evergreening of the Common Curriculum Framework (CCF) for mathematics is in progress. This research will help identify which essential learning outcomes most students should be able to do as they progress from Kindergarten to Grade 12.
- The second round of consultations for the junior high math revisions was completed in January. The draft of the Grade 7 program of studies for optional implementation in September 2004 will be released in June.
- The revised IOP studio (online guide to implementation) will be ready for the fall. Find a link to the guide at www.learning.gov.ab.ca/k_12/curriculum/bySubject/iop/default.asp. Teachers should contact Alberta Learning for the user name and password.

Learner Assessment Branch

- Alberta Learning will second two Pure/Applied Math 30 examiners for September 2005. For more information, contact Deanna Shostak or Hank Reinbold by dialing 310-0000 then (780) 427-0010 or e-mailing Deanna.Shostak@gov.ab.ca or Hank.Reinbold@gov.ab.ca.
- The projects for Applied Mathematics 30 and Pure Mathematics 30 were sent to schools and posted on the Internet at the beginning of February.
- Exam manager's reports for diploma exams will no longer be published for each administration of the exam. Instead, each exam manager will publish a report in the fall commenting on both the January and June diploma exams. A document containing a representative sample of questions from the January and June exams will also be published each fall.
- School authority reports will soon be available on the extranet.

Learning Technologies Branch

Students, teachers and parents will find multimedia learning resources that directly relate to the Alberta programs of study—accessible anytime and anywhere—at www.learnalberta.ca.

Recently added resources for mathematics include the following:

Continuum

This resource covers the concepts required in Mathematics 14 using a variety of interactive strategies such as exploration, concept attainment, games and patterning.

Math 5 Live!

This highly motivating, interactive set of learning objects covers the key concepts in the Grade 5 mathematics curriculum.

Math 5 Live! has five lessons hotlinked and ready to go. Watch for more lessons in the future.

Agents en noir

The popular *Spy Guys* resource for Grade 6 mathematics is now available in French.

Visit www.learnalberta.ca to find these and other mathematics resources including *Applied Mathematics Multimedia Resource* and *Mathematics Discovery Applets—Secondary*.

Math Leaders' Symposium

We invite you, as a leader in mathematics education, to attend the MCATA Spring Symposium: "Creating a Climate for Change." This symposium will be held in Calgary on May 14, 2004. As in the past, the keynote speaker will be followed by structured conversations with other math leaders from across the province.

We hope that you will leave the symposium with inspiring ideas to use in your work as a leader in your school or district.

Visit www.mathteachers.ab.ca for more information and to register.

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