



Mathematics Council NEWSLETTER

The Alberta Teachers' Association

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

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President's Message

It doesn't seem very long since a new mathematics curriculum was implemented in Alberta, but the revision process is under way again for the next curriculum implementation.

Recently the Western and Northern Canadian Protocol (WNCP) published on their website (www.wcp.ca) the Consultation Draft for Common Curriculum Framework (CCF) K-9 Mathematics. This material is organized by strand and also by grade. It has been under review by stakeholders since January. The revision process for Grades 10-12 Common Curriculum Framework begins in June 2005. Visit the website and have a look at the planned changes.

Many schools like to hold special activities on Pi Day on March 14. The Internet is full of sites with hands-on activities for this type of activity. As well, a couple of great books that provide a great historical account of this special number are *Joy of Pi*, by David Blatner, and *A History of Pi*, by Peter Bechman. Enjoy!

—Len Bonifacio

From the Editor's Pencil

Do you know a teacher who does an outstanding job in the math classroom? This is your opportunity to give that person the recognition he or she deserves. Nominate a colleague for the Math Educator of the Year Award. What better way to lift the winter bogged-down blues than to tell someone that he or she is doing a great job?

Did you have an outstanding student teacher this year? Was it someone who has a passion for teaching math? Encourage the student to apply for the Dr. Arthur Jorgensen Chair Award, and help him or her get more involved with math education in Alberta.

It is exciting to note the increase in math-oriented teachers graduating this year. Congratulations to all of you who are making a difference in the lives and attitudes of our future teachers.

Be sure to check out the MCATA website for current updates and more information about conferences and awards.

—Anne MacQuarrie

MCATA Welcomes New Executive Member

I am very pleased to be a coeditor for *delta-K*, a journal that I have read throughout my 15-year career as a junior high, elementary and high school mathematics teacher in southern Alberta. During these years, I had the privilege of working collaboratively on many professional development projects as new curricula were implemented in Alberta.

After completing a master's degree, I had the opportunity to teach preservice math teachers at the University of Lethbridge. This experience contributed to my desire to pursue a Ph.D. in mathematics education at the University of Alberta. Currently I am working with four elementary teachers in designing a math curriculum based on historical stories. My research focuses on how elementary teachers' mathematical knowledge can be enhanced by studying the history of mathematics.

—Gladys Sterenberg

Awards

Friends of MCATA

Every year, MCATA formally recognizes those deserving people who have given the Council faithful and dedicated service in various ways over the years. With appreciation, the Council recognizes the following people as Friends of MCATA 2004:

Scott Carlson
Matt Walker
Joanne Adomeit
Paul Downes
Kathy McCabe
Helen McIntyre
Cynthia Ballheim
Karen Skrypnek

Alberta Mathematics Educator Awards

A maximum of three mathematics educator awards are presented annually in recognition of demonstrated leadership in mathematics education in Alberta. Percy Zalasky of Paul Kane High School in St. Albert is the recipient of the 2004 Alberta Mathematics Educator Award. Congratulations!

Awards may be presented in each of the following categories:

- K-6 classroom teachers
- Grades 7-12 classroom teachers
- Those who have made exceptional contributions to professional development of teachers at the school, local, provincial or national levels and who have demonstrated leadership in encouraging the continuing enhancement of teaching, learning and understanding of mathematics in Alberta.

Nomination Procedure

Nominators must be current members of MCATA.

Nominations for the award must be forwarded to the selection committee. A complete nomination application includes the following:

- Information about nominee
- Information about nominator
- Three letters of support that reflect the criteria listed above

Enquiries can be directed to Geri Lorway, Director of Grants and Awards, 4006 45 Avenue, Bonnyville, Alberta T9N 1J4.

Dr. Arthur Jorgensen Chair Award

Congratulations to Lisa Hauk-Meeker, the winner of the 2004 Dr. Arthur Jorgensen Chair Award. This award is presented by MCATA to encourage students enrolled in education programs in postsecondary institutions throughout Alberta to pursue and commit to mathematics education.

The recipient of this award must be enrolled in a degree program in a Faculty of Education in Alberta and will be selected on the basis of demonstrated academic excellence and a clear commitment to mathematics education.

Applicants must apply by April 30, 2004, to Dr. Arthur Jorgensen Chair Award, c/o Geri Lorway, 4006 45 Avenue, Bonnyville, Alberta T9N 1J4.

Applicants must

- submit a letter of reference from a faculty member in their school of education, and
- complete an MCATA application form and address each of the questions or statements found on the application form.

For further details as well as an application form, see our website at www.mathteachers.ab.ca.

PSAC Grant Program

The Petroleum Services Association of Canada (PSAC) is offering five \$1,000 grants to be awarded to schools in western Canada. The goals of this program are to encourage elementary and junior high students in small communities in western Canada to pursue studies in math and science and to introduce them to the career possibilities available in the petroleum service industry.

Schools must be located in British Columbia, Alberta, Saskatchewan or Manitoba and must be in communities that have a population of 15,000 or fewer. The money would be used to fund a project or to purchase materials related to math, science or computers, or related to the oil and gas industry. These might include science equipment or kits, computer software, educational games, or field trips.

For further information and application forms, contact Petroleum Services Association of Canada, 800 6 Avenue SW Suite 1150, Calgary T2P 3G3; phone (403) 264-4195, toll-free 1-800-818-7722; e-mail info@psac.ca; website: www.psac.ca.

Deadline for Application is April 29, 2005.

Alberta Education Update

Revision of K–12 Mathematics

Alberta Education is providing leadership for the Western and Northern Canadian Protocol (WNCP) to make revisions to the K–12 WNCP Common Curriculum Framework (CCF) for Mathematics. A consultation draft for K–9 was posted on the WNCP website (www.wncp.ca) in late January.

Stakeholders will have an opportunity to provide feedback on this draft by completing the online survey posted on the WNCP website until March 31, 2005. Alberta Education has invited 100 teachers and consultants to participate in English and French language focus groups during February and March. Feedback will be used to inform changes to the draft CCF for K–9 Mathematics.

Revision to Grades 10–12 CCF will begin in June 2005.

For more information, contact Richard DeMerchant at (780) 427-5628. To be connected toll-free within Alberta, dial 310-0000 first.

Recently Authorized Resources

The WNCP has authorized the following resources, based on the current Common Curriculum Framework:

- Nelson Mathematics Grade 1
- Nelson Mathematics Grade 3

For more information, contact Debbie Duvall at (780) 422-3257. To be connected toll-free within Alberta, dial 310-0000 first.

Learning Technologies Branch

LearnAlberta.ca is a website that provides quality resources to the kindergarten to Grade 12 (K–12) community in Alberta. Students, teachers and parents will find engaging multimedia-learning resources that are based on Alberta Education curriculum guidelines.

Join the LearnAlberta.ca mailing list (go to the “About” page) to be notified when new resources are added to the site.

Learner Assessment Branch

The former ministry of learning has been divided into Alberta Education (for K–12 education) and Alberta Advanced Education (for postsecondary education) effective November 25, 2004. The new website address for Alberta Education is www.education.gov.ab.ca/.

Curriculum Branch

Find the latest information about the IOP and links to the September 2003 Field Validation Drafts of Programs of Study and new resource on the Alberta Education website at

- The Alberta Education IOP page: www.education.gov.ab.ca/k_12/curriculum/bySubject/iop/revise
- IOP updates and contacts list: www.education.gov.ab.ca/k_12/curriculum/bySubject/iop/update.asp

Junior High Workshops

Last year, Alberta Education held two focus groups to review the junior high mathematics program of study, with some revisions being made to the current program. During the next two years, Alberta Education proposes six workshops—three per year—on specific topics to provide junior high mathematics teachers with strategies for teaching key concepts. In 2004/05, the topics will be

- Developing Number Sense in Middle Grade Mathematics,
- Developing Fraction Concepts in Junior High, and
- Teaching Integers for Understanding.

The topics for 2005/06 will be

- Developing Algebra Concepts in Junior High,
- Understanding Measurement Concepts, and
- Strategies to Enhance Student Understanding in Mathematics.

Based on feedback from provincial focus group meetings, this series of workshops will provide teachers with strategies for teaching concepts in the junior high mathematics program that students often find challenging. The workshops will provide ideas for addressing a variety of student needs based on current research on mathematics education.

Regional consortia will provide three workshops per year for junior high mathematics teachers. Because grant money from Alberta Education is available, there will not be a registration fee for these workshops. Contact your regional consortia for dates and times and availability of workshops.

—Val Olekshy, Executive Director
Edmonton Regional Learning Consortium
University of Alberta
www.erlc.ualberta.ca

NCTM Conference

“Embracing Mathematical Diversity”

April 6–9, 2005

Online conference registration and hotel reservations are now available for the NCTM 2005 Annual Meeting and Exposition in Anaheim, California.

You’ll learn how to improve your mathematics teaching, view the latest products and services in the Exhibit Hall and NCTM bookstore, network with colleagues from around the world, as well as explore Anaheim’s world famous attractions.

Register online at www.nctm.org/meetings/anaheim/ or phone (888) 241-8406 or (972) 349-7476.

NCTM Offers Online Workshops

NCTM’s e-workshop pilots offer an electronic delivery platform, allowing educators to actively participate in a quality professional development experience without leaving the comfort of their homes or classrooms.

NCTM will be offering the following e-workshop pilots to its members this winter:

Implementing the Algebra Standard in Prekindergarten–Grade 2 and Grades 3–5

Presented by Beth Skipper, *Teaching Children Mathematics Journal* editor, NCTM

These e-workshops will give teachers an interactive overview of the algebra expectations for early grades as defined in NCTM’s Principles and Standards for School Mathematics. Using selected activities from the NCTM’s Navigating Through Algebra publications and NCTM’s journals, the e-workshops will provide insights into ways of using these materials in elementary grades classrooms. Through a discussion of algebraic situations appropriate for these grades, participants will gain insights into approaches and techniques that can be used to integrate algebraic concepts in the classroom. In addition, activities will be provided for classroom implementation, and participants will be invited to participate in a

follow-up session where they will reflect and discuss the impact of the activities on student learning. Follow-up sessions will be held on Wednesday, March 30, for Prekindergarten–Grade 2, and on Tuesday, April 26, for Grades 3–5.

Introductory registration fee (for NCTM members only) is \$65. To register, go to www.nctm.org/eworkshops/.

News from Our Faculty of Education Representative

Elaine Simmt is pleased to report growing numbers of candidates in the University of Alberta’s teacher education program in secondary mathematics education. In Jasper in 1999, she reported that there were fewer than 40 graduating students in all of Alberta. This year, the University of Alberta alone has 78 secondary mathematics majors completing their advanced professional term.

Although placements in schools have already been made for the winter term, it is important that mathematics specialists (particularly in the Edmonton area and Red Deer and north) put their names forward as mentor teachers. With growing numbers of students, we need more mathematics teachers than ever to mentor our future teachers. For more information on requesting a student teacher, go to the Field Experiences page on the Faculty of Education website: www.uofaweb.ualberta.ca/fieldexperiences/.

Watch for the upcoming issue of *delta-K* for a full-length article on the success of the Faculty of Education’s recruitment campaign to get more students to consider teaching mathematics, physics and chemistry.

University of Alberta, Centre for Mathematics, Science and Technology Education (CMASTE)

Just a reminder to mathematics and science teachers across the province, CMASTE has a website that is growing monthly. Teachers can find resources, useful links and information about seminars and bursaries for taking courses in elementary or secondary education. Take a look at www.ioncmaste.ca for more information.

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