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

Volume 24

Number 1

November 2005

### President's Message

Welcome back to a new school year of teaching and learning mathematics. As the new president of MCATA, I would like to introduce myself and tell you about the work that MCATA has been doing on your behalf. I have been an elementary teacher, and a math and science specialist for the Calgary Board of Education, and I am now an elementary school principal. I have been involved in MCATA since 2000, first in helping with conferences and then joining the executive as director for special projects.

On May 6–8, MCATA members, funded by Alberta Education, attended the Canadian Mathematics Education Forum in Toronto. We brought the perspective and concerns of Alberta math teachers to the forum and brought back a national perspective on math education in Canada.

Around the same time, we wrote a letter to Minister of Education Gene Zwozdesky expressing deep and fundamental concerns about the upcoming revisions to the Western and Northern Canada Protocol (WNCP) for mathematics. During the summer, MCATA president Len Bonifacio and secretary Donna Chanasyk met with representatives of Alberta Education's curriculum branch to further discuss our concerns. This fall, Jennifer Dolecki, project manager for mathematics curriculum revisions, was assigned to MCATA as the Alberta Education representative. At our first meeting in September, she participated in a lively and thoughtful discussion with the MCATA executive, who represent all levels of learning from elementary to postsecondary.

We will continue to advocate on your behalf to ensure that the curriculum we teach is thoughtful and well-constructed, and that it meets the learning needs of Alberta students. The mathematics learning and teaching that takes place in your classrooms is already internationally recognized as being among the best in the world. We are working on your behalf to ensure that this continues to be the case and that curriculum changes incorporate the input of the real experts—Alberta teachers. From the Editor's Pencil

The new school year is well under way and everyone is as busy as ever trying to balance their teaching life with their "real" life. Adding one more request to the pile of things already on your desk hardly seems fair, but I'm doing it anyway. See if you can spot someone who is doing an outstanding job as a math teacher and nominate him or her for the Math Educator of the Year award. This is a great way to give teachers the recognition they deserve because even being nominated gives the positive acknowledgement that is so often missing in our lives. All the necessary information can be found on the MCATA website at www.mathteachers.ab.ca.

—Anne MacQuarrie



—Janis Kristjansson

# **Alberta Education Update**

# Knowledge and Employability (formerly IOP)

The integrated occupational program (IOP) is transitioning to knowledge and employability courses. Provincial implementation of the new knowledge and employability policy, courses and provincial achievement tests is scheduled for September 2006. The current IOP policy remains in effect until then. The September 2005 field test drafts of programs of study for the knowledge and employability courses have been posted at www.education.gov.ab.ca/k\_12/curriculum/ bySubject/iop/default.asp.

The revised Certificate of Achievement for Knowledge and Employability will now require that students complete Math 26 and Science 26 for high school completion.

A French-language draft of the Knowledge and Employability Mathematics 8, 9, 16 and 26 programs of study were posted on the Alberta Education website in August 2005.

### **Junior High Workshops**

Alberta Education, in partnership with the Alberta Regional Professional Development Consortia (ARPDC), continues to offer workshops for junior high mathematics teachers. Teacher workshops will be offered through ARPDC. Please refer to the consortia calendar on their website at www.arpdc. ab.ca for times and places of workshops.

### French Language Multimedia Resources

The French-language version of the Learning Equation 12 resource is in its final stages of development. This resource should be available early in the new year.

Eight Grade 3 French-language lessons for the elementary multimedia project are complete and will be posted on the Learn Alberta website (www.learnalberta.ca) shortly. Development of another four lessons has begun.

### **Revision of K–12 Mathematics**

In July 2005, the Publishers' Draft Common Curriculum Framework (CCF) for K–7 Mathematics was posted on the Western and Northern Canadian Protocol (WNCP) website at www.wncp.ca. This draft includes revisions made after consultations with teachers in February and March 2005. Revisions will be made to Grades 8 and 9 in the fall of 2005, with consultations taking place in December. The final draft of the K–9 CCF will be ready by spring 2006. Alberta Education is working with publishers to ensure that resources will be available prior to implementation.

Revisions to the CCF for Grades 10 to 12 began in October 2005. Alberta Education, along with its WNCP partner jurisdictions, undertook extensive consultations with postsecondary institutions and partners in business and the industry last fall and spring. In conjunction with these revisions, Alberta Education will have focus-group discussions with Alberta teachers and consultations with representatives from the apprenticeship community.

The following is the schedule for implementing K–9 mathematics:

	2007	2008	2009
Optional	K, 1, 4, 7	2, 5, 8	3, 6, 9
Mandatory		K, 1, 4, 7	2, 5, 8
	2010	2011	2012

	2010	2011	2012
Optional			
Mandatory	3, 6, 9, 10	11	12

### Technology

Alberta Education's stakeholder technology branch will be seeking proposals to support the use of technology in engaging learning environments. The call for proposals will focus on leadership, emerging technology and reasonable access.

## Interesting Geometry Websites from the Land of the Incas

Why Study Geometry? http://agutie.homestead.com/files/landscape/ landscape\_why\_study\_geometry\_1.htm

#### Geometry

http://agutie.homestead.com/files/landscape/ landscape\_geometry\_1.htm

Academic Disciplines http://agutie.homestead.com/files/landscape/ landscape\_academic\_disciplines\_1.htm

Books of All Time http://agutie.homestead.com/files/landscape/ landscape\_books\_all\_time\_1.htm

Scientific Instruments http://agutie.homestead.com/files/landscape/ landscape\_scientific\_instruments\_1.htm

Inca Empire http://agutie.homestead.com/files/landscape/ landscape\_incas\_1.htm

Syllogism http://agutie.homestead.com/files/landscape/ landscape\_syllogism\_1.htm

Think Out of the Box http://agutie.homestead.com/files/landscape/ landscape\_Think\_out\_of\_the\_box\_1.htm

Hurricane Katrina http://agutie.homestead.com/files/landscape/ landscape\_hurricane\_katrina\_1.htm

## New Executive Representatives Join MCATA

MCATA is pleased to welcome some new representatives to the executive. Jennifer Dolecki is the new Alberta Education representative, and Susan Ludwig and Nicole Merz are new directors at large. Welcome, also, to Rebecca Steel, who will be receiving the Art Jorgensen Award and will be joining us at our November meeting.

Jennifer Dolecki recently joined the curriculum branch at Alberta Education. As program manager

for K–12 mathematics, Jennifer is part of the mathematics curriculum development team and is responsible for the English language mathematics curriculum. Prior to joining Alberta Education, Jennifer taught high school mathematics in Calgary. She previously worked as a geotechnical engineer in northern British Columbia and the Yukon.

Nicole Merz works with the Calgary Board of Education as an Alberta Initiative for School Improvement (AISI) coordinator for mathematics projects. Before she began her three-year term in this role, Nicole taught Grade 5 and 6 classes at a small inner-city school, where she often took the lead in preparing math nights and other schoolwide math activities.

## NCTM Announces New Affiliate Services Committee Representative

**C**arol Matsumoto replaced Ivan Johnson as the National Council of Teachers of Mathematics (NCTM) affiliate services committee (ASC) representative and began her three-year term on the committee in May. She is a Kindergarten and resource teacher at Governor Semple School in Winnipeg and has taught Kindergarten to Grade 3 classes during her 30-year teaching career.

Carol is a longtime member of the Manitoba Association of Mathematics Teachers (MAMT) executive, with which she has held various positions, including president, secretary and NCTM representative. Carol was chair of MAMT's October 2005 Special Area Group conference.

Carol's involvement with NCTM includes chairing a regional conference committee, attending several affiliate leaders conferences, and being a delegate and alternate delegate to a number of NCTM delegate assemblies. She is an active member of the National Council of Supervisors of Mathematics (NCSM), serving on the nominating committee and working at NCSM conferences.

Carol can be contacted at

10 Melmar Place Winnipeg Manitoba, R2G 0P3 (204) 663-6975 cmatsumo@merlin.mb.ca

The NCTM affiliate services staff is available to assist with all affiliate services or with general questions about NCTM. The affiliate services staff can be reached by calling (703) 620-9840, ext. 2104, or by e-mailing affiliates@nctm.org.

# **NCTM Highlights**

# Nominations Sought for NCTM Board and Committees

Affiliate leaders can share their expertise with the wider mathematics education community by serving on National Council of Teachers of Mathematics (NCTM) committees and the NCTM board of directors. Nominate a colleague (or yourself) for the NCTM board of directors or for an NCTM committee. Details, including qualifications, nomination forms, deadlines and so on, can be accessed at www.nctm.org/nominations/general. htm#committees.

### 2005/06 NCTM Conferences

NCTM schedules three regional conferences and an annual meeting and exposition each year. Invitations were sent to affiliate officers to join NCTM president Cathy Seeley in an informal setting at each of the regional conferences scheduled this fall. The invitation stated that these informal meetings "provide a wonderful opportunity for leaders of affiliates and representatives of NCTM to become better acquainted, to discuss possible partnerships for programs and to share ideas . . . about meeting the needs of teachers and how to identify and nurture leadership for the future." Go to www.nctm.org/meetings/index.htm#regionals for NCTM conference sites and dates.

# 2005/06 (and Beyond) Affiliate Conferences

A listing of affiliate conferences can be found at www.nctm.org/affiliates/conferences.htm.

## NCTM Launches New Outreach Program Using NUMB3RS

The following is an NCTM news release.

**N**UMB3RS, a television show that premiered on January 23, 2005, focuses on FBI agent Don Eppes (Rob Morrow) who recruits his mathematical genius brother Charlie (David Krumholtz) to help the bureau solve a wide range of challenging crimes in Los Angeles. Inspired by actual cases, the series depicts how police work and mathematics provide unexpected revelations and answers to the most perplexing criminal questions.

Math teachers who began using *NUMB3RS* content informally during the show's first season as a supplemental teaching tool to encourage students' interest in math achieved positive results. This year, this effort is being made official, with financial and operational support from Texas Instruments (TI) in association with the National Council of Teachers of Mathematics (NCTM). The initiative will provide Grades 9–12 math teachers with high-quality, engaging activities that have been developed by classroom teachers and leading mathematicians for students at grade-appropriate levels.

"It is really gratifying to know that *NUMB3RS* can serve a purpose beyond pure entertainment. We are glad that TI and NCTM see the educational value in our show, and we and the cast of *NUMB3RS* look forward to doing whatever we can to spread the word that 'Math is cool!" stated *NUMB3RS* executive producers and cocreators Cheryl Heuton and Nicolas Falacci.

NCTM will work with TI and *NUMB3RS* to create special classroom activities corresponding with the math used in each episode of *NUMB3RS*. Students will explore the math concepts highlighted in each week's episode.

"We're proud to be working in association with TI and *NUMB3RS* to implement this exciting educational outreach program," said Cathy Seeley, NCTM president. "By emphasizing the real-world applications of math, we hope to motivate students to go further and learn more challenging mathematics while raising their awareness of how we all use math every day."

Individual copies of this newsletter are available at a cost of \$2 per copy plus 5 per cent shipping and handling and 7 per cent GST. Please contact Distribution at Barnett House to place your order. In Edmonton, dial (780) 447-9400, ext. 321; toll free in Alberta, dial 1-800-232-7208, ext. 321.

Copyright © 2005 by The Alberta Teachers' Association (ATA), 11010 142 Street NW, Edmonton, Alberta T5N 2R1. Unless otherwise indicated in the text, reproduction of material in *Mathematics Council Newsletter* is authorized for classroom and professional development use, provided that each copy contains full acknowledgement of the source and that no charge is made beyond the cost of reprinting. Any other reproduction in whole or in part without prior written consent of the ATA is prohibited. *Mathematics Council Newsletter* is published several times yearly by the ATA for the Mathematics Council. Editorial and production services: Document Production staff, ATA. Address all correspondence to the editor, Anne MacQuarrie, 208 Douglas Woods Hill SE, Calgary T2Z 3B1; e-mail anne.macquarrie@shaw.ca. Authors' opinions are not necessarily those of MCATA or the ATA. ISSN 0823-1117