



Mathematics Council NEWSLETTER

The Alberta Teachers' Association

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September 2011

President's Message

Welcome back to a new school year. I hope your summer break met the three Rs of holidays—relaxing, rejuvenating and ready to jump into the new year.

A number of changes have occurred in the Alberta math curriculum. Last year, we witnessed the completion of the K–9 new math curriculum and the start of the new senior high math. As we move forward, the new math curriculum will evolve and become the complete math program for all Alberta students, from kindergarten through Grade 12.

As the 2011/12 school year commences, the new math program for Grade 11 comes on line. As with other grades, the changes continue to be about pedagogy. Since students have now been exposed to the new learning format of the math curriculum, the changes to Math 20 programming should be easier to implement. Understanding and communication continue to be the major focus of the new

curriculum. We mathematics teachers need to continually strive to improve our teaching skills and enhance our students' learning skills in these two crucial areas. As math teachers, we gain our expertise through knowledge and practice—the same things we impart to our students on a daily basis. Keeping this in mind, it is imperative that we remind ourselves that we are the facilitators of student learning. Through our facilitation, student knowledge and practice will improve, and students will grow and flourish as learners of mathematics.

The MCATA conference in October and the fall symposium will have some excellent presenters who will share myriad ideas and strategies to use in the classroom as we continue this exciting mathematics journey.

“If you can do math, you can do anything!”

Marj Farris

From the Editor's Laptop

Wow, it is hard to believe another school year is just around the corner. With each new year comes the chance to set goals, try new things and develop our skills. Each fall I look forward to determining which area of my teaching I am going to further develop—or even, perhaps, delve into for the first time. Along with this I must decide on my goals for my teacher professional growth plan, and how I can achieve them through professional development. There are many options for professional development through professional learning communities, regional consortia, school boards and, of course, ATA specialist councils.

I encourage each of you to attend MCATA Conference 2011, “Looking for the Road Less Travelled,” at the River Cree Resort and Casino, Enoch, Alberta, on October 21 and 22, 2011. This is an amazing opportunity to listen to fabulous speakers, network with colleagues and delve deeper into the world of teaching mathematics. If you are not yet an MCATA member, go to the ATA website (www.teachers.ab.ca), log in, and select Tools and Specialist Council Membership from the menu on the right.

Until next time, happy learning!

Tancy Lazar

Math Contests

33rd Annual Edmonton Junior High Math Contest 2011

With ongoing support from MCATA and various organizations, the committee is pleased to announce the results of this year's contest. The top teams, top three individuals and the top Grade 7 and 8 winners are listed below:

Top School Teams

- 1st: Vernon Barford—Lingfeng Zhu, Ling Long, Sherry Wang
2nd: Grandview Heights—Kevin Wang, Kristy Wang, Cindy Qian
3rd: Crestwood—Jennifer Lee, Iara Santelices, Daniel Jin, Kirtan Dhunnoo

Top Individual Winners

- 1st: Kevin Wang, Grandview Heights, and Lingfeng Zhu, Vernon Barford
3rd: Bianca Angotti, St Cecilia, and Jennifer Lee, Crestwood
Top Grade 7: Andrew Ho, Vernon Barford
Top Grade 8: Ling Long, Vernon Barford
For this year's contest and solution, please visit www.mathteachers.ab.ca

2011 Calgary and District 35th Junior High School Mathematics Contest—May 4, 2011

Top School Teams

- 1st: John Ware Junior High School—Ryan (Han Jie) Zhu, Jeff Hudson, Minghao Ji
2nd: Queen Elizabeth Junior/Senior High School—Rena Far, Desmond Sisson, Tony Cai
3rd: St Joan of Arc School—Sean Ginham, Mitchell Higgin, Skylar Litun

Top Individuals

- 1st: Ryan (Han Jie) Zhu, John Ware Junior High School
2nd: Rena Far, Queen Elizabeth Junior/Senior High School
3rd: Jeff Hudson, John Ware Junior High School, and Al Zhang, Mount Royal Junior High School

The Calgary Junior High School Mathematics Contest is a 90-minute mathematics contest that takes place every spring. The exam is primarily for Grade 9 students; however, all junior high students attending schools in Calgary and surrounding districts are eligible to participate. The exam is formatted into two components: a short-answer section and a longer problem-based section. Participants write the exam in their own schools.

Details and results of this and related contests can be found at <http://math.ucalgary.ca/community/outreach/junior-math-contest>.

Alberta High School Mathematics Competition

The first part of the 55th Alberta High School Mathematics Competition was written on November 16, 2010, by 579 students representing 25 schools.

Individual Results

- 1st: Mariya Sardarli, Strathcona High School, Edmonton (Grade 11), and Hunter Spink, Western Canada High School, Calgary
3rd: Weilian Chu, Old Scona Academic High School, Edmonton (Grade 10)

Team Results

- 1st: Western Canada High School, Calgary—Hunter Spink, YuanChen Fan and Megan Liang, managed by Ms Renata Delisle
2nd: Old Scona Academic High School, Edmonton—Weilian Chu, Jennifer Yu and D Mah/H Wang, managed by Mr Ihor Lytviak
3rd: Sir Winston Churchill High School, Calgary—Yaroslav Babich, Justine Zhang and Nam Song, managed by Mr Neil Hamel

The second part of the 55th Alberta High School Mathematics Competition was written on February 2, 2011, by 67 students representing 13 schools. Here is the list of fellowship winners and top performers.

- ConocoPhillips Canada Fellow (1st): Mariya Sardarli, Strathcona High School, Edmonton, Grade 11
- Peter H Denham Memorial Fellow (2nd): Hunter Spink, Western Canada High School, Calgary
- Canadian Mathematical Society Fellow (3rd): Yaroslav Babich, Sir Winston Churchill High School, Calgary
- Alberta Teachers' Association Grade 11 Fellows (4th): Bai Li, Henry Wise Wood High School, Calgary, and Jason Lynch, Bishop Carroll High School, Calgary
- Alberta Teachers' Association Grade 10 Fellow (12th): Ethan White, Westmount Charter School, Calgary

Do the Math! 2011

Canadian Open Mathematics Challenge

Presented by the Canadian Mathematical Society and Sun Life Financial

Wednesday, November 2, 2011

Check it out at cms.math.ca/COMC.

Alberta Education

The Seven Mathematical Processes—Connections

“Through connections, students begin to view mathematics as useful and relevant.”

—Alberta Mathematics Program of Studies

Here’s an interesting fact about the Beatles’ song “Strawberry Fields Forever”: in the studio, John Lennon preferred portions of two different takes of the song and wanted the producer, George Martin, to splice the two takes together. The seemingly insurmountable challenge for Martin was that the two takes were at very different tempos and in different keys! (This was problem solving in action.) Jason I Brown, a professor of mathematics at Dalhousie University, details this story and the mathematics involved in the February 2011 issue of *CMS Notes*, the official newsletter of the Canadian Mathematical Society.

Making connections is an important process in the revised mathematics curriculum. Every time we make an interesting connection between mathematics and our students’ personal experiences, mathematics becomes real to our students and they soon will begin to look for the mathematics that is everywhere around them. Sometimes finding these connections can be difficult, particularly as math becomes more abstract, but often it is as easy as connecting with colleagues and sharing ideas. The authorized resources also have many great ideas for helping make mathematics come alive through real-life contexts or by making connections to students’ personal experiences.

On a related note, our first video, *Math: It’s Everywhere*, which connects mathematics to several student interests, just won an international Telly Award for creative excellence! Find it on our webpage at www.education.alberta.ca/math.

Webpage Updates

Check out our webpage, www.education.alberta.ca/math, for three new videos:

- *Math: It’s Mine*—watch the philosophy of our revised program come alive in K–9 classes
- *Math: It’s My Choice*—watch the philosophy of our revised program come alive in the new high school course sequences
- *Math: It’s My Future*—see a student transported through a variety of careers, demonstrating the connections to mathematics

On our webpage you can also access the programs of study, assessment standards, an easy-to-use authorized resource list, information fact sheets, a PowerPoint on the new course sequences, and other materials including a link to information about postsecondary acceptance.

Critical Information for Students in Applied and Pure Mathematics 30

As you are likely aware, Applied and Pure Mathematics 30 will no longer be offered as of the 2012/13 school year. We have developed a critical information fact sheet for students and parents to help them understand the options should students not be successful in either course by the end of the 2011/12 school year. The fact sheet is available on our webpage at http://education.alberta.ca/media/6571950/math30_critical.pdf or <http://tinyurl.com/625gwqk>. If you are teaching either course, please give this fact sheet to your students and their parents. As well, please share this information with your administrators, guidance counsellors and other teachers.

Assessment Standards

Mathematics 10C and 10-3: The draft assessment standards documents for these courses have been available since April 2010. Now that the courses have been implemented for a full year, the documents will be reviewed and updated in consultation with teachers.

Mathematics 20-1, 20-2 and 20-3: The draft assessment standards documents for these courses are available on our webpage and will be updated in 2012/13, after the first year of implementation.

Mathematics 30-3: The draft assessment standards document for this course will be developed this year, in consultation with teachers, and will be available prior to implementation.

Information on the New Diploma Examinations for Mathematics 30-1 and 30-2

Information sessions for the Mathematics 30-1 and 30-2 diploma examinations will be held this fall. Draft blueprints and sample items will be supplied; participants will also be given the opportunity to develop some machine-scored items for their classrooms. Check your local professional development consortium for more information (www.arpdc.ab.ca). The information bulletins, including the exam blueprint, notes for teachers, standards, formula sheets and sample questions, will be released in spring 2012. Item-writing sessions for both exams will also be held this fall. If you are interested in working on one of these committees, your name must be provided to us by your superintendent. Contact your principal for details.

Digital Field Tests for Current Diploma Examinations

Digital field tests for both Applied Mathematics 30 and Pure Mathematics 30 will be offered during the 2011/12 school year. To access these field tests, go to <https://questaplus.alberta.ca>.

MCATA Conference 2011

The 2011 MCATA conference, at the River Cree Casino and Resort in Enoch, near Edmonton, will be an exciting one! It marks 50 years of providing leadership to encourage the continuing enhancement of teaching, learning and understanding mathematics. This year we are focusing on “Looking for the Road Less Travelled,” with our keynote speakers, Dan Meyer and David Coffey.

Dan Meyer received a Cable in the Classrooms Leader in Learning Award in 2008 for his work with math instruction, multimedia and inquiry-based learning. In 2010, he was named a Future Ed Tech Leader by *Tech & Learning* magazine. Dan will demonstrate how to be a creative, effective and interesting math instructor.

Dr David Coffey has demonstrated a commitment to facilitating capacity and agency in learners at all levels. His mathematics courses reflect promising practices from educational research from across the disciplines. In 2007, Grand Valley State University, in Allendale, Michigan, recognized his efforts with the Faculty Teaching & Learning Center’s Pew Teaching Excellence Award.

In addition to these formal learning opportunities, make sure you stop by our second annual social on the Friday night.

For registration information, visit www.mathteachers.ab.ca.

MCATA Fall Symposium

You are cordially invited to the MCATA Fall Symposium for leaders in mathematics education: “Mathematical Storytelling for Fun and Challenge.”

Why do students hate word problems? Why don’t they understand or enjoy the power of math in the world around them? Why don’t they thrill to pure math problems in the same way that you and I do? Maybe the difference is generational—these are different kids in a different age. Or maybe there’s a vast gulf between the math that we love and how it’s represented in our textbooks. Dan Meyer will describe a model for designing math problems that use digital media and challenge students yet are fun to do. Participants will create problems and solve them, and submit problems of their own for the presenter to remodel.

There will be breakout sessions following the opening presentation. Divisions I and II will be facilitated by Geri Lorway; Divisions III and IV will be facilitated by Dan Meyer.

This symposium is a joint project of Alberta Regional Professional Development Consortia and MCATA.

Thursday, October 20, 2011
River Cree Resort, Enoch, Alberta
9:30 AM–3:00 PM
\$65.00 (NOTE: Prepayment is required.)
Register through the Edmonton Regional Learning Consortium at www.erlc.ca.

MCATA Grants

MCATA grants are available to teachers and coordinators as part of professional development, for research into math education or for other initiatives that promote and enhance mathematics education in the province of Alberta. These grants help fund projects that you develop that further the education of students and educators in the math field. Grants of up to \$500 are awarded twice each year; applications should detail the nature of the project, the audience participating and benefiting, and how the project incorporated diversity in regional development opportunities for teachers. The grants are intended to help pay the cost of the associated professional development.

For more information or an application, please visit our webpage at www.mathteachers.ab.ca/mcata_grants.htm or contact the director of awards and grants, Carmen Wasyluniuk, at 780-907-8990 or carmenbt@telus.net.

Save the Date

The next High School Mathematics Institute, “Seeing the World Mathematically! Math for All Students” (in both English and French), will be held on January 26, 2012, at locations across Alberta. This opportunity is sponsored by the Alberta Regional Professional Development Consortia and is at no cost to participants. Contact your local consortium to register (www.arpc.ab.ca).

TERM Meetings

Teachers of Mathematics in the Edmonton Region (TERM) will meet on October 3, December 5, March 5 and May 7. The meetings are held at Paul Kane High School, in St Albert, at 5 PM in Room 224 (on the north side of the building). For more information, please send a message to donnajc@telus.net.

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Individual copies of this newsletter are available at a cost of \$2 per copy plus 5 per cent shipping and handling and 5 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.

Personal information regarding any person named in this document is for the sole purpose of professional consultation between members of the ATA.



Looking for the Road Less Travelled

Celebrating
50 Years

ANNUAL CONFERENCE OCTOBER 21-22, 2011
Registration Begins Thursday Evening October 20, 2011
EDMONTON MARRIOTT at RIVER CREE RESORT
300 East Lapotac Blvd, Enoch, Alberta

For further information and ongoing updates, visit www.mathteachers.ab.ca

MCATA is the Mathematics Council of the Alberta Teachers' Association and its mission is to provide leadership to encourage the continuing enhancement of teaching, learning and understanding mathematics.

CONFERENCE REGISTRATION FORM

Name: (last) _____ (first) _____

Address: _____

City: _____ Province: _____ Postal Code: _____

Phone: (home) _____ (school) _____ (fax) _____

School Name: _____ Teaching Certificate #: _____

Email: _____

Grades Taught: ___ K-3 Div I, ___ 4-6 Div II, ___ 7-9 Div III, ___ 10-12 Div IV, ___ Postsecondary

In registering for this specialist council conference, you are voluntarily providing your personal information and consenting to its collection, use and disclosure for all purposes connected with your attendance at this conference and future conferences and symposiums.

Conference Fees:

You are entered in the Early Early Bird Draw if your registration is postmarked by **June 30, 2011** and the Early Bird Draw if your registration is postmarked by **September 16, 2011**. Draws are for one night's accommodation at The **EDMONTON MARRIOTT at RIVER CREE RESORT, ENOCH, ALBERTA**.

Early Registration (Postmarked by October 1, 2011)
 Non-MCATA Member (includes a MCATA membership) \$380 _____
 Current MCATA Member (must be a member at the time of registration) \$350 _____
 Student (Undergraduate—provide copy of student ID) \$100 _____
 Retired MCATA Member \$350 _____
Saturday Only Non-MCATA Member (includes MCATA Membership) \$130 _____
Saturday Only MCATA Member (must be a MCATA member at time of registration). \$100 _____

Late Registration (Postmarked after October 1, 2011)
 Non-MCATA Member (includes MCATA membership) \$405 _____
 Current MCATA Member \$375 _____
 Student Member (Undergraduate) \$125 _____
 Retired MCATA Member \$375 _____
Saturday Only Non-MCATA Member (includes MCATA Membership) \$155 _____
Saturday Only MCATA Member (must be a MCATA member at time of registration). \$125 _____

Persons not eligible for specialist council membership \$760 _____
 Central office staff who did not elect active ATA membership cannot be members of specialist councils. The superintendent and deputy superintendent of school jurisdictions and teachers in direct charter, federal or private schools must be ATA associate members in order to qualify for specialist council membership. Questions? Call ATA at 780-447-9400 or 800-232-7208.

A conference fee includes Friday breakfast and lunch, and Saturday breakfast. Saturday only registration includes Saturday breakfast only.

Extra meal tickets:
 Friday Breakfast \$22 _____
 Friday Lunch \$30 _____
 Saturday Breakfast \$22 _____

Total Fees \$ _____

In making application for membership to MCATA, you are voluntarily providing your personal information and consenting to its collection, use and disclosure for all purposes connected with your participation as a member of the Mathematics Council.

Bring your MCATA bag from last year to receive a bonus gift.

Method of Payment:

MCATA does **not** accept credit cards, school POs or board POs. Payment must be made by money order or cheque. No postdated cheques will be accepted. Registration must be accompanied by full payment. Please MAKE CHEQUES PAYABLE to Math Council ATA.

Conference Cancellation Policy

If it becomes necessary for you to cancel your registration, please cancel in writing by fax (780-469-0414) or mail (1826 51 Street, Edmonton, AB T6L 1K1) to the MCATA Conference Registrar **prior to October 1, 2011**. A \$40 administration fee will be levied on refunds issued prior to this date. No refunds will be issued after this date. NSF cheque fee: \$20.00.

Mail Registrations to

MCATA Conference, 1826 51 Street, Edmonton, AB T6L 1K1.

Registration confirmation letters will be faxed to each participant. It is important that you **include the correct fax number on your registration form**. It is also important that you indicate the grade/division you teach.

Full program and speaker schedule will be supplied upon check-in at the conference. A sample of the speaker list and session descriptions will be available online at www.mathteachers.ab.ca in September.

For further registration information, contact Patricia at 780-450-1813 or mathematicsconference@shaw.ca. More registration forms can be downloaded from the MCATA website, www.mathteachers.ab.ca.

Accommodation

The Edmonton Marriott at River Cree Resort is holding a block of guest rooms at a special rate of \$147.00 per night. This special rate does not include taxes. For room availability, please book your reservation by calling 780-484-2121. Use **promotional code Math Council of the ATA**. The block will be held until **September 30, 2011**. Ensure that you have made your own hotel reservations prior to this date. **Conference registration fee does not include accommodations.**

Keynote Speakers

For biographical information on our Friday and Saturday keynote speakers, please visit the MCATA website at www.mathteachers.ab.ca. Some sessions will be given on interactive whiteboards.



Looking for the Road Less Travelled

Celebrating
50 Years

ANNUAL CONFERENCE OCTOBER 21–22, 2011
Registration Begins Thursday Evening October 20, 2011
EDMONTON MARRIOTT at RIVER CREE RESORT
300 East Lapotac Blvd, Enoch, Alberta

Come join the Mathematics Council of the ATA in celebrating 50 years of providing leadership to encourage the continuing enhancement of teaching, learning and understanding mathematics at our annual conference, “**Looking for the Road Less Travelled**” at the Edmonton Marriott at River Cree Resort.

You will have an opportunity to pick up your conference registration package at the Edmonton Marriott at River Cree Resort conference registration desk from 7 PM to 10 PM on Thursday, October 20, and from 7 AM to 11 AM on Friday, October 21, 2011. After that time, please go to the MCATA table in the display area for assistance.

In your registration package you will find your nametag. Wear your name tag at all times. It ensures your entrance to your chosen sessions. Your registration includes a ticket for the Friday buffet breakfast, Friday lunch and Saturday buffet breakfast.

The Math Council realizes that some of you are unable to attend the Friday portion of the conference. As a result, we are offering a Saturday-only special rate that includes breakfast, a keynote speaker, and two Saturday sessions. The registration desk will be open on Saturday, October 22 from 7 AM to 9 AM. After that time, please go to the MCATA table in the display area for assistance.

Conference session times are as follows:

Thursday, October 20, 2011	7:00 PM–10:00 pm	Registration Only
Friday, October 21, 2011	7:00 AM–11:00 AM	Registration
	7:45 AM–8:30 AM	Breakfast
	8:30 AM–9:00 AM	Opening Remarks
	9:00 AM–10:00 AM	Keynote Speaker
	10:15 AM–12:15 PM	Session #1
	12:15 PM–1:00 PM	Lunch
	1:15 PM–2:15 PM	Session #2
	2:30 PM–3:30 PM	Session #3
	3:45 PM–4:45 PM	AGM
5:00 PM–7:00 PM	Wine and Cheese Social	
Saturday, October 22, 2011	7:00 AM–9:00 AM	Registration
	7:45 AM–8:30 AM	Breakfast
	8:30 AM–9:00 AM	Opening Remarks
	9:00 AM–10:00 AM	Keynote Speaker
	10:15 AM–11:15 AM	Session #4
	11:30 AM–12:30 PM	Session #5

For further information and ongoing updates, visit www.mathteachers.ab.ca.