

Mathematics Council NEWSLETTER

The Alberta Teachers' Association

Volume 26

Number 1

September 2007

President's Message

Another September is upon us, full of new faces and exciting challenges. September always has a certain magic to it, whether you are in the midst of optional implementation of the new curriculum in kindergarten, Grade 1, Grade 4 or Grade 7; starting a new assignment with new math courses; or just starting fresh with a new group of eager students. The start of a new school year gives us a chance to re-evaluate why we do what we do. It challenges us to think about how students learn and how to make our lessons meaningful.

Although new curriculum usually means a lot of extra planning, it also gives us a sense of renewal and new opportunities for networking. The program of studies for kindergarten to Grade 9 has been adopted and is now available online at www.education.gov.ab.ca. If you haven't had a chance to look at it yet, I encourage you to do so. Over the next few months we will be sending out a needs assessment for K-6 and 7-9 to help the Mathematics Council prepare for future conferences.

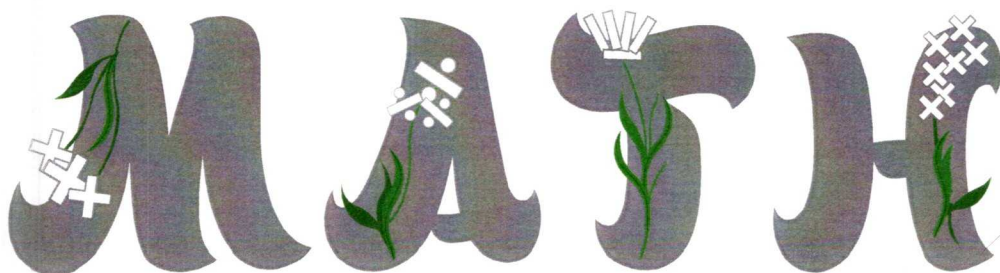
Thank you to those who responded to our survey over the summer on the proposed new senior high curriculum. It gave us a sense of the future needs for senior high, and we have shared the results with Alberta Education representatives. The senior high curriculum has not been finalized but it is getting closer; please take the opportunity to give your feedback now.

From now until 2012, when the new curriculum is fully implemented, math teachers will form very strong professional learning communities. We will be helping each other reach the necessary depth of knowledge that our students will require of us. Never forget that Alberta students are among the best math students in the world because of the expertise of Alberta teachers. We have a lot to share with each other. Maybe now is the time to consider presenting at conferences, to help organize mini-conferences, or to participate in forming regional learning communities.

The MCATA executive is looking forward to our conference in October and hopes to see many of you there. With automatic specialist council memberships being offered by the ATA, we are hoping to see more teachers becoming involved. If you have a colleague teaching math who is not an MCATA member, please encourage him or her to join us. We all know that math teachers have the most fun! If you are already a member of the Mathematics Council and would like to take a more active role, please contact any member of the executive. We have lots of opportunities for people to become more involved.

As MCATA president this year, I am looking forward to working with all of you and getting to know more of my mathematical colleagues. Have a wonderful school year!

—Sharon Gach



From the Editor's Pencil

As another school year begins, I can't help but reflect on how quickly time really does seem to be passing by. Everyone I've spoken to in the last couple of weeks has agreed that this summer was the fastest one yet. Mathematically speaking, of course, time passes at a constant rate and it is only the busyness of life and the world that changes our perceptions. However, perception is reality and, for most of us, the reality is that time is going by much too fast.

In a recent comic strip in the *Calgary Herald*, one of the characters asked whether the speed at which our lives are being lived meant that she should really buckle down and try harder to make her mark, or whether she should just work less and enjoy herself more. Of course, the funny answer was the latter, but it made me stop and think.

For teachers of mathematics, at whatever level we find ourselves, there is joy to be found in the excitement of exploration and discovery, or in the look of sudden comprehension on the faces of our students who have struggled and come to understand. When the news of war and politics and disease threatens to drag us down and weary our outlook, we must remember that joy can be found all around us if we only look for it. We can make our mark *and* enjoy ourselves. What a wonderful profession we belong to!

—Anne MacQuarrie

Alberta Land Surveyors' Association Sponsors Math Challenge

The land surveying profession is always looking for students who would enjoy using their skills and interest in mathematics to pursue a career in the ever-changing profession. With that in mind, the Alberta Land Surveyors' Association has created the Trig-Alta Challenge—a math contest aimed at Alberta Grade 11 pure math students and based primarily on content included in the Grade 10 pure math curriculum.

The Trig-Alta Challenge exam is 50 minutes long (in order to accommodate a typical school period). It contains a mixture of multiple-choice, numerical response and written response questions. The questions have been developed jointly by experienced math teachers and Alberta land surveyors and have a survey-related theme—showing how Alberta land surveyors use the math that students have learned.

The registration deadline for the first Trig-Alta Challenge is October 26, 2007, and the exam is December 11, 2007. For more information on the Trig-Alta Challenge or to register your students, visit www.trigalta.ab.ca.

For Your Consideration from PEC

Strategic Plan of the Alberta Teachers' Association

Twice yearly your elected representatives, the Provincial Executive Council, and the executive staff meet to plan and set direction for our association. Members have many opportunities to provide input.

A cornerstone of the Alberta we want to create is a strong public education system that develops the full potential of all children to learn, to care about one another and to contribute to the collective prosperity of Albertans in an inclusive and democratic society.

The Association's Strategic Planning Group has developed "Preferred Futures," an expression of the kind of Alberta of which we want to be a part and the kind of organization that will get us there. The strategic plan, developed over the last year, is a map that will help guide the way.

We have set four strategic directions:

1. Advance the professional role of teachers into public leadership in learning
2. In the context of responsibilities of the teaching profession, actively address social justice and social cohesion in the interest of healthy families and communities
3. Be an adaptive organization that is continuously learning through research and strategic thinking about the future
4. Enhance member engagement and commitment to the collective interests of the profession by providing flexible and responsive services

For more information on the Association's strategic plan, vision and mission, contact your district representative or your local president.

—Carol Henderson
Provincial Executive Council Liaison

World Youth Mathematics Intercity Competition



The eighth World Youth Mathematics Intercity Competition was held this summer from July 21 to 25 in Chang Chun, China. Sixty-six teams, each consisting of four junior high school students, took part. One team from Canada competed, along with nineteen teams from China, two from Hong Kong, two from India, one from Indonesia, nine from Iran, four from Macau, five from the Philippines, four from Singapore, six from South Africa, one from South Korea, six from Taiwan, four from Thailand and two from the United States.

The Canadian team was from Edmonton, and consisted of Mariya Sardarli of McKernan Junior High School (Grade 7), Michael Meiers of D S MacKenzie Junior High School (Grade 9), Ranek Kiil of Vernon Barford Junior High School (Grade 9) and Yuri Delanghe of Avalon Junior High School (Grade 9). The team leader was Gilbert Lee, an Edmonton resident and graduate student in computing science at the University of Victoria. The deputy leader was Emily Cliff, an undergraduate student in mathematics at the University of Alberta.

In the individual contest, Mariya won a bronze medal, while the other three team members all won honourable mentions. In the team contest, the 66 teams were divided into five groups. The Edmonton team won a silver medal in their group. They also won the gold medal for the best behaviour overall.

During the competition, each team member spent two nights at the home of a local family. After the competition, the team stopped over at Beijing for three days of sightseeing before coming home.

The cost of the trip was shared equally by the parents, the Pacific Institute for the Mathematical Sciences and the SNAP Mathematics Foundation of Edmonton.

—Andy Liu

Mathematical Tapestries: Weaving the Connections

The MCATA conference this year promises to be an exciting one, and teachers across Alberta are already signed up and looking forward with great anticipation to the experience. As MCATA president Sharon Gach said, “Math teachers have the most fun!”

David Jardine will be the opening keynote speaker on Friday morning, when he presents “Time Is Always Running Out.” On Saturday morning, Dave Mitchell will be the final keynote speaker with his presentation “I Enjoy, Therefore I Succeed.”

David W Jardine is professor of education in the faculty of education of the University of Calgary. He is the author of six books, as well as numerous articles on curriculum and classroom practice. His main work is introducing teachers and student teachers to the intellectual pleasures of the living disciplines and how they might be thoughtfully and accountably practised with students in schools. He lives with his family in Bragg Creek, a small community in the foothills of the Rocky Mountains, west of Calgary.

Dave Mitchell taught math for 30 years, 10 of which he spent as head of mathematics at Cameron Heights Collegiate Institute in Kitchener, Ontario. He is now a full-time professional development speaker and educational publisher. He is well known for using puzzles, songs, rap and stories to make math classes memorable. His presentations involve music, puppetry, math commercials, origami and more. Dave has been awarded the Ontario Secondary School Teachers’ Association Award of Excellence, the Stewart Award for Teacher Excellence, the Ontario Cable Television Producers’ Award for Youth Programming and the Roy C Hill (Hilroy) Award for Innovation in Teaching.

For further information, visit the MCATA website at www.mathteachers.ab.ca.



Alberta Education Update

Alberta Education held a Mathematics Summer Institute in both English and French, in Edmonton, July 4–6, 2007. The purpose of the institute was to support the implementation of the revised Alberta programs of study for K–9 mathematics for kindergarten and Grades 1, 4 and 7 (optional in 2007, provincial implementation in 2008). This very successful institute was attended by more than 300 teachers from across Alberta.

School administrators will need to plan for implementation and resource purchases. A list of approved resources can be found on the Alberta Education website at www.education.gov.ab; English resources will be available for optional implementation, and French resources will be available for provincial implementation.

Analysis of the feedback on the consultation draft of the Western and Northern Canadian Protocol

(WNCP) Common Curriculum Framework (CCF), gathered through face-to-face consultations and an online survey, has taken place. Though Alberta remains a partner in the WNCP, feedback from our stakeholders indicated the need for Alberta to create a different pathway for Fundamentals of Mathematics than the other jurisdictions. The need of the other jurisdictions for a very distinct pathway for Mathematics for Sciences was contrary to the transferability between pathways that Alberta stakeholders desire. Because of these differing needs, Alberta Education, with input from teachers and postsecondary personnel, is developing its own Grade 11 and 12 courses for Fundamentals of Mathematics.

The final draft of the WNCP CCF for Grades 10–12 will be available for publishers early in 2008 so that resources will be available for the proposed implementation timeline.

	2007	2008	2009	2010	2011	2012
Optional	K, 1, 4, 7	2, 5, 8	3, 6, 9			
Provincial		K, 1, 4, 7	2, 5, 8	3, 6, 9, 10	11	12

MCATA Grants

MCATA grants are available to teachers and coordinators as part of professional development, for research into math education, or for other math initiatives that promote and enhance mathematics education throughout the province. These grants help to fund projects that you develop and further the education of students and educators in the math field.

Grants of up to \$500 are awarded twice each year. Applications should describe the project, specify the audience participating and benefiting, and explain how the project increases diversity in regional development opportunities for teachers. The grants are intended to assist in covering the cost of facilitating professional development.

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

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