

Mathematics Council NEWSLETTER

The Alberta Teachers' Association

Volume 27

Number 1

September 2008

President's Message

As another year begins, mathematics teachers across the province are busy planning and implementing the new curriculum. Change always brings a range of emotions; it can fill us with fear or excitement. We often question the reasons for the change and want to cling to our old, familiar methods. I hope that those of you who are implementing the new kindergarten, Grade 1, 4 or 9 program or piloting the Grade 2, 5 or 8 program are finding the change a positive one.

As we read the new curriculum, we find that many things seem to be the same. The mathematics we teach doesn't change, but the methodology we use is constantly evolving. Please take the time to read the front material in the curriculum documents, because the philosophy is extremely important. Teaching our students to be independent thinkers who can apply their personal strategies to solve problems is an important part of this curriculum.

Dialogue between colleagues increases exponentially in years when we are introducing new

curriculum. Sharing ideas and materials creates synergy in our schools. Whether you work in a large school with many teachers who support each other or in a small school where you are the only math teacher, it is important to connect with fellow math teachers. Whether that connection is made at summer institutes, math conferences, regional consortia workshops or the local level, it is important to keep the communication channels open.

The MCATA executive has been working with Alberta Education and the regional consortia to provide teachers with professional development

opportunities. We all want what is best for our students. Take advantage of as many opportunities to work together as you can. Many hands make light work, and many minds make brilliant ideas. Alberta students will continue to be among the top math students in the world because of the wonderful teachers they have!

I look forward to working with you this year.

Sharon Gach



From the Editor's Pencil

I would like to take this opportunity to welcome you all to a new year. Each new school year, whether you are a veteran or a novice, brings both wonder and apprehension. Each year is different than the last; there are new responsibilities and challenges, new successes and achievements.

Those of you who have been MCATA members in the past will notice that I am new to the job of newsletter editor, so I would like to introduce myself. My name is Tancy Lazar and I currently teach Grade 2 at a wonderful school with the Calgary Board of Education. I am excited to be adding this endeavour to my list of new challenges and look forward to helping all of you, whether past or new members, get more information about what is new and exciting in the world of mathematics and the council. Until next time, I wish you all an exciting start to a brand-new year!

Tancy Lazar

Conference 2008: “Exploring New Depths, Reaching New Heights”

Mathematics teachers and curriculum leaders are invited to join fellow Alberta mathematics educators for our annual conference, to be held at the beautiful Jasper Park Lodge, October 16–18, 2008. This year's conference promises to give you a good mental workout as you explore new depths and reach new heights. When you have had enough of brain work, there are beautiful walks and hikes just outside your cabin door. The conference has a well-balanced program, from hands-on activities for building deep and flexible mathematical understanding to strategies for mental mathematics and using technology to prepare materials and deliver lessons. A registration form is included with this newsletter; you can also download the form from the new MCATA website at www.mathteachers.ab.ca. Hope to see you there!

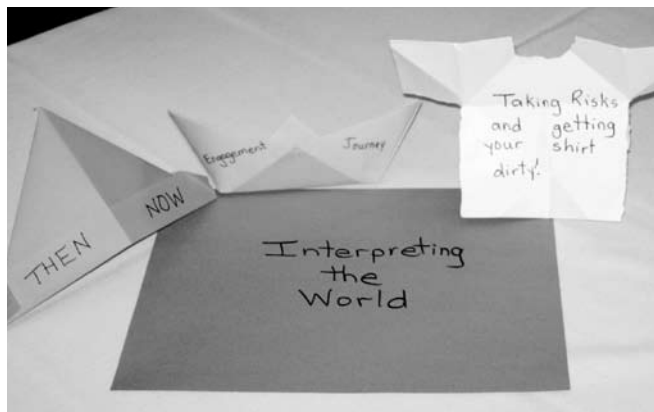
*Elaine Simmt
Conference Chair*

MCATA Executive Meetings

During the 2007/08 school year, the executive met four times. At each of the meetings, there was a lot of discussion about the new K–12 curriculum—content, implementation and other related issues. One of MCATA's concerns is adequate professional development opportunities for teachers implementing the new curriculum. The annual MCATA conference and the two MCATA symposia will continue as professional development opportunities for teachers and other stakeholders in implementing the new curriculum. The MCATA executive continues to communicate with many stakeholders so that no one operates in isolation, and everyone works and makes decisions using the same information.

MCATA 2008 Spring Symposium

The MCATA Spring Symposium was held on June 9, in Calgary. Dr Florence Glanfield was our speaker and facilitated an all-day workshop on personal teaching strategies and their importance in the new Western and Northern Canadian Protocol (WNCP). Dr Glanfield's workshop was enjoyable, and very helpful in modelling the sorts of conversations we all need to have with colleagues and students when exploring personal teaching strategies. The feedback was overwhelmingly positive and many participants were interested in working again with Dr Glanfield at a future workshop.



An artistic representation of the philosophy of constructivist learning created by symposium attendees.

Alberta Education Update

Mathematics Summer Institute

Albert Education hosted the second Mathematics Summer Institute (MSI), on July 7–9, 2008, and it was a huge success. Almost 300 teachers participated in large and small group sessions to look closely at the vision, philosophy and outcomes of the revised K–9 mathematics program of studies and how it will affect their teaching. Topics included “Building Conceptual Understanding” and “Thinking Algebraically.” Planning is under way for MSI for Grades 3, 6 and 9, in summer 2009.

Kindergarten–Grade 9

Provincial implementation of the revised K–9 mathematics program of studies started in September 2008 for kindergarten and Grades 1, 4 and 7. Grades 2, 5 and 8 are available for optional implementation this year and will be implemented provincewide next year. Grades 3, 6, 9 and 10 follow according to the schedule below.

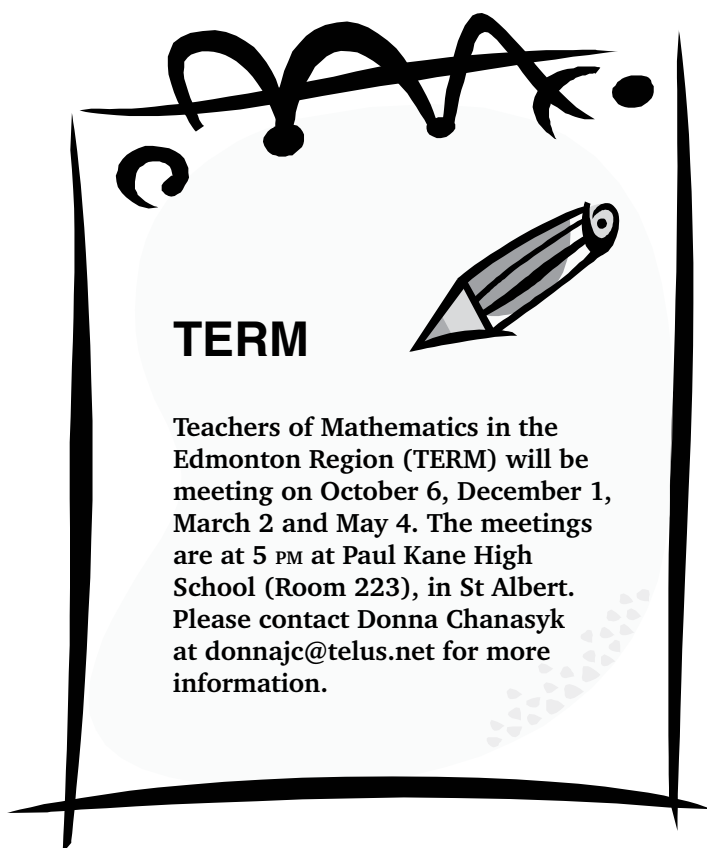
| | September 2008 | September 2009 | September 2010 |
|------------|----------------|----------------|----------------|
| Provincial | K, 1, 4, 7 | 2, 5, 8 | 3, 6, 9, 10 |
| Optional | 2, 5, 8 | 3, 6, 9 | |

Grades 10–12 Mathematics

The revised Grades 10–12 mathematics program of studies (English and French) received ministerial approval in June 2008 and is posted on the Alberta Education website at www.education.alberta.ca/teachers/core/math/programs.aspx. Provincial implementation of the program begins in September 2010, starting with Grade 10. The University of Alberta has indicated that it will accept Mathematics 30-2 as a prerequisite for STAT 141 and MATH 153, thereby increasing postsecondary options available to students choosing Mathematics 30-2. Decisions regarding the acceptance of the mathematics course sequences are anticipated well in advance of the first graduates of the programs entering postsecondary education.

Learner Assessment

The deadline for working group nominations (for activities such as item writing, examination review, field test validations, validation of French translations and standard setting) is October 3, 2008. The deadline for marking nominations is October 17, 2008. Alberta Education may be offering an online unit field test in both pure and applied mathematics in the second semester.



TERM

Teachers of Mathematics in the Edmonton Region (TERM) will be meeting on October 6, December 1, March 2 and May 4. The meetings are at 5 PM at Paul Kane High School (Room 223), in St Albert. Please contact Donna Chanasyk at donnajc@telus.net for more information.

MCATA Grants



Twice a year, MCATA offers grants that can be used for professional development, research, or any initiative that would promote and enhance mathematics education in Alberta. These grants are intended to support current learning and teaching practices in Alberta, as well as to support current priorities in mathematics education.

For more information or an application, visit the MCATA website at www.mathteachers.ab.ca/mcata_grants.htm. Deadlines for applications are December 1 and May 1 of each calendar year. While at the MCATA conference, in Jasper, October 16–18, keep these grants in mind when attending sessions that may be relevant to other math teachers in your school or jurisdiction.

Mathematics Contest Winners

Congratulations to all of the winners of the Edmonton Junior High Mathematics Contest and the Alberta High School Mathematics Competition.

Edmonton Junior High Mathematics Contest

Top Teams

First Place: Vernon Barford School—Kaiven Zhou, Joe Ou, Andrew Qi

Second Place: McKernan School—Jennifer Yu, Mariya Sardarli, Robert Luo

Third Place: Grandview Heights School—Lisa Wang, Qaasim Mian, Eric Xu, Stephanie Li

Top Three Individual Winners

First Place: Kaiven Zhou, Vernon Barford School; Jennifer Yu, McKernan; Mariya Sardarli, McKernan School

Second Place: Joe Ou, Vernon Barford School

Third Place: Stephen Just, St Rose Catholic Junior High School

Alberta High School Mathematics Competition—Part 1

Individual Prizes

First Prize: Linda Zhang, Western Canada High School, Calgary

Second Prize: Danny Shi, Sir Winston Churchill High School, Calgary; Jarno Sun, Western Canada High School

Grade XI Prize: Jacky Tian, Western Canada High School

Grade X Prize: Jaclyn Chang, Western Canada High School

Robert Barrington Leigh Memorial Prizes: Hunter Spink, Calgary Science School; Mariya Sardarli, McKernan School, Edmonton

Team Prizes

First Prize: Western Canada High School—Linda Zhang, Jarno Sun, Jacky Tian

Second Prize: Sir Winston Churchill High School—Danny Shi, Kevin Tan, Darren Xu

Third Prize: Harry Ainlay High School, Edmonton—David Szepesvari, Alex Huang, Yuri Delanghe

Alberta High School Mathematics Competition—Part 2

Conoco Phillips Canada Fellow (First Place)—Jarno Sun, Western Canada High School

Peter H Denham Memorial Fellow (Second Place)—Danny Shi, Sir Winston Churchill High School

Canadian Mathematical Society Fellow (Third Place)—Mariya Sardarli, McKernan School

Alberta Teachers' Association Grade XI Fellows—Glen Wang, Western Canada High School; Noble Zhai, Western Canada High School

Alberta Teachers' Association Grade X Fellows—Stephanie Bohaichuck, Harry Ainlay High School; Jaclyn Chang, Western Canada High School

Robert Barrington Leigh Memorial Prize: Hunter Spink, Calgary Science School

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