

Mathematics Council NEWSLETTER The Alberta Teachers' Association

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President's Message

A s your incoming president, I would like to take a few minutes to tell you about myself. I am a self-confessed math geek. My belief is that if you do math, you can do anything! This is obviously true in my case, as I have been teaching math for the past 29 years for the Fort Vermilion School Division. (Think northern Alberta and double that.) Though most of my career has been with Grade 7–12 mathematics, I did spend three years as a K–9 numeracy coordinator for one round of Alberta Initiative for School Improvement (AISI). My current position is junior high mathematics coordinator for the Fort Vermilion School Division. In this role, I work with individual teachers on pedagogy, content, in-class assessment and developing common assessments for teachers to use in their classrooms.

During the past 10 years I have been extensively involved in the modifications to the Alberta mathematics curriculum. The excitement and enthusiasm of actively participating in making changes to the curriculum have made me feel like I did when I first entered the classroom many years ago. Over the implementation years, I have seen teachers' comfort level increasing as the new math curriculum continues to roll out. The words of a Grade 4 student sum up my feelings about the new math. Attached to a bouquet of paper flowers sent to her teacher was a report card for the teacher. In it, the student thanked the teacher, especially for making math fun and easy to understand.

Many teachers feel that the recent decision by the minister of education to drop the written response section of the diploma exams for all math and science courses is a step backwards for many

students. For many of us, this decision also sends mixed messages from the department of education about the value of reasoning and communication in the new mathematics curriculum. It is said that we value what we assess. So, as dedicated professional teachers, we will need to work even more diligently to ensure that students know we believe that the processes of mathematics are equally as or more important than content knowledge. We can demonstrate this by continuing to implement written response assessments in our classroom practices. The MCATA executive was pleased that teachers and the minister of education, the Honourable Dave Hancock, attended our forum held just prior to the MCATA conference. The minister was able to hear directly from teachers about the real tension they will face with students who excel in the written response, yet struggle with multiple choice and numeric response. It is because we are a profession that cares about students that these teachers are distressed by the government's decision. I am confident that teachers in Alberta classrooms will continue to value students' written response work and expect students to explain mathematical processes.

Reflecting on the next steps for math educators, I think we need to look at the role of both assessment for learning and assessment of learning in the classroom and bring them into alignment with the new pedagogy. Until we start assessing the same way we are teaching, a true change will not take place.

Do math well and you can truly do anything!

Marj Farris



From the Editor's Laptop

appy New Year! I hope this newsletter finds you Real well rested after a well-deserved winter break. It is hard to believe we have already been back in the classroom for four months, yet when reflecting upon those four months I realize how busy we teachers are at all times. September is the time for getting to know your students and getting routines in place. October finds you busy planning, marking, and trying to meet the needs of all your students and balance a life outside of work. November brings report cards and December is, of course, busy both in and out of school with winter holidays, concerts and the like. Along with the usual hustle and bustle of every fall, mathematics educators also have the opportunity to participate in the MCATA conference, which is held in October each year.

This year one of my personal goals was to present sessions at two different conferences. As a fifth-year teacher, I decided it was time to step out of my comfort zone and share my passion for mathematics in the classroom with other teachers, both beginning and experienced. To this end, I presented on behalf of MCATA at the Beginning Teachers' Conference in Calgary this past fall and also put on a session at the MCATA conference in October. I am pleased to say I survived both experiences! One thing I learned is the fulfillment that comes from sharing some of your best ideas with colleagues. There is no reason to be scared, because we are all looking for new and exciting ideas to take into our classroom to meet the needs of the diverse student population we deal with every day. It doesn't just benefit other teachers when you present-you also benefit from the dialogue that happens in your sessions and the ideas that others share that build from what you presented.

I encourage all of you to consider how you might share your ideas with others in the profession. You don't have to present at a conference. It could be as informal as walking down the hallway at your school to discuss with another teacher the amazing lesson you just taught. Seek out new teachers who need mentors, experienced teachers who want to change their practice or a friend who is as excited as you are about the new curriculum. If you want to step out of your comfort zone, I encourage you to submit a speaker proposal for the next MCATA conference, "The Joy is in the Journey," to be held in Calgary in October 2010. The information and proposal form can be found on the MCATA website at www.mathteachers.ab.ca. Until next time, happy sharing!

Tancy Lazar



2010 MCATA Conference

Don't forget to mark your calendars now for the fall conference at the Coast Plaza Hotel & Conference Centre in Calgary, Alberta, on October 22–23, 2010. If you have something you would like to present to your colleagues, please fill out a speaker proposal form, which can be found online at www.mathteachers.ab.ca. The conference is sure to be a rewarding experience!

Putting Real Learning First

Real Learning First is an initiative of the ATA to communicate the message that teachers are ultimately responsible for evaluating and reporting student progress, and it stresses that effective assessment is built on trust and relationships built over time between teachers, students and their parents. Early last spring, Provincial Executive Council made a decision to infuse strategic thinking across the ATA, with a particular focus on Real Learning First.

Five years ago, the association created a committee to explore how the current accountability framework used by Alberta Education might be improved. We recognized that initiatives by government were driven by a 15-year-old model—a business model that reflected a very different time in the history of our province. With Alberta Education's Inspiring Education initiative under way, now is the time to implement assessment that truly represents the way children learn in the twenty-first century.

As you know, the minister of education has cancelled the written portion of the science and math diploma exams. This decision was made with no consultation with teachers. To his credit, he is giving consideration to changing the weighting in favour of the classroom teachers. This works toward achieving our longstanding policy of 80 per cent for the teacher mark and 20 per cent for the diploma exam. The minister has also said that he plans to cancel Grade 3 achievement tests. We are still waiting for the announcement.

Carol Henderson

Carol Henderson is president of the ATA and Provincial Executive Council's liaison to the Mathematics Council.

Highlights from Executive Meetings

September 2009

At this meeting, a lot of the discussion concentrated on the annual conference to be held in October at the Edmonton Marriott at River Cree Resort for the first time. Another agenda item was the announcement by the minister of education about the removal of Part A (the written portion) from mathematics diploma examinations for the 2009/10 school year. The executive passed a motion directing the MCATA president to write a letter to the minister of education saying that MCATA did not support the removal of the written response from diploma exams. This letter was vetted through Provincial Executive Council of the Association before it was sent. As well, the executive decided that instead of holding a symposium on the day before the conference, it would host an afternoon panel discussion regarding the significance and impact of removing the written response from the diploma exams. We spent time planning the format of the panel discussion as well as choosing stakeholders to invite as members of the panel.

November 2009

Because this meeting closely followed the annual conference, most of the meeting was spent considering the panel discussion that MCATA hosted and the 2009 conference, as well as planning the Spring Symposium in April 2010, in Calgary, and the annual conference in October, also in Calgary. We also spent some time sharing information with new executive members. The executive passed a motion requesting the MCATA president to write a letter to the ATA regarding the shortcomings of TNET with regard to the council's membership list and other related matters. As of November 27, 2009, MCATA had not received a response to the letter that we sent to the minister of education regarding the removal of Part A from the mathematics diploma exam in 2009/10.

Awards and Grants

Friends of MCATA 2009

The 2009 recipients of the Friends of MCATA Award were Hank Reinbold and Didi Heer.

Hank Reinbold was a teacher at St Albert Catholic High School for many years. Towards the end of his career in education, he was the Pure Math 30 manager for Alberta Education. Over the years, he was involved with several high school mathematics committees. He provided leadership to encourage the continuing enhancement of teaching, learning and understanding of mathematics for both teachers and students.

Didi Heer is the accountant for the ATA's subgroup services. She has provided support above the call of duty in reconciling the financial affairs of MCATA over the years.

Math Educator of the Year Awards

Linda Arndt

Linda is an exceptional mathematics teacher whose students live and breathe math. Linda teaches in such a meaningful way that mathematics comes alive not only for her students, but for their families, too. Over the past eight years, Linda has immersed herself in mathematics. She has an exceptional knowledge of the mathematics curriculum and has attended primary mathematics summer institutes as both a participant and a facilitator. There have been many requests for Linda to leave her classroom to become a consultant or divisional leader, but she steadfastly requests that she be allowed to stay in her classroom working with "her kids."

Brenda MacDonald

Brenda is an outstanding teacher and educational leader. She has served as curriculum coordinator and has provided professional development support to all math teachers in her school division. Brenda is a teacher of teachers and a leader of leaders; she is diligent, dedicated, committed and insightful. She is a wonderful role model for all teachers in the district for her professionalism and her concern for appropriate delivery of the new math curriculum. It is evident that Brenda truly cares that we instill in our students the love for math that she demonstrates to all who have been touched by her.

Dr Arthur Jorgenson Chair Award

This year's Dr Arthur Jorgenson Chair Award was presented to Jennifer Baerg. Jennifer graduated from the University of Alberta in December 2008. While at university, she served on the executive of the Science and Mathematics Education Students Association (SMESA).

New Executive Members

Jennifer Baerg

Trecently graduated from the University of Alberta, earning both a bachelor of science and a bachelor of education. My major in both of these degrees was mathematics. Currently, I am teaching Grade 8 and 9 mathematics at Fultonvale Elementary Junior High School, located outside of Sherwood Park, Alberta. I am also the lead mathematics teacher in my school for the new AISI Cycle IV. I have an enormous passion for mathematics, and I hope to transfer this to my students and colleagues. My role on the MCATA executive is the Dr Arthur Jorgenson Chair.

Alberta Education

The Revised Mathematics Grades 10–12 Program of Studies

Implementation of the revised high school mathematics program of studies will begin in September 2010, with the new Grade 10 courses replacing Pure Mathematics 10, Applied Mathematics 10, Mathematics 14, and Mathematics Preparation 10.

The publishers who have been selected to develop the authorized student basic and teaching resources for Mathematics 10C and Mathematics 10-3, 20-3 and 30-3 are as follows:

- Mathematics 10C
 - Pearson Education (will be translated into French)
 - McGraw-Hill Ryerson
- Mathematics 10-3, 20-3 and 30-3
- Pacific Educational Press (will be translated into French)

The resources are scheduled to be available in spring of the school year prior to implementation.

The first High School Mathematics Institute, "Seeing the World Mathematically! Math for All Students" (in both English and French) was held on Monday, January 25, 2010, at locations across Alberta (using both videoconferencing and face-toface interaction). The focus of the day was the implementation of Mathematics 10C and Mathematics 10-3. A second institute, tentatively planned for June 24, 2010, will continue the discussion begun in January. High school mathematics teachers are encouraged to attend all of the institutes. This opportunity is sponsored by the Alberta regional professional development consortia and is at no cost to participants. Registration is through the local consortium.

The standards documents for Mathematics 10C and Mathematics 10-3 will be available in a draft version on the Alberta Education website in February 2010. However, the development of a number of digital resources has been delayed. In particular, the Grade 10 mathematics glossary, Grade 11 standards documents and Grades 3, 6, and 9 planning guides will not be available as originally planned. A final release date is still to be determined.

Learner Assessment

An assortment of projects for both Pure Mathematics 30 and Applied Mathematics 30 are still posted on the Alberta Education website for classroom use. As well, the sample solutions for all of these projects can still be found on the extranet. Although there is no hard link to any particular numerical-response or multiple-choice questions on the diploma examinations, the projects still help students to make connections from their math classes to real-life contexts and allow them to utilize their problem-solving and communication skills and to demonstrate their creativity.

Learner Assessment has also been working on the implementation of the revised program of studies. The calculator standards and list of approved calculators will be published in the spring 2010 for students who are starting Grade 10 in the fall. Teachers who would like to be involved in the consultations for the information bulletins for Mathematics 30-1 and 30-2 or for other implementation activities should ask their superintendents to forward their names to Learner Assessment, Alberta Education.

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

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