



Mathematics Council NEWSLETTER

The Alberta Teachers' Association

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President's Message

Be-coming the new Math Council president has completely energized me. As I transition into this role, I am excited to address key issues facing math teachers in Alberta. This year, already, we have had the luxury of presentations from Jo Boaler and Sunil Singh to help us bring mathematics alive in our classes, and Francis Su and James Tanton will both be presenting at our fall conference.

I am new to this role, but if you feel that there is an issue that MCATA needs to address, please contact me directly at teacher.davidmartin@gmail.com.

Happy counting!

Dave Martin

From the Editor's Laptop

This fall, I was able to work with many math gurus and teachers focusing on math teaching and learning—definitely the best fall in my career! It is such a luxury for me to see different classrooms and teaching styles in mathematics, which helps me learn a lot and reflect on mathematics teaching and learning as I never have before.

One of the biggest things that resonates with me is that students who love math definitely have a teacher who loves math in them. So, math teachers, you might not know or notice, but your passion for math teaching definitely shines through. Your passion for math teaching or comfort level with teaching math is no doubt contagious; it will pass on to your students, like it or not. This is supported by John Hattie's research; teacher credibility stands at 0.90 and teacher-student relationships at 0.72 in terms of effect sizes.

Happy math teaching and learning!

Stacey Wu

Fall Symposium Summary

Almost 30 delegates had the luxury of watching Dr Boom make science come alive with up-close experiments. Afterwards, the delegates had the chance to tour NINT (National Institute for Nanotechnology) at the University of Alberta. Using electron microscopes, the group witnessed how small nanotechnology truly is.

Spring Symposium

Save the date for May 3, 2019, and watch for more details.

New Executive Profile

I am so excited to be working with passionate mathematics educators as your specialist council secretary, to inspire and be inspired, as we collectively and collaboratively find ways to increase our effectiveness at teaching and learning about mathematics.

So
Write outside the lines, even on the windows,
Pose more questions than you can give answers,
Make the rules, or at least a few conjectures,
Wonder, search for the beauty,
Connect visually to mathematics.
Just do mathematics!

Participating in an ongoing professional development group throughout my teaching tenure sparked my interest to explore more deeply how to improve student learning by developing and refining my teaching practice, specifically pedagogy and elementary mathematics subject knowledge. With the changes to the Teaching Quality Standard and curriculum, I cannot imagine a better time or circumstance to be investigating and assisting your council in how to support teachers in their growth. I look forward to being a part of the ever-changing landscape of education with others who hold similar passions for children, mathematics learning and educators.

Sincerely

Barb O'Connor

Executive Meeting Summary—September

Most of this meeting was spent updating all of the executive members on the details for the joint Math/Science conference and the 2018/19 proposed budget. Five members of the executive presented at the beginning teachers conferences in Edmonton or Calgary in September/October. Minister of Education David Eggen replied to a letter that was sent on behalf of the MCATA membership regarding bursaries for teachers to take mathematics courses at postsecondary institutions in the province. A few resources that have been developed by teachers will be shared with the

membership in the future and a new resource is in the development stage. Dale Block was selected to receive the Dr Arthur Jorgensen Chair Award for 2018/19 year, and Monica Andrew was selected for the Alberta Mathematics Educator Award. Both awards were to be presented at the joint Math/Science conference. Florence Glanfield was to be recognized for her work with the National Council of Supervisors of Mathematics, MCATA and the Province of Alberta, and Carol Henderson honoured for her work with MCATA while serving in many capacities with the ATA.

Save the Date for Conference

October 25 and 26, 2019, at Jasper Park Lodge. More details to follow.

Alberta Education Update

A recent statement from David Eggen, minister of Education, indicates the department's support for mathematics learning in Alberta: "We will work diligently to improve our math scores by reinforcing basic skills and by introducing new programs. Strong math skills are key to success in learning."

Following are some updates from the department.

- Presentations have been given to key stakeholders:
 - Preservice teachers
 - College of Alberta School Superintendents
 - Mathematics Council of the Alberta Teachers' Association
 - Curriculum Coordinator meetings
- Math Bursary Program—as of May 25, 2018, 251 bursaries accounted for a total of \$251,000, \$79,000 in the 2017/2018 fiscal year and \$172,000 in the 2018/2019 fiscal year.
- Future provincial curriculum:
 - Future K–4 curriculum is available for viewing on New.LearnAlberta.ca.
 - An implementation and resource plan is currently being developed.
 - The next phase of development has shifted from Grades 5–8 to Grades 5–9, with a target of December 2019 for ministerial signoff.
 - Development and ministerial signoff timelines for high school curriculum are currently being determined.

Publishing Under the *Personal Information Protection Act (PIPA)*

The Alberta Teachers' Association (ATA) requires consent to publish personal information about an individual. *Personal information* is defined as anything that identifies an individual in the context of the collection: for example, a photograph and/or captions, an audio or video file, artwork.

Some schools obtain blanket consent under FOIP, the *Freedom of Information and Protection of Privacy Act*. However, PIPA and FOIP are *not* interchangeable. They fulfill different legislative goals. PIPA is the private sector act that governs the Association's collection, use and disclosure of personal information.

If you can use the image or information to identify a person in context (for example, a specific school, or a specific event), then it's personal information and you need consent to collect, use or disclose (publish) it.

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Maggie Shane, the ATA's privacy officer, is your resource for privacy compliance support.

780-447-9429 (direct)

780-699-9311 (cell, available any time)

Alberta Mathematics Educator Award

Congratulations to Monica Andrew from Holy Trinity Catholic School in Red Deer! Monica is a division leader who works with school math leads, teachers, students and parents.

Monica is a champion of the growth mindset philosophy and, in word and action, models continuous growth to everyone. Monica is seen as knowledgeable, patient and understanding while demonstrating a passion for teaching with her students and colleagues. Her contributions to math teaching and learning are immeasurable.

A maximum of three mathematics educator awards may be conferred annually in recognition of demonstrated leadership in mathematics education in Alberta. More information is available at <http://mathteachers.ab.ca/alberta-mathematics-educator-award.html>.

ATA Educational Trust Specialist Council Grants

ATA Educational Trust Specialist Council Grants to attend a mathematics conference in 2018/19 were given to Corbett Artym, Dianne Brodie, Michelle Cloutier-Enders, Martina Fernandes, Lynn Gagnon, Helen Hammel, Kara Holst, Dawn Kuz, Chana MacDonald, Addie Otto, Amy Tetz, Amanda Thomson, Tracy Trautmann and Michelle Wotherspoon.

In order to receive one of these grants for an outstanding professional development opportunity for 2019/20, teachers need to apply by September 30, 2019. The application form is available online on the ATA website.

Friends of MCATA

MCATA formally recognizes deserving individuals who have been kind and generous in sharing their time, efforts and expertise through the years in service to MCATA, teachers and students.

This year, MCATA expresses its gratitude to Carol Henderson, Diane Stobbe, Jan Olson, Michael Chichak and John Nelson, who were declared to be Friends of MCATA.

Annual Report and Results of Election from the Annual General Meeting

At our annual general meeting (AGM), we were excited to acclaim Dave Martin as MCATA president and to elect Barbara O'Connor as secretary. Thank you to Sandi Berg for also running for secretary.

Dr Arthur Jorgenson Chair Award

Congratulations to Dale Block, a student from the University of Calgary! Dale is an outstanding student specializing in secondary mathematics education who has received the highly competitive University of Calgary Program for Undergraduate Research Experience (PURE) Award. Despite his high level of experience teaching school mathematics and being in a leadership position in heading a school mathematics department, Dale has always demonstrated openness to learn and try new things within and outside of coursework. As a mature and curious thinker, he is able to see value in all learning experiences and continually seeks out further knowledge, demonstrating that he already understands what it means to be a lifelong learner as a reflective teacher.

This award is presented by the Mathematics Council of the Alberta Teachers' Association (MCATA) to encourage students enrolled in education programs in postsecondary institutions throughout Alberta to pursue and commit to mathematics education. More information is available at <http://mathteachers.ab.ca/dr-arthur-jorgensen-award.html>.

PEC Report

We are now at the end of our yearlong celebrations commemorating the 100th anniversary of the founding of the ATA. Events included a banquet at the Annual Representative Assembly and the unveiling of a statue on the grounds of the legislature on World Teachers' Day. The statue, called "The Garden," features the profiles of seven faces arranged to represent a tree. Take a walk in the legislature grounds and have a look.

The focus for the ATA this year is member and political engagement. You can watch the Face of Education advertising campaign videos on the ATA website. Please visit www.iBelieveInPublicEd.ca to sign the pledge to support public education and then promote this on your own social media. The ATA is a nonpartisan organization, but it is not nonpolitical. We encourage all our members to become involved with the party of their choice and actively promote education as an election issue.

Recently the ATA surveyed our K–4 teachers about their readiness to implement the new curriculum. More than 2,800 teachers responded to the survey. Teachers expressed enthusiasm for the new curriculum with less content and more flexibility. However, the majority (76 per cent) believed that a one- to three-year implementation period is needed to do this properly. Teachers want to get this right, with proper field testing and resource development. The ATA continues to promote this message with Alberta Education.

Katherine D Pritchard

C³: Current Commentary by the Council

Note: The views expressed in this C³ do not reflect the views of MCATA or the ATA.

Close your eyes and imagine that it's the last week of June. The weather has been beautiful for a while now and you are excited for summer. You can't wait for camping, outside sports, spending time with your family. It's time for a well-deserved break. There is just one thing stopping you. Actually, it's more than one thing ... first, you have to write final exams. The province needs to see where you are in science, social studies, reading comprehension, writing, and math. To make sure, we'll double up on math and make you do a part without a calculator.

Fast forward to the last day of your exams. It's time for math. It may be your favourite subject or it may be the subject you struggle with the most. You may be feeling anxious right now just thinking about writing a math test. You have spent the last couple of weeks writing exams every day and you are tired of multiple choice and bubble sheets.

Imagine you write part one in the morning. It's difficult. You run out of time. You don't get to finish. You can't figure out why the test is trying to confuse you. You can't figure out why all of the answers are trying to trick you. You have a break for lunch and then have to write part two in the afternoon. This one says you are supposed to be able to do 20 questions in 20 minutes. It takes you five minutes just to finish the first question. The answer is a fraction. It takes you another couple of minutes to figure out how to put it into the answer boxes and fill in the bubbles. Now your heart is racing, you are sweating and you are starting to panic. Now you think you are stupid because you aren't going to have time to finish the test.

Imagine that you have trouble reading. Imagine that you have trouble focusing. Imagine that you are tired. Imagine that you are hungry. Imagine that you have test anxiety. Imagine that you just immigrated here a few months ago and this entire process has been done in your second or third language. Imagine that you have special needs. Imagine that you are struggling with your mental health. Imagine that your family is struggling at home. Imagine that you are a refugee. Imagine that you have all sorts of knowledge and ideas in your head that you can't explain to a multiple-choice test.

Imagine that your boss gets a letter in the mail saying you got 18 per cent on the math exam. Imagine that you don't get a promotion because of this mark. Imagine that this mark affects your future learning opportunities. You can only go to certain conferences and training seminars because you aren't good at math—that's what the test said. Imagine that you now believe that you aren't good at math and lack confidence to use math in your everyday life. Imagine that you tell your own children that you aren't good at math and they think it's genetic. Imagine you live the rest of your life trying to avoid math.

Now, imagine that you are 11 years old (Grade 6 PAT). Imagine you are 14 years old (Grade 9 PAT). Imagine you are 17 years old (Grade 12 diploma).

Would you like to be assessed, ranked and labelled as an adult? With a multiple-choice exam that is built to fit a bell curve? How about if you had to do it in four different subject areas? How about if you had to do it in a language you are just learning? Just because it

happens to us doesn't make it right. Just because it's how we've always done it doesn't make it right.

Government, if you need data, why don't we use math and trust statistics? Why don't we use a sample population? Why don't we make it anonymous so kids don't pay the price?

We are preparing our children for jobs that don't yet exist. Why are we using standardized tests when we don't want standardized learners or workers? We need flexibility, creativity, problem solving and perseverance, none of which can be assessed with multiple choice.

We know better, let's do better. Let's try to end standardized tests in Alberta.

Alicia Burdee

Upcoming 2019 Elections

The MCATA executive comprises elected positions such as president, vice-presidents, secretary and treasurer. Each of these positions is for a two-year term. Last year (2018), we acclaimed our president and vice-president publications and held a secret ballot election at our annual general meeting, in October, to elect our new secretary. This year (2019), the following positions are up for election:

- Treasurer
- Vice-President Professional Development

If either of these positions is of interest to you, please ensure that you get your nomination form in before the May 15 deadline. The nomination form is included in the newsletter and will be available on our website.

Teachers of Mathematics in the Edmonton Region (TERM)

Monday, April 8 is the second meeting for the 2018/19 school year. The meeting will be held at Paul Kane High School, in St Albert, at 5 PM. Please contact Donna Chanasyk at donnajc@telus.net for more information.

National Council of Teachers of Mathematics (NCTM)

Are you a member of NCTM? Is your school?

Did you know that MCATA is an affiliate of the National Council of Teachers of Mathematics (NCTM)? There are many benefits to being a member of NCTM as an individual, including an award-winning journal; access to online interactive math tools, lessons, activities and problems; and access to e-seminars. For more information, see www.nctm.org/uploadedFiles/Membership/indvmb_rchr0617_PP.pdf.

NCTM also offers school memberships. Is your school a member? If not, take a look at the school membership brochure, www.nctm.org/uploadedFiles/Membership/k8mbr_brchr0617_PP.pdf, and discuss it with your administration.

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Mathematics Council

of the Alberta Teachers' Association

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

NOMINATION FORM FOR MCATA EXECUTIVE

Ensure an active executive council by nominating teachers who will take an active role in making the Mathematics Council benefit all mathematics teachers. Nominators and nominees must be current members of MCATA and the ATA.

Nominations for the following offices for the 2019–2021 term are now being accepted:

- Treasurer
- Vice-President (Professional Development)

To nominate a candidate, complete the form below, and mail it to

Returning Officer
c/o Lisa Everitt, Executive Staff Officer
11010 142 Street NW
Edmonton, AB, T5N 2R1

The nomination deadline is May 15, 2019.

If an election is necessary, it will be conducted at the annual general meeting of the MCATA, which takes place during the council's annual conference. A special newsletter featuring the platform of each candidate will be sent to all members near the beginning of the 2019/20 school year. If a candidate wishes to include their platform in the newsletter, it should be sent to

Returning Officer
c/o Lisa Everitt, Executive Staff Officer
11010 142 Street NW
Edmonton, AB, T5N 2R1.

by **June 15, 2019**. Platforms should be a maximum of 500 words in length.

We, the undersigned members of MCATA, nominate _____
(name)

of _____
(address)

Teaching Certificate Number of nominee _____ for the position of _____.

Signatures and addresses of three nominators:

Name _____ Signature
Teaching Certificate Number _____
Address _____

Name _____ Signature
Teaching Certificate Number _____
Address _____

Name _____ Signature
Teaching Certificate Number _____
Address _____

I _____ accept this nomination.

(print name)

(signature of nominee)

By completing this form 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 this council.