



Mathematics Council NEWSLETTER

The Alberta Teachers' Association

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President's Message

Hello, everyone.
Thank you to everyone who was able to attend our annual conference, 2017: A Prime Year for Mathematics. We had a great turnout and have had a lot of positive feedback. A big thank you to the conference committee and the rest of the MCATA executive members for all of their hard work putting this event together.

We are currently planning for our Spring Symposium, which will be in Red Deer, on May 4. Stay tuned for more information. We are also looking forward to our second joint conference with the Science Council, which will be held in Edmonton, on October 19 and 20, 2018. We are excited to announce that Jo Boaler is one of our keynote speakers and that she will be running an afternoon breakout session. Keep your eyes open for more information and plan to register for this exciting learning opportunity.

Thank you to all the teachers involved in the curriculum writing across our province. A lot of work goes into this, and we appreciate all that you are doing. We are looking at how to better support our teachers across the province with PD opportunities and other math teacher support. Please follow us on Twitter at MCATA_Tweets and check out our website at www.mathteachers.ab.ca for information, resources and links. Contact us with ideas and suggestions. We love to hear from you!

Thank you, teachers, for inspiring students to love math. I hope your holiday season was relaxing and rewarding.

Alicia Burdess

From the Editor's Laptop

With Christmas just around the corner and the year of 2017 drawing to an end as I write, one of the many things that resonate with me from all the good reads this year is "strengths of the heart" in learning, which includes assets such as social maturity, open-mindedness, honesty, gratitude, agreeableness, kindness, humility, compassion, self-reflection, tact, empathy and forgiveness. At school, our instructions and assessments often focus on strengths of the head, but really not so much on strengths of the heart. An incredible educator who has been devoted to using heart strengths to help grow the head strengths in mathematics teaching and learning is Jo Boaler, one of our keynote speakers at our coming conference in the new year. Growth mindset is one of the strengths of the heart. Any math class definitely needs both to succeed. I am so looking forward to our conference in 2018!

Happy math teaching and learning!

Stacey Wu

**Spring
Symposium**

Save the date: **May the 4th 2018 be with you!**
More details to come!

Notes from the Executive

Annual Report and Results of Election from the Annual General Meeting

After the introduction of the executive members for 2017/18, executive members presented reports. Rod Lowry was acclaimed as vice-president of professional development. Darcy Bundy was selected as treasurer by a secret ballot election of the MCATA members in attendance. John Nelson will continue as treasurer until the financial report for the 2017 annual conference is finalized.

Executive Meeting Summary—September and November/December

Some of the members attended the NCTM annual conference in April and the ATA Summer Conference in August. Some presented at the beginning teachers' conferences in September and October. Most of the time was spent finalizing details for the symposium and the annual conference, which took place in October at the River Cree. Marj Farris and David Martin are co-chairs representing MCATA for the math/science 2018 conference. David Martin and Sandi Berg will be the co-chairs for the 2019 annual conference. A \$500 grant application from a member was approved. New members on the MCATA executive are Katherine Pritchard, PEC liaison, and Darin Trufyn, director at large.

Fall Symposium Summary

Fall Symposium was a great success. Sandi Berg and Dave Martin ran "Prime Yourself for Breakout." In the morning, the group had the opportunity to try out many different themed breakout boxes and also the chance to plan their own for an upcoming lesson. In the afternoon, we went to an actual breakout room and one group set a record. Overall, it was a blast and we had lots of fun.

Games Night at the Fall Conference

Every year, we host a games night at our fall conference. Attendees have an opportunity to learn new games, connect with other attendees and, hopefully, win a board game to take home with them. Games night is always a fun way to spend the Friday night of the conference. A big thank you to Dean Walls for bringing his collection of games for us to try and for his patience in teaching us how to play.

EdCamps

Professional Learning Reimagined!

Too often, conferences are “Sit and get” and you are never provided with an opportunity to talk with other educators, to find out what’s happening in other schools or to engage in the professional conversations that many of us wish we could have.

If you could sit down for an hour with another mathematics educator, what would you talk about? Redesigning the high school classroom? Assessing students? Written response on diploma exams? Engaging the edges of the class? Structuring for success? Problem solving? Basic math skills?

What questions would you ask? What ideas would you share?

Participants brainstormed those topics for conversations at the 2017 fall conference. Seven rooms were set up, each with at least one facilitator, whose role it was to guide—not lead—the conversation. Using the vote-with-your-feet method, participants

joined a session they felt would meet their needs. Opportunities to ask questions and share ideas flowed over the next hour. Many of those conversations continued throughout the rest of the conference.

MCATA would like to thank all the facilitators who were willing to help support those conversations. Without you, EdCamp would not have been a success.

Sandi Berg
Lorelei Boschmann
Indy Lagu
Rod Lowry
Dave Martin
John Nelson
Darin Trufyn
Tancy Whitehouse
Robert Wong

We look forward to hosting another EdCamp in the future.

Provincial Executive Council

This year we celebrate 100 years of the Alberta Teachers’ Association. As an association, we have come a long way since 1918. Improvements to salary, benefits, leaves, pensions and conditions of practice have been hard won over the years by many previous generations of teachers. We honour their legacy and look forward to the future.

Learn from the past. Inspire the future.

Our executive secretary no longer has to drive around the province signing up teachers, and it is rare to see a teacher being paid in chickens. However, many issues are still with us: professional autonomy of the teacher, curriculum, pedagogy, child poverty, class sizes and assessment.

The ATA is monitoring the implementation of the central table agreement, assisting locals with local bargaining and preparing for the next round of central bargaining, which will open in the spring. This does not

mean there is a deadline for locals to complete local bargaining. The ATA and TEBA (Teachers’ Employer Bargaining Association) have produced several bulletins to help teachers understand the central table agreement.

The ATA is a partner in the curriculum development process. We support our members involved in this important work, while at the same time protecting them and the process from becoming a political football. The Committee on Convention Review is up and running. There is a survey on the ATA website for members to give input. The committee will report at Summer Conference in August 2018. The ATA is continuing its support for the Walking Together for Reconciliation project. There are some great resources for teachers (in both English and French) on the ATA website.

Katherine D Pritchard

Mathematics Council Awards

Alberta Mathematics Educator Award

Congratulations to math teacher Scott Seland, from CW H Croxford High School, Airdrie! Scott has taught middle and high school for 27 years in Saskatchewan and Alberta. Scott is seen as kind, patient and understanding while demonstrating a passion for teaching with his students and colleagues. Scott is an incredible teacher, leader and person, and his contributions to his current and previous schools are immeasurable.

About the Award

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

Dr Arthur Jorgenson Chair Award

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

Friends of MCATA

Debbie Duvall, Karen Bouman and Carol Henderson were named Friends of MCATA.

ATA Educational Trust Specialist Council Grants

The following people received an ATA Educational Trust Specialist Council Grant to attend a mathematics conference in 2017/18:

Joshua Brown
Katrina Brown
Jessica Fouquette
Stephanie Hofmeyer
Nicole McRae
Renee Michaud
Sheree Murray
Kirsten Ouellette
Abdelhak Saddiki
Krystal Zhang

Upcoming 2018 Elections

The MCATA executive elects positions such as president, vice-presidents, secretary and treasurer. Each of these positions is for a two-year term. Last year (2017), we acclaimed our vice-president professional development and held a secret ballot election at our annual general meeting, in October, to elect our new treasurer.

This year (2018), the following positions are up for election:

- President
- Secretary
- Vice-President Publications

If any of these positions are 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)

The second meeting for this school year is on April 9, at Paul Kane High School, in St Albert, at 5 PM. Please contact Donna Chanasyk at donnajc@telus.net for more information.

C³: Current Commentary by the Council

Five Things I Was Not Doing as a Math Teacher ... That I Wish I Had

Recently, I heard a Harvard researcher state that “Sometimes the problem is not in what you are doing, but instead in what you are *not* doing.”

This made me reflect upon my first eight years of teaching math. What was I not doing that might have increased learning? If I could go back in time, here are five things I wish I had done more (or even at all), in no specific order:

- I never gave pictures to students and asked them, “Where should the origin be placed to best understand or work with this image?” Instead, I would always supply images to my students with a Cartesian coordinate already drawn on. If I could go back, I would make time for students to discuss and debate on where is the “best place” for the origin to be placed on an image to solve the problem given.
- I never explained what *simplify* truly meant. I would give students loads of questions and I would write “Simplify” as a directing word. In my classes, *simplify* meant add, subtract, factor, expand, combine like terms, rationalize denominator and so on. I wish I had showed students where, and ultimately why, each form may be simpler than other forms, and that if you change the question a different form may actually be simpler.
- I never asked students to actually measure needed quantities to solve problems. I usually gave students problems with all the information needed, even in the order they needed it, and then asked the

question. If I could go back, I would have started asking questions such as “To solve this problem, what would we need to measure and/or determine?” I think it is important that students know how to measure, but more important, that they know what is worth measuring.

- I never allowed students to be individuals, not only in the instruction process, but also in the assessment process. Most of my tests required students to learn the required material by the same day, and then even asked my students to demonstrate learning the same way. If I could go back, I would allow students to demonstrate learning when they have mastered the material, regardless of the speed and pace of the other students. In addition, I would also have asked students to relate their learning, when possible, to their passions and interests.
- I never built my course to allow connections to be built between essential learning outcomes. Instead, I built my course in units where I would teach outcomes as disjointed ideas and rarely make connections between each unit; I created silos of learning throughout the year. If I could go back, I would actually remove all notions of units in my course and instead weave big ideas throughout my entire course. Instead of teaching a big idea in September, and then only discussing it again during our final exam review, I would ensure that big ideas spanned the entire length of the course.

What things, thinking back, did you not do?

Dave Martin

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.

www.nctm.org/uploadedFiles/Membership/indvmbrrchr0617_PP.pdf

NCTM also offers school memberships. Is your school a member? If not, take a look at the school membership brochure and discuss it with your administration.

www.nctm.org/uploadedFiles/Membership/k8mbrbrchr0617_PP.pdf



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 2018–2020 term are now being **accepted**:

President, Vice-president (Publications), Secretary

To nominate a candidate, complete the form below, and mail to Returning Officer, c/o Lisa Everitt, Executive Staff Officer, 11010 142 Street NW, Edmonton, AB T5N 2R1

Nomination Deadline is MAY 15TH, 2018

If an election is necessary, it will be conducted at the Annual General Meeting of the MCATA which is run 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 2018/2019 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 15th, 2018. Platforms should be a maximum of 500 words in length.

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

of _____
(address)

Teaching Certificate Number of nominee _____ for the position of _____

Signature and addresses of three nominators:

Name _____ Teaching Certificate Number _____

Address _____

Signature _____

Name _____ Teaching Certificate Number _____

Address _____

Signature _____

Name _____ Teaching Certificate Number _____

Address _____

Signature _____

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.

Save the Date for Conference 2018 and Beyond

OCTOBER 19-20, 2018	Math/Science Joint Conference Location: Delta/Radison Hotels Edmonton, AB	ADMIT ★ ONE ★
OCTOBER 25-26, 2019	Math Fall Conference Location: Jasper Park Lodge Jasper, AB	ADMIT ★ ONE ★
OCTOBER 23-24, 2020	Math Fall Conference Location: Tentative Red Deer, AB	ADMIT ★ ONE ★

ATA Specialist Council Conference Grants (\$500)

The Ed Trust awards a number of grants to help defray the costs associated with attending an ATA specialist council conference. The application form for this grant will be posted in May. More information is available at <http://www.teachers.ab.ca>.

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.

Minors cannot provide consent and must have a parent or guardian sign a consent form. Consent forms must be provided to the Document Production editorial staff at Barnett House together with the personal information to be published.

Refer all questions regarding the ATA's collection, use and disclosure of personal information to the ATA privacy officer.

Notify the ATA privacy officer immediately of any incident that involves the loss of or unauthorized use or disclosure of personal information, by calling Barnett House at 780-447-9400 or 1-800-232-7208.

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

780-447-9429 (direct)

780-699-9311 (cell, available anytime)

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For a complete listing of the Math Council executive, please visit www.mathteachers.ab.ca.

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