President's Message

I hope everyone had a wonderful summer full of family, friends and good books. I am honoured to take over the position of president of the Mathematics Council of the Alberta Teachers' Association (MCATA) from John Scammell. John, thank you for all your hard work, and good luck in your future endeavours.

We have had some other changes to our executive. Jan Olson has taken over from Diane Stobbe as our Alberta Education representative, and Stacey Wu has taken over from Karen Bouwman as our newsletter editor. Thank you, Diane and Karen, for your years of service to our council. We will see you again at our conference. Welcome, Jan and Stacey.

MCATA also says a huge thank you and *au revoir* to Carol Henderson, who has served as our PEC liaison for over 20 years. We will miss you, Carol!

Some exciting things are happening in mathematics education. Alberta has launched a $1 million bursary program to help teachers strengthen their knowledge, skill and confidence in teaching mathematics. The goal of the bursary is to provide funding to encourage eligible current and future K–12 teachers to take a qualifying math pedagogy course. Bursaries in the amount of $1,000 are available to applicants who meet the eligibility criteria. For more information, go to https://education.alberta.ca/math-bursary/ or e-mail EDC.mathbursary@gov.ab.ca.

A lot of work has been put into the Elementary Mathematics Professional Learning (EMPL) website to support elementary math teachers in our province. Please explore the EMPL resources at http://learning.arpdc.ab.ca.

Mathematician James Tanton is leading the way for Global Math Week, an international math event happening October 10–17, 2017. Mathematicians, math educators and math lovers everywhere will come together to celebrate the joy of math. Teachers all over the world are signing up their students to participate. Participants will engage in an interactive video and activity that can be done online or offline. Go to www.explodingdots.org for more information.

I spent the summer learning what my new adventure as MCATA president will entail. Over four days in August, I learned how to be a president at the ATA's Summer Conference in Banff, and I am grateful for the experience and the support from our council. I look forward to representing our members as we work together to learn and teach our students. Please contact me with your ideas and comments at stone_alicia44@hotmail.com, or visit www.aliciaburdess.com.

Alicia Burdess

April 2017 Executive Meeting Summary

Vice-president Rod Lowry chaired the meeting as John Scammell had resigned as president.

From the executive members in attendance, Alicia Burdess was nominated as interim president until October 2018. Stacey Wu was appointed newsletter editor. The 2017–19 directors are Carmen Wasylynuik (awards and grants), Sandi Berg (publicity) and Darin Trufyn (director at large).

The agenda items were as follows:

- Courses and bursaries offered by the universities for teachers to deepen their understanding of mathematics
- Concern that Canadian affiliates of the NCTM are not being included in its reorganization
- Debrief of the April 2017 symposium
- Plans for future symposia and conferences

2018 Fall Conference

MCATA's 2018 fall conference, to be held October 19 and 20 in Edmonton, will be our second joint conference with the Science Council. We are excited to have Jo Boaler as a keynote speaker and session presenter. Boaler is a professor of mathematics education at Stanford University and the faculty director of YouCubed (www.youcubed.org).

From the Editor's Laptop

This is my first issue as editor of the *Mathematics Council Newsletter.* Serving as editor is such an honour, and I have big shoes to fill. Karen Bouwman, thank you for all your hard work!

My summer was filled with readings and reflections while I was taking graduate leadership courses with the University of Calgary. Inspired by all sorts of learning theories, I can't help but reflect on our math teaching and learning. Math is such a beautiful and creative subject, and teachers are no longer spoon-feeders. Every child has the ability to excel in math in an authentic, collaborative, interactive, personalized and cooperative learning environment. In such an environment, he or she is supported by the teacher's tailored feedback, which is focused on the development of students' math reasoning skills and personal growth instead of on merely correct answers or learning outcomes. A classroom that is truly focused on deep understanding and building math knowledge with connections to our world instead of on speed or test scores is fundamental. Technology is changing how we learn and how we act; one challenge is how we can personalize technology to the point that it will have an impact on personalized math learning. Math education is becoming more and more challenging— but exciting! Our education world has never been this alive and robust.

Welcome back! Happy math teaching and learning!

Stacey Wu

MCATA Grants

The MCATA executive encourages members to organize professional development initiatives. Grant applications for a maximum of $500 must be made in writing to the MCATA director of awards and grants, who will submit the application to the MCATA executive for approval. Applications must be received by **December 1** or **May 1** to be considered for the following six-month period.

Grant applications will be considered for mathematics education initiatives that support

- current learning and teaching practices, and
- current priorities as outlined by or through Alberta Education, local school districts, MCATA, the NCTM, the ATA or other reputable education associations.

Judgment of the merit of the initiative will be based on

- the nature of the project,
- the audience that will participate or benefit, and
- diversity in regional development opportunities for teachers.

For more information, contact Carmen Wasylynuik at carmenbt@telus.net. To apply, go to www.mathteachers.ab.ca/mcata-grants.html.

New to the MCATA Executive

Director at Large

MCATA's new director at large, Darin Trufyn, comes to the executive as a passionate learner willing to embrace new and challenging endeavours. He strives to live by the same philosophy he impresses upon his students: to be a lifelong learner.

Darin has 23 years of mathematics teaching experience at the secondary level, including the International Baccalaureate (IB) and Advanced Placement (AP) programs. Passionate about spatial reasoning and incorporating visuals, math labs and data into his classes, he has found teaching a natural fit. With the support of family, friends and colleagues, Darin has spent the last three years as a secondary mathematics consultant with Edmonton Catholic Schools, where he provides support in various forms to both students and teachers. He has coauthored two textbooks and presented numerous sessions, and he is currently volunteering his time to support the Association of Professional Engineers and Geoscientists of Alberta (APEGA) by providing questions for its Pi Challenge (a math challenge for Grades 7–9).

In his free time, Darin enjoys tinkering around in his garage, vintage cars, anything *Star Wars* and even reading a good math book. A recent highlight was meeting science writer Simon Singh at this year's National Council of Teachers of Mathematics (NCTM) annual conference in San Antonio, Texas.

Upcoming TERM Meetings

Two Teachers of Mathematics in the Edmonton Region (TERM) meeting dates have been set for the 2017/18 school year: November 6 and April 9. The meetings 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.

2017 MCATA Elections

MCATA will be holding a vote to elect a treasurer for the upcoming two-year term at our annual general meeting on October 20, 2017. Please refer to the June issue of the *Mathematics Council Newsletter* (www.mathteachers.ab.ca/newsletter.html) for the candidates' platforms.

PEC Liaison

I am Katherine Pritchard, the ATA South West district representative and the newly appointed liaison between Provincial Executive Council (PEC) and MCATA. I am replacing Carol Henderson, who has retired after many years of dedicated service. I wish Carol happiness in her well-deserved retirement.

I have always loved mathematics and numbers. Some of my earliest memories involve math: looking up the hymn numbers for Gran at church (before I could read the words) and playing cards with my mum. I took a combined honours degree in mathematics and French before moving to Canada in 1993. I then completed my BEd at the University of Lethbridge, specializing in mathematics education. I became a member of MCATA in 1998, when my local paid for each new inductee to join a specialist council as part of the induction ceremony. I have been a member ever since and appreciate the current no-cost membership that automatically renews each year.

I have taught mathematics in various high schools, including a short placement online. As a teacher in a mostly rural area, I am often the only high school math teacher at the school. I have taught every strand of the current curriculum, from Mathematics 10-4 to calculus, and have often taught several strands at the same time in various split class combinations.

I believe that we, as math teachers, must advocate for our students and ourselves. We know the realities of our classrooms and the needs of our students. The discipline of mathematics is so much more than memorized facts. Our challenge is to teach our students to think logically, to question, to problem solve, to seek out a solution and demonstrate it in an elegant and efficient manner, and to appreciate the beauty of mathematics.

I look forward to working with PEC and with MCATA.

Katherine Pritchard

Fall Conference: "2017: A Prime Year for Mathematics"

We are excited about our upcoming MCATA fall conference, "2017: A Prime Year for Mathematics," to be held October 20 and 21 at the River Cree Resort and Casino in Enoch.

Our keynote speakers are Michael Pruner and Sunil Singh. Pruner is a high school teacher in North Vancouver with a thinking classroom (following up on our Peter Liljedahl keynote at last year's conference). Singh, from Toronto, is the author of *Pi of Life: The Hidden Happiness of Mathematics* (Rowman & Littlefield, 2017). Both are passionate about learning and teaching mathematics.

We will follow the Edcamp (www.edcamp.org) model for one of the breakout sessions; come prepared with topics you'd like to discuss and learn more about. Don't forget to join us for the wine and cheese and our annual games night.

For more information and to register, please visit www.mathteachers.ab.ca. For conference updates, follow us on Twitter (@MCATA_Tweets).

Call for Proposals

We are still accepting speaker proposals! Go to www.mathteachers.ab.ca and click on Speaker Proposal.

Fall 2017 Symposium

"Prime Yourself to Breakout!"
October 19, 2017 (9 AM–3 PM)
River Cree Resort and Casino, Enoch
$75 per person

Keep October 19 open for the MCATA fall symposium! The topic will be how to break out from traditional math classes. Sandi Berg, Alicia Burdess and Dave Martin will show participants how to use a breakout box to engage students in mathematical concepts.

Have you ever participated in an escape room, where you had to solve a variety of clues to break out of the room? Do you remember the excitement you felt when you unlocked another lock and were one step closer to escaping?

You can bring that excitement to your classroom! Breakout EDU games are exactly what you are looking for. These breakout games are designed to build skills in problem solving, collaboration, communication and critical thinking in your classroom. Breakout games can be used to review or even introduce concepts in mathematics, science, social studies, language arts, health and music.

During this high-energy and hands-on session, participants will play a breakout game, investigate the logistics of implementation in a variety of classroom settings, examine design concepts and explore games created by other teachers.

For more information and to register, go to www.mathteachers.ab.ca.

MCATA FALL CONFERENCE

2017 A PRIME YEAR for Mathematics

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KEYNOTE SPEAKERS

Michael Pruner
Vancouver, BC

Michael Pruner is a high school mathematics teacher with a Thinking Classroom in North Vancouver. He is also the president of the BC Association of Mathematics Teachers.
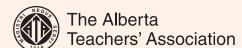
Sunil Singh
Toronto, ON

Author of the book *Pi of Life: The Hidden Happiness of Mathematics*, and a self-proclaimed Mathematical Jester, Sunil Singh is transforming the way mathematics is revealed and discussed all over North America.

October 20 and 21, 2017
Edmonton Marriott
River Cree, Enoch, Alberta

Social Events
- Wine and Cheese
- Games Night

@MCATA_Tweets

The Alberta Teachers' Association

For more information, visit
www.mathteachers.ab.ca