



Mathematics Council NEWSLETTER

The Alberta Teachers' Association

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President's Message

The Mathematics Council of the Alberta Teachers' Association (MCATA) has some exciting events planned for the rest of 2019. Make sure you don't miss out!

On May 3, we held a spring symposium for math coaches and teachers, in Calgary. In October, we will host our annual conference, in Jasper. For more information on MCATA professional development opportunities, visit our website (www.mathteachers.ab.ca).

As Alberta's new K-4 curriculum is being rolled out and trialed, I would like to thank all the hard-working teachers who represented mathematics in the rewrite and review sessions. Your efforts and dedication have been noticed as we update to an improved program of studies.

If you are interested in joining the MCATA executive, please visit our website and submit an application (under Forms).

Hope you had an amazing finish to the 2018/19 school year!

David Martin

From the Editor's Laptop

In everyday work in the classroom, when a math lesson focuses on the question "What mathematics is important?" or "What is the big idea behind the mathematics?" one can feel the teacher's passion, which is passed on to students. The teacher's reflections on that lesson most likely sound like this: "That's the most successful discussion I've ever had in class. They actually get it. I love it! Tomorrow, I think I will . . ." Before the teacher knows it, he or she has finished planning another lesson.

This is a pattern I have found in my own work. For me, this is definitely the teacher buy-in in math. Only when teachers believe in what they do will students work with them.

So, math teachers, why do you do what you want to do?

Happy mathing!

Stacey Wu

Notice of Motion

The MCATA membership will vote on an amendment to our constitution at MCATA's annual general meeting, to be held October 25, 2019, at the fall conference in Jasper. Please plan to attend!

With Gratitude

MCATA would like to thank some very important people who have spent a lot of time and effort serving as members of the executive over the years.

Marj Farris

Marj Farris joined the executive in 2009. She served a brief stint as director at large before becoming president. After serving as president for five years, she served four years as past president. During her time as president, she also took on the role of director of facilities when the position suddenly became vacant. She also served as conference codirector for two conferences.

Daryl Chichak

Daryl Chichak joined the executive in 1993. Over the past several years, he has served as membership director, as well as doing a term as past president when the position was left vacant. He helped organize and was codirector of several conferences, and he also assisted with registration at conferences for many years.

Donna Chanasyk

Donna Chanasyk joined the executive in 1994. Over the past several years, she has served as secretary. She also took on the role of promotions, organizing and ordering the many promotional items MCATA offers (including pencils, T-shirts, socks and the famous pi plates), and was kind enough to store those items (as well as other MCATA materials).

All of these wonderful members of our executive will be missed, not only for their dedication to the council but also for their passion for mathematics education. They have left big shoes to fill. We thank them for their service and wish them all the best in their future endeavours.

Contribute to *delta-K*

Do you have an idea or thoughts to share with other mathematics teachers? The MCATA journal, *delta-K*, is seeking teacher submissions.

Contributing to *delta-K* is something you could include in your yearly professional growth plan, and at the same time you would be sharing with others. Please consider submitting a lesson plan, an activity, a book review, a rich task or a research paper, or simply sharing something that worked in your classroom that other math teachers can try. Our combined collaboration can enrich all our students' math experiences.

Send your submission to lboschman@mhc.ab.ca. See your idea in print!

Lorelei Boschman



MCATA Grants and Awards

MCATA Grants

MCATA encourages members to organize professional development initiatives that support current learning and teaching practices and current priorities as outlined by or through Alberta Education, local school districts, MCATA, the National Council of Teachers of Mathematics (NCTM), the ATA or other reputable education associations. Grant applications for mathematics education initiatives may be considered.

MCATA will award grants to a maximum of \$500 to members. Submit an application form by **December 1 or May 1 of each year** to the director of awards and grants, Carmen Wasyluniuk (carmenbt@telus.net). The application form is available on the MCATA website at www.mathteachers.ab.ca (Grants and Awards > MCATA Grants).

Alberta Mathematics Educator Awards

Do you work with an awesome math teacher or math lead? Is a colleague at another school your go-to resource for teaching math?

Exemplary classroom teachers in K–6 and 7–12, as well as teachers who have made exceptional contributions to

professional development of teachers at the school, local, provincial or national level, can be nominated.

For more information and a nomination form, go to the MCATA website (Grants and Awards > Alberta Mathematics). The nomination deadline is **August 1 of each year**.

Dr Arthur Jorgensen Chair Award

A student teacher attending a postsecondary education program in Alberta will be selected on the basis of demonstrated academic excellence and a clear commitment to mathematics education in either specialization in mathematics at the secondary level or a keen interest in and desire to expand mathematics knowledge at the elementary level.

Application forms are available on the MCATA website (Grants and Awards > Dr Arthur Jorgensen Award). The application deadline is **April 30 of each year**.

In addition to MCATA grants and awards, ATA Educational Trust grants of \$500 are available for attending a specialist council conference in 2019/20. Apply by **September 30, 2019**, using the application form on the ATA website at www.teachers.ab.ca (My ATA > Programs and Services > Grants, Awards and Scholarships > ATA Educational Trust).

Conference 2019 Update

MCATA is excited to announce that James Tanton and Francis Su will be our keynote speakers for our annual conference, to be held October 25–26 in Jasper. Tanton is the mathematician at large for the Mathematical Association of America (MAA) and a founding member of the Global Math Project. Su is the Benediktsson-Karwa Professor of Mathematics at Harvey Mudd College, in Claremont, California, and a former president of the MAA (2015–17).

We are still accepting breakout session proposals. Go to the MCATA website (www.mathteachers.ab.ca) to submit a proposal. Presenting a session is a great way to share your gifts and talents, network with others, and enhance your own professional development.

New to the conference this year is the Mathematical Playground. On Saturday morning, delegates will be given time to play with math at various stations and to see how much fun fractions, exponents and arithmetic can truly be.

2018/19 Alberta High School Mathematics Competition

The 2018/19 Alberta High School Mathematics Competition (AHSMC) was held November 20, 2018 (Part I) and February 6, 2019 (Part II). The winners are listed below and at www.ualberta.ca/

mathematical-and-statistical-sciences/outreach/alberta-high-school-math-competition/.
Congratulations to the students, their teachers and their schools!

Part I

INDIVIDUAL PRIZES

First Prize—ConocoPhillips Scholar John Zheng, Western Canada High School, Calgary (Grade 11)

Second Prize Yundi George Duan, Western Canada High School, Calgary (Grade 11)
Liam Kusalik, Renert School, Calgary (Grade 11)

Third Prize David Luo, Old Scona Academic, Edmonton (Grade 12)

Grade XI Prize Xinhua Cao, Robert Thirsk High School, Calgary

Grade X Prize Alexander Cai, Old Scona Academic, Edmonton
Andrew Carlson, Old Scona Academic, Edmonton

Robert Barrington Leigh Memorial Prize Arnav Kumar, Webber Academy, Calgary (Grade 9)

TEAM PRIZES

First Prize—Peter H Denham Memorial Plaque Western Canada High School, Calgary, with John Zheng, Yundi George Duan and Yu Li (managed by Renata Delisle)

Second Prize Old Scona Academic, Edmonton, with David Luo, Katie Forbes and Alexander Cai (managed by Stephanie Gower)

Third Prize Renert School, Calgary, with Liam Kusalik, Shailah Aggarson and Anika Kehrig (managed by Vincent Chan)
Sir Winston Churchill High School, Calgary, with Daniel Chang, Oliver Sun and Sunny Zuo (managed by Shelina Kassam)

Zone I Prizes

INDIVIDUAL PRIZES

First Prize Yu Li, Western Canada High School, Calgary (Grade 11)
Kevin Zhang, Western Canada High School, Calgary (Grade 11)

TEAM PRIZE

Westmount Charter School, Calgary, with Christopher Monaghan, Andrew Li and Allan Cao (managed by Sandy Miller)

Zone II Prizes

INDIVIDUAL PRIZES

First Prize Basil Chin Ting Ng, Strathcona-Tweedsmuir School, Okotoks (Grade 12)

Second Prize Sixiong Xie, Strathcona-Tweedsmuir School, Okotoks (Grade 11)
Ajitesh Anand, Strathcona-Tweedsmuir School, Okotoks (Grade 12)

TEAM PRIZE

Strathcona-Tweedsmuir School, Okotoks, with Basil Chin Ting Ng, Ajitesh Anand and Sixiong Xie (managed by Michelle Melton)

Zone III Prizes

INDIVIDUAL PRIZES

First Prize Katie Forbes, Old Scona Academic, Edmonton (Grade 12)

Second Prize Ruhanjot Bhandohal, Old Scona Academic, Edmonton (Grade 11)

TEAM PRIZE

Harry Ainlay High School, Edmonton, with Qikun Remi Hou, Ge Amy Yu and Adedamola Akinola (managed by Mathias Stewart)

Zone IV Prizes

INDIVIDUAL PRIZES

First Prize Joseph Nahachewsky, Archbishop Jordan Catholic High School, Sherwood Park (Grade 12)

Second Prize Janice Fan, Holy Trinity Catholic High School, Fort McMurray (Grade 11)

TEAM PRIZE

Archbishop Jordan Catholic High School, Sherwood Park, with Joseph Nahachewsky, Seamus Ritcey and Ashley-Marie Ference (managed by Marge Hallonquist)

Part II

First Place—AHSMC Fellow Liam Kusalik, Renert School, Calgary (Grade 11)

Second Place—Peter H Denham Memorial Fellow Yundi George Duan, Western Canada High School, Calgary (Grade 11)

Third Place—Canadian Mathematical Society Fellow Xinhua Cao, Robert Thirsk High School, Calgary (Grade 11)
David Luo, Old Scona Academic, Edmonton (Grade 12)

Eighth Place—Alberta Teachers' Association Grade X Fellow Zijie Ma, Old Scona Academic, Edmonton

Fifth Place—Alberta Teachers' Association Grade XI Fellow Kevin Zhang, Western Canada High School, Calgary

Eighth Place—Robert Barrington Leigh Memorial Fellowship Ian Zhao, Renert School, Calgary (Grade 9)

HONOURABLE MENTIONS

Sixth Place Daniel Chang, Sir Winston Churchill High School, Calgary (Grade 11)
Oliver Cheng, Old Scona Academic, Edmonton (Grade 11)

Tenth Place Tony Shi, Sir Winston Churchill High School, Calgary (Grade 11)
John Zheng, Western Canada High School, Calgary (Grade 11)

Twelfth Place Andrei Neskov, Sir Winston Churchill High School, Calgary (Grade 12)
Jinyang Zhao, William Aberhart High School, Calgary (Grade 12)

Fourteenth Place Jingyu Chen, Western Canada High School, Calgary (Grade 10)
Isaiah Hazelwood, Western Canada High School, Calgary (Grade 11)
Katie Forbes, Old Scona Academic, Edmonton (Grade 12)

Seventeenth Place Vincent Chen, Western Canada High School, Calgary (Grade 10)

Eighteenth Place Shailah Aggarson, Renert School, Calgary (Grade 12)
Brendan Guilfoyle, Renert School, Calgary (Grade 12)
Zihang Liu, hosted by Calgary Olympic Math and Computer School, Calgary (Grade 10)
Yu Li, Western Canada High School, Calgary (Grade 11)

C³: Current Commentary by the Council

How My Dog Taught Me About Math

Last summer, my wife and I adopted a puppy that was found in a local garbage bin. After reading three or four books, I decided to teach my dog how to sit, stay, roll over, bark and do mathematics.

How do you teach a dog math?

Very easy, but first you have to teach the dog how to bark. Once I'd done that, I trained my dog to bark twice every time I say, "One plus one." She barks three times when I say, "Two plus one." Last, I trained her to remain silent when I say, "Four times zero."

She understands math, correct?

Before anybody argues, I do not believe that my dog truly understands math; she has only memorized mathematical commands. I wonder how many students go through math class with knowledge similar to that of my dog—memorized facts but very little understanding.

Years ago, my class was set up in such a way that I might have been training dogs, not teaching students. I would give students questions out of context, assign redundant homework, and reward speed and repetition with marks. My dog has taught me a more valuable lesson than I could ever offer her—that there is a large difference between memorization and knowledge.

David Martin

PEC Report



Each year, ATA policy and the upcoming year's budget are debated at the Annual Representative Assembly (ARA) in May. Provincial Executive Council (or PEC) is then charged with conducting the business of the Association between ARAs.

PEC is made up of the president and two vice-presidents, who are elected by the membership at large; 15 regional district

representatives; the past president; and the ATA's executive secretary.

Thank you to everyone who voted in the recent PEC elections. The new Council will take over in July. Congratulations to Jason Schilling, the newly elected president. Jenny Regal and Darrin Bauer were acclaimed as vice-presidents. Greg Jeffery will move

into the past president role. We wish Mark Ramsankar well as he leaves PEC after a decade of service.

This year's ARA took place in Edmonton over the long weekend in May. ARA is a great opportunity to witness the democratic nature of the ATA. The 425 delegates are selected by their locals to attend. They debate resolutions, set policy, scrutinize the budget and set the membership fee for the coming year. This year, delegates considered the results of a policy review. Delegates at a previous ARA directed PEC to find a way to logically organize ATA policy, deleting or merging resolutions that say the same thing and grouping where possible. The results of the review were accepted, and all ATA policy will now be grouped by topic. This will make it much easier for members to see what policy related to mathematics already exists and to determine whether MCATA should submit any new policy.

Katherine Pritchard

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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)

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Signed: _____

Print name: _____ Today's date: _____

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For a complete listing of
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