ISSN 1481-7799 **Spring/Summer 2026**

President's Message

May is always a busy time at schools as we navigate the final weeks of the year. Thank you all for your hard work this year in a challenging environment. As the count-down to summer begins, I hope you all get the chance to take a well-deserved break to rest and reflect.

The MTA executive is hard at work planning an engaging and informative conference for this coming October. We're excited to announce that Graham Fletcher and Vanessa Vakharia will be our keynote speakers. Graham is the creator of popular fact fluency resources and math progression videos. Vanessa is the author of *Math Therapy*, a book dedicated to helping students over-come math anxiety. It is going to be a great conference!

Teachers like you are the heart of this event. We en-courage you to share your expertise and **submit your presentation proposal here**.

Erick Lee, President
Mathematics Teachers Association

Message du président

Le mois de mai est toujours une période bien occupée dans les écoles alors que nous naviguons à travers les dernières semaines de l'année scolaire. Merci à toutes et à tous pour votre travail acharné cette année dans un contexte exigeant. Alors que le compte à rebours avant l'été commence, j'espère que vous aurez l'occasion de prendre une pause bien méritée pour vous reposer et vous ressourcer.

Le comité exécutif de l'MTA travaille d'arrache-pied à la pla-nification d'une conférence dynamique et informative pour octobre prochain. Nous sommes ravis d'annoncer que Gra-ham Fletcher et Vanessa Vakharia seront nos conférenciers d'honneur. Graham est le créateur de ressources populaires axées sur la fluidité des faits numériques et de vidéos sur la progression en mathématiques. Vanessa est l'auteure de *Math Therapy*, un livre dédié à aider les élèves à surmonter l'anxiété mathématique. Ce sera une excellente conférence !

Les enseignantes et les enseignants comme vous sont le cœur de cet événement. Nous vous encourageons à partager votre expertise et à **soumettre votre proposition d'atelier ici**.

Erick Lee, Président
Mathematics Teachers Association

In This Issue

Mathematics News

Chalkdust magazine Book of the Year 2025 — Each year, Chalkdust magazine releases a short list for its mathematics book of the year. The 2025 list of books would all make a great addition to your professional or personal reading lists. Here is the complete, impressive shortlist of nominees for the Chalkdust Book of the Year 2025:

- **The Mathematician's Library** by Thomas K. Briggs ***(Winner!)***
- **Unequal: The Maths of When Things Do (and Don't) Add Up** by Eugenia Cheng
- **The Mathematics of Origami** by Joseph O'Rourke
- **Proof: The Uncertain Science of Certainty** by Adam Kucharski
- **Think Like a Mathematician** by Junaid Mubeen
- **Sum Stories: Equations and Their Origins** by Robin Wilson
- **A Little History of Mathematics** by Snezana Lawrence

You can check out full reviews for each of these books on the Chalkdust website at chalkdustmagazine.com/book-of-the-year/book-of-the-year-2025/. Happy reading, everyone!

Building Thinking Classrooms Regional Conference — The 1st Building Thinking Classrooms Regional Conference is coming to Moncton, NB on July 6–7, 2026 and you won't want to miss it! Join teachers from across the region for two days of powerful learning, collaboration, and inspiration. Peter Liljedahl, author of Building Thinking Classrooms, will be the opening keynote!

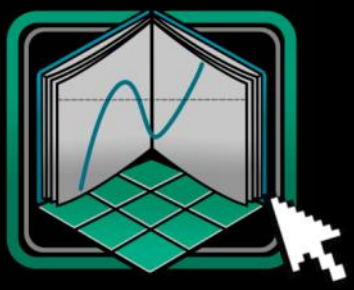
- **Location:** Harrison Trimble High School, Moncton, NB
- **Website:** https://btcmoncton26.netlify.app/
- **BTC Events Page:** https://www.buildingthinkingclassrooms.com/events

Mark Your Calendar for OAME 2027 — Looking for an inspiring way to expand your teaching toolkit and connect with mathematical thinkers across Canada? The Ontario Association for Mathematics Education (OAME) 2027 Annual Conference is going fully virtual from April 27–30, 2027. Centered around the engaging theme "Mathematics Through Stories: Cultivating Courage, Curiosity & Connection," this conference will explore how narrative-driven tasks and student experiences can shape mathematical identity, encourage classroom risk-taking, and ignite a deeper wonder for the subject.

Because OAME 2027 is entirely virtual and features a schedule with many sessions running during the evening, it presents a uniquely accessible professional development opportunity for Nova Scotia educators. Teachers can participate in top-tier workshops and hear from inspiring keynote speakers right from the comfort of home after the school day wraps up. No hassle or expense of travel and accommodations. To explore the conference theme, meet the featured speakers, and check for upcoming schedule updates, visit the OAME 2027 Homepage.

Tuesday April 27	Wednesday April 28	Thursday April 29	Friday April 30
Evening Keynote (6:00 - 7:30)	Evening Workshops (4:00 - 5:15) Evening Workshops (6:00 - 7:15) Evening Workshops (7:30 - 8:45)	Evening Workshops (4:00 - 5:15) Evening Workshops (6:00 - 7:15) Evening Workshops (7:30 - 8:45)	Daytime Workshops (10:00 - 11:30) Lunch & Learn (11:45 - 12:45) Keynote (1:00 - 2:30)

OAME 2027



MATHEMATICS THROUGH STORIES

cultivating COURAGE, CURIOSITY & CONNECTION

A VIRTUAL CONFERENCE vFAIRS

APRIL 27 - 30 2027

@oame2027

www.oame2027.ca

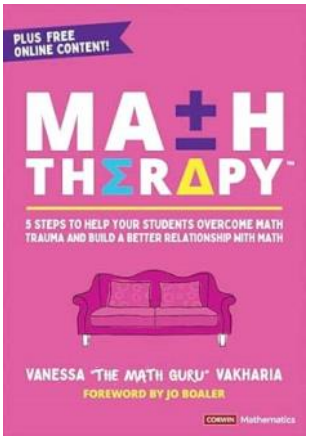
MTA Conference Update — Friday, October 23rd, 2026

Keynote Speaker — Graham Fletcher

Graham Fletcher has served in education as a classroom teacher, math instructional lead, and currently, as a math specialist. He continually seeks new and innovative ways to support students and teachers in developing a conceptual understanding of elementary mathematics. He is a coauthor of Building Fact Fluency and openly shares many of his resources at gfletchy.com. To learn more about Building Fact Fluency Toolkits, contact Lisa Martin.

Keynote Speaker — Vanessa Vakharia

Vanessa Vakharia is the founder of "The Math Guru" and the author of *Math Therapy*. She is a visionary leader dedicated to dismantling the "math person" myth once and for all. A rockstar in both the classroom and on stage (as the keytar-player for the band Goodnight, Sunrise), Vanessa uses her background in feminist theory and education to help students and teachers overcome math trauma and embrace a culture where STEM is cool, accessible, and inclusive.



NOVA SCOTIA MATHEMATICS TEACHERS ASSOCIATION
PROFESSIONAL DEVELOPMENT CONFERENCE

Nova Scotia MTA Conference 2026

Friday, October 23rd, 2026

MTA.NSTU.CA #NSMTA2026

Location - The MTA would like to thank **Charles P. Allen High School** in Bedford for once again hosting our 2026 conference. The size of this school allows us to host numerous sessions simultaneously and to make space for as many participants as we have sessions for. Being in a location that is near the centre of the province makes it reasonable for as many teachers as possible to have access to. We will be using the cafetorium at CPA to host the keynote sessions. Both of these keynote presenters have amazing messages to share and we want as many people as possible to be able to participate.

Speaker Proposals for October 2026!—The key factor in the success of the MTA conference is the willingness of Nova Scotian educators to share their knowledge and experience. So many amazing things are happening in our mathematics classrooms that can inspire and encourage fellow teachers.

Please reflect on what you might have to offer and consider sharing. Educators can submit proposals for conference sessions using this Google Form.

The Power of Podcasts

By Kirk Keating, Middle School Mathematics Teacher, Instructional Lead, Chignecto Central Regional Centre for Education (CCRCE)

It takes time, reflection and perseverance to implement micro and macro Building Thinking Classroom moves daily. Having someone in your building to collaborate and co-teach with can help a great deal to change and tweak practices. Podcasts can also be a powerful tool to help strengthen micro and macro moves or push your practice to try a new move. I listen to a lot of podcasts in the morning before school and am learning a lot from listening to educators talk about teaching and learning mathematics. Many podcast episodes have had a direct impact on helping me with the launch, body and closing of a lesson.

Here is a reflection on how two episodes had an impact on teaching and learning mathematics in my classroom.

Little Minds Big Thinkers Episode 32—Manipulatives in the Thinking Classroom with Kim Rimbey

After listening to this episode on manipulative use in the thinking classroom and having the opportunity to connect with Kim to continue the conversation, I started to have a manipulative bucket at each group. Once we introduced a manipulative, it went in the bucket. As the bucket fills up, students are building their toolkit and have more chances for implicit access and choice as there are several different manipulatives available for students to choose from during tasks.

I started to do this immediately and noticed that during a task that I facilitated soon after, all students chose either cuisenaire rods or fractions strips to show their understanding of the difference between different lengths of snakes. I didn't have to nudge or explicitly tell students to use linear models, this was their go to choice. Task link: Evergreen [Day 2] from Make Math Moments. Here are some pictures of what this looked like in my classroom during the launch, body and closing.

Kim also talks about the importance of transferring Ideas from using physical manipulatives to visual tools, symbolic, verbal and between different modes (Lesh Translation Model). This is something I am working on and making sure I am nudging students to make connections to different representations when they are working at their boards as well as during the closing and launch of the lesson.

I would recommend checking out the green Building Thinking Classrooms book, "Mathematics Tasks for the Thinking Classroom, K-5" Pages 18 - 23, this section that unpacks manipulatives in a thinking classroom as well as Kim Rimbey's blog about using manipulatives when building a building a thinking classroom.

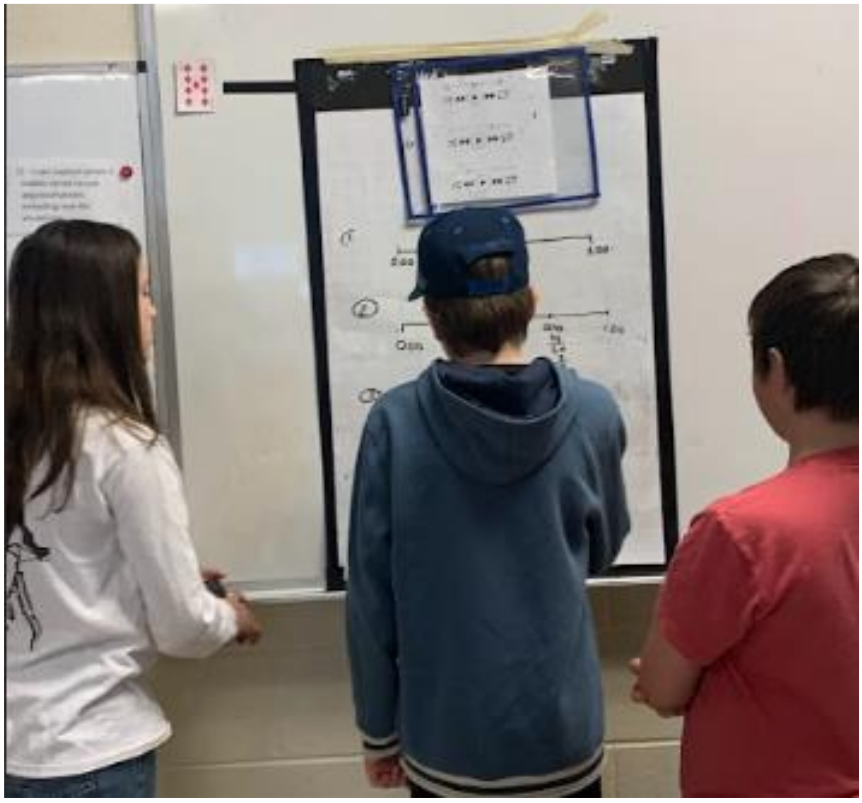
Think. Thank. Thunk. Episode 32—Peter & Maegan's K-5 Task Book

This episode helped me continue to improve on thin slicing, closing the lesson and gave me two new tasks to try. After hearing Maegan and Peter reflect on one of their favourite tasks in their new book, *Mathematics Tasks for the Thinking Classroom Grades K-5*, I decided to try them out. **Larger By a Fraction** and **Musical Fractions** were two great tasks for our grade 7 math class. We needed tasks to continue to deepen our understanding of equivalent fractions and comparing fractions. Both of these tasks provided all of that and more, allowing every student to have access to the task to build their understanding of comparing fractions and equivalent fractions.

Larger by a Fraction's strong emphasis on the area model to compare fractions was a perfect fit as it helped students start with friendly benchmark fractions during type 1 tasks: comparing fractions with the same shape, then

The Power of Podcasts… continued

nudged students to see type 2 tasks: comparing fractions with different shapes and finally type 3 tasks: comparing fractions with different denominators. For type 3 tasks, I gave hints like, “What shape can we show both of these fractions in?”, “What shape could fit fourths and fifths?”, “How can we reorganize into more or fewer equal parts so we can compare?”. Rectangles started to emerge after some attempts of trying to slice circles. I consolidated from the bottom through a teacher scribe noticing and naming variation followed by students engaged in check your understanding questions provided from the green book.



*A group of students working on the **Musical Fractions** task. When giving hints, I ask for their marker and after giving the hint with their marker, I give it back to a different student.*

Musical Fraction’s focus on using a linear model helped students build on their understanding of fractions as division, fraction equivalence and visualizing & estimating fractions on a number line. Students were hooked from the launch and through the three types of tasks followed by another noticing and naming variance consolidation scribe. I spread this task into two days and we did check your understanding one day after the consolidation scribe and notes after the consolidation scribe the next day.

Both tasks helped me bring more structure through the launch, body and especially the consolidation scribe part of the closing and provided my students with engaging and meaningful learning experiences. Our students brought these tasks alive and I would highly recommend trying these out.

*Consolidating the **Greater By a Fraction** task.*

You can find many podcast episodes geared towards Building Thinking Classrooms on the BTC Podcasts webpage. I hope they will inspire you, keep you connected to the Building Thinking Classroom community and help you and your students.

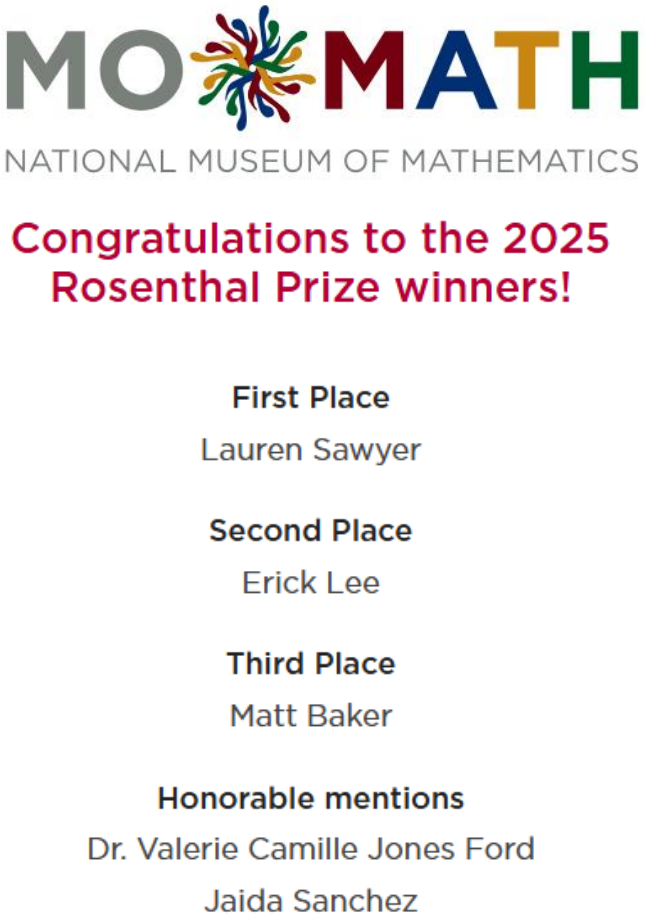
MTA President Erick Lee Wins 2025 Prestigious Math Award

By Anne Pentecost, Vice President of the NS Math Teachers Association

The Rosenthal Prize for Innovation and Inspiration in Math Teaching is a prestigious annual award recognizing innovative, hands-on math lessons in upper elementary and middle school. The prize celebrates inquiry-based, novel teaching methods that engage students in grades 4–8. The prize was established to honor Saul Rosenthal, a major supporter of mathematics education and aims to encourage creative teaching that moves beyond traditional methods, specifically seeking activities that connect to real-life scenarios and encourage student thinking.

Judges for the award look for originality, solid mathematics, ease of implementation, and a hands-on engaging approach. The winner receives a cash prize and has the opportunity to share their activities with educators around the world. The award is administered by the National Museum of Mathematics (MoMath) in New York, where Erick went in January of 2026 to gladly accept his prize.

On behalf of our provincial math community I want to commend Erick on this well-deserved award and thank him for his unwavering commitment to mathematics education.



In Memoriam: Marc Luc Deveau

C'est avec une profonde tristesse que nous partageons avec vous le décès de Marc Luc Deveau, un ancien membre du comité exécutif de la MTA, survenu le 8 mars 2026 à l'âge de 41 ans, suite à une courageuse lutte contre le cancer.

Marc a été un membre inestimable de l'équipe de la MTA, occupant pendant de nombreuses années le poste de représentant du CSAP. Au cours de ses années au sein du comité, Marc a apporté une présence posée et réfléchie, ainsi qu'une voix forte en faveur de l'enseignement des mathématiques en français au sein de notre association. La MTA offre ses plus sincères condoléances à sa famille, ainsi qu'aux nombreux collègues et élèves dont il a marqué la vie.

It is with deep sadness that we share the passing of former MTA Executive member Marc Luc Deveau, who passed away on March 8, 2026, at the age of 41, following a courageous battle with cancer.

Marc was an invaluable part of the MTA team, serving as our CSAP Member-at-Large for many years. During his years on the executive, Marc brought a steady, thoughtful presence, and a strong voice for French-language math education to our association.

The MTA extends its heartfelt condolences to his family as well as the many colleagues and students whose lives he touched.

Sharing Your Classroom Story: Writing a Conference Proposal

By Erick Lee (@TheErickLee.bsky.social), MTA President, Mathematics Teacher/Registrar, Citadel High School (HRCE)

As we approach the end of another busy school year and tackle our professional growth plan reflections, I'm reminded of how lucky I am to be able to connect and learn from inspiring educators from my school, region and across Canada. At the end of April I had the opportunity to attend, and present at, the Ontario Association for Mathematics Educators (OAME) 2026 Conference in London, Ontario.

When I was preparing a session proposal for this conference at the beginning of the school year, I had to ask myself, "*What story from my classroom is worth sharing? What do I have to offer other teachers to inspire or energize them?"* Writing a proposal can be intimidating. Over time, however, I've begun to see it differently. The act of writing a proposal has become one of the best ways for me to reflect on my teaching practice.

Participating in a session at OAME 2026.

At the time, I had recently finished reading James Lang's book *Small Teaching* and was struck by how many of his suggestions aligned with what I was already doing in my classroom. I learned about the research behind these practices and how I can further refine them to make them more effective. For the past few years, I've opened each class with a short math question or discussion prompt to get students thinking and engaged. This became the topic of my session, titled "Bigger on the Inside: The Surprising Power of Short Math Routines."

Writing the proposal helped me understand what I valued most about my own practice. These routines aren't revolutionary, just a few minutes of reasoning, estimating, or making connections. But when I started reflecting on why these small moments felt so powerful, I realized there was a story worth telling. Writing a session description, limited to a strict character count, forced me to distill what mattered most. Why do these routines work? What do they accomplish beyond filling time at the start of class?

That's when I realized that the proposal itself *was* the reflection. Applying to present at a conference made me pause long enough to see my teaching with a sharper focus.

Presenting this session at OAME 2026 was a great experience. Speaking with educators from across Ontario as they engaged in these routines from my classroom was incredibly rewarding. The questions and feedback from attendees gave me fresh insight to incorporate back into my own classroom.

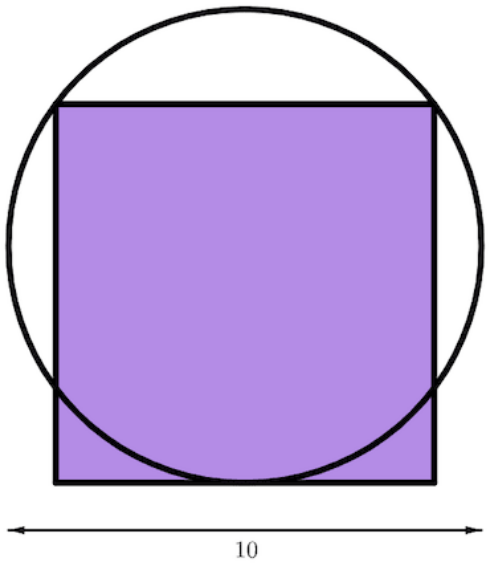
But as valuable as the presentation itself was, I've realized that the true power of a proposal doesn't actually depend on getting accepted. Even when a proposal isn't accepted (I have some personal experience with this), the process of writing one helps me articulate what I believe about teaching. It makes me identify the threads that have been running through my practice and see how they connect to broader ideas in math education. In a profession where one busy day flows into the next, writing a proposal helped me to pause, reflect and make connections.

As we look forward to our own Nova Scotia Math Teachers Association conference this October, I encourage you to submit a session proposal of your own. You don't need a ground-breaking idea or a paradigm-shifting pedagogy. Start with a moment from your classroom that you're proud of or felt energized by and see where reflecting on that takes you. Even if you never submit your proposal, you'll likely discover something important about your own teaching in the process.

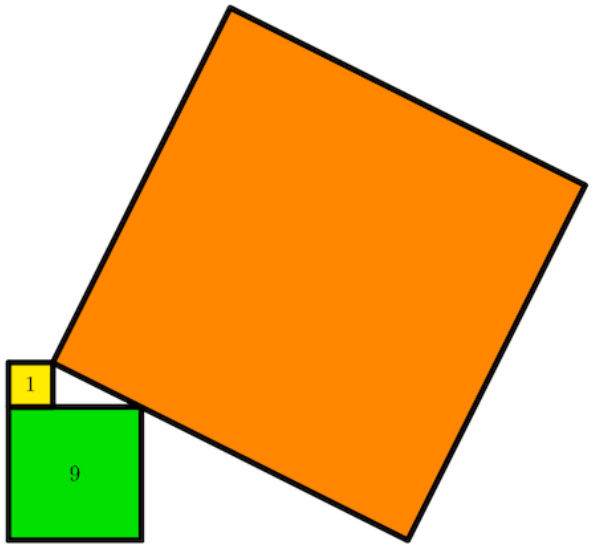
In the end, that's what makes writing a proposal so worthwhile. It gives you a chance to share your ideas with our amazing community of math educators, and in doing so, clarifies your own teaching practice.

Adventures in Logic and Reasoning

Geometry Puzzles from Paulo Ferro



Puzzle #28 — A circle has diameter 10.What is the area of the square?



Puzzle #26 — An orange square is tangent to a yellow and a green squares with areas 1 and 9, respectively. Its right bottom vertex is aligned with the green square's base. What is the area of the orange square?

Mastering Geometry Puzzles by Paulo Ferro was released in April 2026. It is a book of visually intriguing geometric puzzles. The 120 puzzles are organized into different levels of difficulty, from very easy to challenging. All of the puzzles have step-by-step solutions. Paulo Ferro is a mathematics teacher as well as an author. He has been published in the NCTM, The New York Times, The Guardian, and American Scientist. He also has a math blog called ENIGMATH, where he publishes a variety of puzzles and mathematical games.

Puzzles share with permission by the author, Paulo Ferro.

The Canterbury Puzzles — The Miller's Puzzle

The following puzzle is from Henry Ernest Dudeney's *The Canterbury Puzzles* from 1907.The puzzles are written in the style of Chaucer's **Canterbury Tales**.

The Miller next took the company aside and showed them nine sacks of flour that were standing as depicted in the sketch. "Now, hearken, all and some," said he, "while that I do set ye the riddle of the nine sacks of flour. And mark ye, my lords and masters, that there be single sacks on the outside, pairs next unto them, and three together in the middle thereof. By Saint Benedict, it doth so happen that if we do but multiply the pair, 28, by the single one, 7, the answer is 196, which is of a truth the number shown by the sacks in the middle. Yet it be not true that the other pair, 34, when so multiplied by its neighbour, 5, will also make 196. Wherefore I do beg you, gentle sirs, so to place anew the nine sacks with as little trouble as possible that each pair when thus multiplied by its single neighbour shall make the number in the middle." As the Miller has stipulated in effect that as few bags as possible shall be moved, there is only one answer to this puzzle, which everybody should be able to solve.

Nova Scotia Math Teachers Association Executive

Below are the current members of the NS MTA Executive. The membership and the positions of the executive change each year at the Annual General Meeting held at the MTA Provincial Conference (The MTA provincial conference is on the fourth Friday in October of each year).

Name	Position
Erick Lee	President / Communications
Anne Pentecost	Vice-President
Kimberley McCarron	Treasurer
Jennifer Courish	Secretary
Lori Burns	Conference On-Site Chair
Angela MacLeod	Member-at-Large Halifax
Joe MacDonald	Member-at-Large South Shore
Brad Pemberton	Member-at-Large Annapolis Valley
Kelly Legere	Member-at-Large Tri-County

Special Projects

The MTA strives to give back to its membership by making funding available for special projects developed by classroom teachers. If you have an innovative math education project taking place in your classroom(s), MTA may be able to offer some financial assistance to help develop the project. Information on funding can be obtained by contacting any member of the Executive.

Call for Contributions

We are better together. Mathematics Matters, the MTA newsletter, is looking for a variety of contributions from classroom teachers, math mentors and coaches, math support/intervention teachers and others who are interested in the teaching and learning of mathematics. Please consider sharing a favorite lesson or activity, a reflection or blog post, a book or technology review, or another work of interest to mathematics teachers in Nova Scotia and beyond. Sharing your ideas and reflections with other teachers is a great way to contribute to a vibrant and dynamic community of mathematics educators in our province.

If you are interested in contributing, please get in touch. We look forward to hearing from you!

The MTA Newsletter is published by the NSTU for the Mathematics Teachers Association, Erick Lee, Editor.
The opinions expressed are not necessarily those of the Editor, the NSTU, or the MTA.