

President's Message	2
In Memory of Joseph E. Cicero	3
AMATYC Dues Increase	4
AMATYC Executive Board Elections	4
Project ACCESS	5
Student Research League	5, 8
Conference News	6, 8, 11
Teaching for PROWESS	7
ANet News	7-10, 12
Calendar of Events	8
Do I Really Need a Lesson Closure	9
Message from Website Coordinator	9
Math Anxiety	10
Helping Students Discover Real-World Uses of Mathematics	11
Mu Alpha Theta	11
Highlights of Board Meetings	11
Focus on Affiliates: MMATYC	13

## Life, Liberty, and the Pursuit of Mathematics in Historic Philadelphia

by Celisa Counterman, Local Events Coordinator



This November, as we gather in Philadelphia under the theme “Life, Liberty, and the Pursuit of Mathematics,” we meet in a city where the language of liberty was drafted, debated, and defended. The same spirit of rigorous argument, careful reasoning, and bold imagination that drives mathematical discovery once shaped our nation here. Between sessions and panels, we invite you to explore some of the 67 National Historic Landmark sites that make Philadelphia a living testament to intellectual courage.

Begin at Independence National Historical Park, often called “America’s most historic square mile.” Inside Independence Hall, delegates debated and adopted both the Declaration of Independence and the U.S. Constitution. Stand in the Assembly Room and imagine the intensity of those discussions—spirited, imperfect, and transformative.

Across the green, the Liberty Bell remains a powerful symbol of freedom and responsibility. Nearby, Congress Hall and Carpenter’s Hall deepen the story of early American governance. For mathematicians, these spaces offer a familiar scene: ideas proposed, challenged, refined, and ultimately formalized. Liberty, like mathematics, was not assumed—it was constructed.

The Museum of the American Revolution and the National Constitution Center provide immersive explorations of the nation’s founding documents and debates. If you appreciate elegant arguments and enduring frameworks, you will feel right at home here. And no visit would be complete without encountering Benjamin Franklin at Franklin Court and the Benjamin Franklin Museum—and perhaps even our own version of Franklin in the Hospitality Room! Printer, scientist, diplomat, and inventor, Franklin embodied intellectual curiosity. His work in probability and practical problem-solving reminds us that the pursuit of knowledge has always crossed disciplinary boundaries.



Assembly Room at Independence Hall  
Photo courtesy of National Park Service

“Life, Liberty, and the Pursuit of Mathematics” echoes a familiar phrase, but it also speaks to our work as scholars and educators. Mathematics, like democracy, depends on open inquiry, transparent reasoning, shared standards of evidence, and a community committed to truth. In Philadelphia, you will walk streets where foundational principles were drafted with care, defended with logic, and sustained through debate.

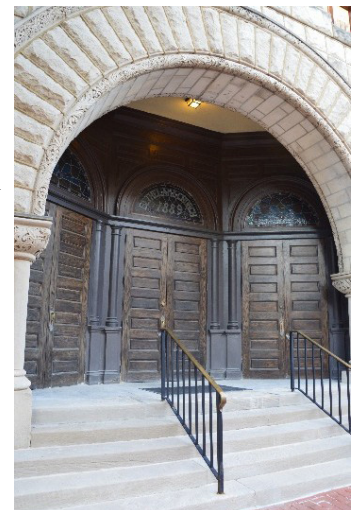
As you present research, mentor students, share new ideas, and collaborate with colleagues this November, take time to step outside the conference walls and into the city that gave enduring meaning to liberty—and to the pursuit of big ideas.

We look forward to welcoming you to Philadelphia, where history and mathematics come together in inspiring ways.

Liberty was not only debated in grand halls—like today, it also lived in row houses, workshops, and the lives of everyday people. Walk along Elfreth’s Alley, the nation’s oldest continuously inhabited residential street, and glimpse daily colonial life. Visit the Betsy Ross House and the President’s House Site to reflect on both the aspirations and complexities of early America. Walk on hallowed ground at Mother Bethel AME Church, the first Black church in the United States, and explore more than 360 years of Jewish history at the Weitzman National Museum of American Jewish History. History here is layered and human, much like the long arc of mathematical development.



Constitution Center  
Photo courtesy of Celisa Counterman



Mother Bethel AME Church  
Photo courtesy of Celisa Counterman

# President's Message



## The Hallway is the Conference

*Eddie Tehertchian*

Los Angeles Pierce College • Woodland Hills, CA

One of my favorite things to do each year is attend the annual AMATYC conference. Every year I find myself learning something new from one of the great talks I sign up for at the conference, whether that be the use of technology in the classroom, an innovative approach to teaching a certain topic, or simply a cool math fact of which I was unaware. Oh, and there is IGNITE, which I've had the honor and pleasure of hosting for the past five years. It is always a highlight! However, we all know that the talks at the conference are only half the reason we attend each year. Many long-time attendees also know that the real "learning" takes place in the hallways, between talks, and even at lunch and dinner. It is where we truly form community. It is where we chat with fellow attendees, presenters, ANet-ers, and colleagues. There is really something gratifying about exchanging ideas about teaching math over a glass of wine and a hot meal. Perhaps a cup of coffee or a bowl of chicken soup is what the soul needs when a math faculty member shares about what is happening at their campus to someone who teaches across the country.

I have been teaching mathematics at Los Angeles Pierce College for fifteen years. A couple of years ago, ten full-time math professors from my college attended the 50<sup>th</sup> conference in Atlanta, GA. Of course, we hung out together throughout the four days, at lunches, dinners, and on the trips from and to the airport. We eventually pointed out the irony. It took an event in Atlanta, GA, to bring ten of us together from Los Angeles, CA. That is how powerful a community we have at AMATYC.

Having been involved with the organization for many years now, I have had the opportunity to meet people from throughout the country at AMATYC events. They have shared that they have "AMATYC friends," or "AMATYC people," and even "AMATYC relatives," just to name a few terms I have overheard. What does it all mean? It means there are certain people whom folks see year after year only at AMATYC and catch up with about life, teaching, and just about everything else. Everyone has their "AMATYC family." The AMATYC conference is an event marked by the power of community.

Many of us probably attend other conferences, too. I had the honor, representing AMATYC as President, of already attending and presenting at two annual events in 2026 for two of our partner organizations. The 2026 Annual Conference of the Association of Mathematics Teacher Educators (AMTE) took place in Portland, OR, on February 5–7. Only a couple of weeks later, the National Organization for Student Success (NOSS) held its 50<sup>th</sup> annual conference on February 22–25 in New York City. These were two

wonderful events that really made me think: what is a conference, really? Most will still say it is an event full of professional development opportunities in various formats and a way to network. But I am increasingly convinced, as I attend more of these events, that an organization's annual conference, usually its culminating event for the year, is the foundation of its community.

The AMTE conference felt like a family gathering. President Farshid Safi and the AMTE board did a fantastic job hosting their family members. I felt like an honored guest at the table because I was part of a presidential exchange panel focused on future collaboration between math organizations. It is interesting to note how much AMTE resembles AMATYC. The two conferences are about the same size. AMTE has affiliates throughout the country, much like AMATYC. While AMTE's focus is on math teacher educators, many of the presentations would have been a great fit at an AMATYC conference. Ideas included utilizing technology, creating equitable practices in the classroom, teaching with active learning, implementing nontraditional grading schemes, and, of course, at the heart of it all, some math too. I look forward to collaborating more with AMTE soon.

The NOSS event took place during the New York City blizzard in February. I was lucky to be on one of the last flights allowed to land at JFK Airport before the city closed to prepare for the giant storm. While the winds and snow spared nobody outside the Hilton Midtown in Manhattan, the student-success-centered talks and presentations about technology rang loudly inside. NOSS, formerly known as NADE (National Association for Developmental Education), always features great talks. Math, English, and counseling faculty, along with some students, attend the event. With this being the 50<sup>th</sup> anniversary of their conference, the NOSS group was in celebration mode. And there was plenty to celebrate. The presence of community could be felt throughout the building, despite the nasty weather outside.

As I embark on more conference journeys this year, I cannot help but think about Philadelphia in November. A lot of history will come together in the City of Brotherly Love this year. In August, the country will celebrate the 250<sup>th</sup> anniversary of the signing of the Declaration of Independence. While unanimously adopted on July 4, 1776, the document was signed on August 2, 1776. The Year of Math initiative ([www.theyearofmath.org/](http://www.theyearofmath.org/)) will hopefully "reintroduce" mathematics to the country, and AMATYC will rock the bell (no pun intended) in Philly in November. I hope to see you there.

# In Memory of Joseph E. Cicero



by Debora Rimkus, AMATYC Executive Director

AMATYC lost its third President and one of its founding members with the passing of Joseph E. Cicero on August 30, 2024. Joseph was present at AMATYC’s founding meeting in New York City in 1974. He was the “mystery man” from the back of the room who first rose in support of Herb Gross’s impassioned call to “stand and be counted.”

Joseph attended that meeting because he was eager to collaborate with colleagues. In his own classroom, he had developed group-teaching methods in response to the needs of his capable but underprepared community college students. He was searching for a professional community where he could share ideas and learn from others facing similar challenges.

Joseph took office as AMATYC President at the second annual conference in San Francisco in October 1976 and served until the conference in Atlanta in October 1977. During his tenure, he testified before the Senate Special Subcommittee on Science, Research, and Technology on March 3, 1977, advocating for National Science Foundation funding to support community colleges.

After retiring from his career as a U.S. Navy fighter pilot, Joseph began studying mathematics. He completed his undergraduate degree at Drew University, earned his master’s degree from the University of Notre Dame, and received his PhD from the University of South Carolina.

While working on his dissertation in the 1970s, he served as Mathematics Coordinator at Midlands Technical College in Columbia, South Carolina. After completing his doctorate, he taught at Clayton Junior College (now Clayton State University) until January 1978. His experiences at these two institutions inspired his search for improved methods of teaching community college students and coincided with his presidency of AMATYC.

In January 1978, Joseph joined Coastal Carolina College (now Coastal Carolina University) in Conway, South Carolina, as a mathematics professor. He later became Director of the School of Mathematics and Computer Sciences and served as the first Chair of the Department of Computing Science from 1987 to 1989.

You can hear Joseph’s story in his own words at <https://www.amatyc.org/amatyc-history/amatyc-past-presidents/>. Additional information is available in *The History of AMATYC 1974–1999*, which can be downloaded at [www.amatyc.org/amatyc-history/](http://www.amatyc.org/amatyc-history/). Joseph’s obituary may be viewed at [www.legacy.com/us/obituaries/washingtonpost/name/joseph-cicero-obituary?id=56304240](http://www.legacy.com/us/obituaries/washingtonpost/name/joseph-cicero-obituary?id=56304240)



## AMATYC Executive Board Elections in Fall 2027!

by George Hurlburt, Past President

The election for the 2028–2029 AMATYC Executive Board will take place in September 2027.

Serving in a board position with AMATYC is both an honor and a meaningful opportunity to support the mathematics community. AMATYC plays a vital role in supporting faculty who teach mathematics in the first two years of college through professional development, curriculum leadership, and advocacy for quality mathematics education. Seeking a position on the board reflects a commitment to advancing these shared goals.

Serving on the board provides the opportunity to collaborate with dedicated educators from across the country to address current challenges in mathematics instruction. Board service is not only about governance; it is also about listening to members, representing diverse perspectives, and helping shape strategic initiatives that respond to the evolving needs of students and faculty.

Running for a leadership role also demonstrates a willingness to contribute time, energy, and thoughtful leadership to an organization that continues to have a profound impact on mathematics education. By working collaboratively, communicating transparently, and focusing on innovation, you can help AMATYC continue empowering mathematics educators and the students they serve.

For information about available positions and the nomination process, visit the Executive Board Nominations page at [www.amatyc.org/executiveboardnomin](http://www.amatyc.org/executiveboardnomin).



## AMATYC Membership Dues Increase

by Kyle Kundomal, Treasurer

Dear AMATYC friends and colleagues, as I begin year three of my term as Treasurer, I would like to take a moment to thank everyone who has supported me in this role. It has been a pleasure to give back to a community that has meant so much to me over the years. The Reno conference marked the 15<sup>th</sup> AMATYC conference I have attended. While the organization has been navigating some challenges in recent years—such as rebuilding membership numbers, increasing conference attendance, and balancing the budget—it has been rewarding to take part in the thoughtful, collaborative work focused on strengthening our financial future and sustaining the support we provide to faculty and students during their first two years of college.

Did you know that your AMATYC membership offers much more than just the annual conference? There are many ways to use your membership to support your students, connect with colleagues, and stay engaged with the profession:

- AMATYC Webinars cover a wide range of timely topics and offer practical ideas you can bring directly into your classroom.
- *AMATYC News* and *MathAMATYC Educator* digital publications help you stay connected to developments and conversations in mathematics education across North America.
- AMATYC Academic Networks (ANets) provide opportunities to collaborate with colleagues, contribute to the profession, and lend your voice to important policy discussions.
- The AMATYC Foundation offers grants to support innovative projects and research ideas.
- AMATYC Student Competitions—including the Student Mathematics League, Student Research League, and Two-Year College DataFest—provide meaningful opportunities for students to engage with mathematics beyond the classroom.

Member dues are scheduled for a small increase on July 1, 2026, so this may be a good time to renew or join AMATYC before the new rates take effect. You may extend your membership for multiple years at the current rate or consider becoming a lifetime member. For more information about the types of membership available, please visit [www.amatyc.org/Membership](http://www.amatyc.org/Membership).

I look forward to seeing many of you in November at our 52<sup>nd</sup> Annual Conference in Philadelphia!

Membership Type	Current Rate (until June 30, 2026)	New Rate (starts July 1, 2026)
Individual Membership		
1-year	\$111	\$119
2-year	\$217	\$233
3-year	\$318	\$342
Adjunct Membership (1 year)	\$56	\$60
Retired Membership (1 year)	\$56	\$60
Student Membership (1 year)	\$10	\$10
Lifetime Membership (installment payment option available)	\$2,220	\$2,380
Institutional Membership (1 year)	\$636	\$654

# Meet the New Project ACCESS Team

by Karina Ochs, Project ACCESS Coordinator



Karina Ochs

I am truly honored to serve as the new Project ACCESS Coordinator for AMATYC. I am currently an Associate Professor at Brookdale CC in New Jersey and a proud alumna of Project ACCESS Cohort 12. This year, our Project ACCESS team includes Rebecca Claxton, Project Assistant, and Lorisha Riley, Program Assistant. Rebecca joins us from Raritan Valley CC (NJ), and Lorisha is from Santa Fe College (FL). I also welcome Jessica Bernards from Portland CC (OR) and Breanne Hooks from Santa Fe College (FL) as members of the Selection Committee. I look forward to collaborating with this wonderful team and supporting our fellows from Cohort 21 and future cohorts.

Each year, Project ACCESS provides a new cohort of mathematics educators with invaluable professional development opportunities. I still remember the excitement I felt early in my career when I was selected as a fellow in Cohort 12. At the time, I hoped the program would support my professional growth and connect me with others who shared a passion for teaching mathematics. What I gained was far more than I ever expected.

Project ACCESS provided me with a welcoming community united by a shared purpose: to better support our students while growing as educators and leaders. During the two-year fellowship, I developed meaningful professional relationships, collaborated with mathematics faculty across the country, formed lasting friendships, and discovered a network of colleagues who continually encouraged and inspired me. When I completed the fellowship, I felt empowered and confident in taking on new challenges and making a greater impact in my home state. For example, I served as MATYCNJ's Recording Secretary and later as President. At Brookdale CC, I have served as an Assistant Chair in the Mathematics Department and currently serve as Assistant Dean of STEAM.

Ten years after completing Project ACCESS, I am excited to give back to the program that gave me so much. As Coordinator, I hope to inspire future fellows to pursue leadership roles, strengthen their professional networks, and continue growing as mathematics educators. I look forward to fostering the same sense of belonging, encouragement, and professional development that shaped my own journey.

The application period for Project ACCESS Cohort 22 is now closed. We are pleased to share that applications have been received and are currently under review.

We would greatly appreciate your continued support for the next cycle. The application timeline is expected to follow a similar schedule, and details will be posted on the AMATYC website. Please keep an eye out and help us spread the word when the next application cycle opens.

We also invite you to join us in November at the AMATYC Annual Conference, where Cohort 21 fellows will share the exciting projects they have been working on. If you are interested in presenting to our fellows in Philadelphia, please contact Lorisha Riley, Program Assistant, at [lorisha.riley@sfccollege.edu](mailto:lorisha.riley@sfccollege.edu).

If you have any questions about Project ACCESS, reach out to me at [karina.ochs@amatyc.org](mailto:karina.ochs@amatyc.org).

I look forward to seeing you all in Philadelphia!

## Welcome Jon Anderson, Student Research League Coordinator



Jon Anderson

Dear AMATYC colleagues, I'm Jon Anderson, and I've recently been selected as the Student Research League Coordinator. I look forward to serving in this role.

By training, I am an electrical engineer, but at heart I am a math teacher. I especially enjoy teaching Quantitative Reasoning courses, which is one of the main reasons I applied for this position.

I have been teaching at Utah Valley University for the past 19 years. During that time, I have primarily taught developmental mathematics and quantitative reasoning courses, with the occasional College Algebra class. Teaching is truly my passion.

Helping students see how mathematics applies to their everyday lives is particularly important to me. The Student Research League ([www.amatyc.org/student-research-league](http://www.amatyc.org/student-research-league)) provides students with valuable opportunities to apply mathematics while working on real-world problems, and I am excited to support that mission.

# Liberty, Learning, and the Pursuit of Great Math

## The 52<sup>nd</sup> AMATYC Annual Conference

Philadelphia—the birthplace of American democracy—sets the stage for the 52<sup>nd</sup> AMATYC Annual Conference, November 19–22, 2026, at the Philadelphia Marriott Downtown. As our nation celebrates the 250<sup>th</sup> anniversary of its independence, what better place to gather, debate big ideas, and reaffirm our commitment to student success? Whether you are a first-time attendee or a seasoned AMATYC veteran, this year’s theme, “Life, Liberty, and the Pursuit of Mathematics!”, promises an experience that is both inspiring and memorable.

### **Thursday Morning: Fresh Ideas from Six ANets**

Kick off the conference on Thursday morning from 8:00 to 10:00 am when six of our Academic Networks (ANets) take the stage with themed sessions designed to spark meaningful conversations and bring fresh perspectives to your classroom. Sessions will be led by the ANets for International Mathematics, Math Intensive, Statistics and Data Science, Quantitative Reasoning, Research Experiences for Students and Faculty, and Math and Its Applications for Careers. Each session features a series of focused 15-minute talks. Use the conference app to browse presentations, build your personal schedule, and move between sessions—or settle in with one ANet for the entire morning.

First-time attendees are encouraged to join an AMATYC 101 walking tour of the Philadelphia Marriott Downtown. These guided tours offer a warm welcome and a chance to meet leaders from the Executive Board, Professional Development Committee, and Conference Committees. Tours depart from the registration area on Wednesday evening at 5:00 pm and Thursday morning at 8:00 am.

### **Thursday: Keynote, Exhibit Hall, and Research**

Thursday’s keynote session features Ken Ono, Marvin Rosenblum Professor of Mathematics at the University of Virginia. A Guggenheim Fellow whose research in number theory and prime numbers has made headlines well beyond academic circles, Ono has a rare gift for connecting mathematics to the wider world. We look forward to hearing what he brings to Philadelphia.

Following the keynote, don’t miss the Grand Opening of the Exhibit Hall at 4:30 pm, a beloved conference tradition. Cap off Thursday evening with the Research Session at 6:30 pm, where colleagues share results from grant-related projects and cutting-edge work in mathematics education.

### **Friday: Connect, Learn, and Ignite**

Friday is packed from start to finish. Project ACCESS fellows will share the projects they have been developing and implementing at their colleges, always a highlight for those interested in mentoring and faculty development. The Regional Breakfast and Meeting provides a great opportunity to connect with colleagues from your part of the country. Throughout the day, you can choose from a wide range of presentations on topics including student success, AI in the classroom, inclusive teaching practices, and mathematics pathways.

Friday evening brings something electric: the Ignite Session. Each presenter has five minutes and twenty slides to share ideas that will stay with you long after you leave Philadelphia.

### **Saturday: Awards, Inspiration, and a Community Celebration**

Saturday’s Awards Breakfast features keynote speaker Edray Goins, professor of mathematics and statistics at Pomona College. Featured in the 2024 documentary *Journeys of Black Mathematicians* and recently elected the first African American president in the 110-year history of the Mathematical Association of America, Goins is an inspiring voice in the mathematics community. If you have ever heard him speak, you know this is a session you will not want to miss.

Later on Saturday, the conference opens its doors to the Philadelphia community with a Julia Robinson Mathematics Festival, a joyful, hands-on event that brings local families and students together to explore the beauty and fun of mathematics.

### **Sunday: Reflect and Carry It Forward**

After more breakout sessions on Sunday morning, the Closing Session offers one final opportunity to gather, reflect on your biggest takeaways, and celebrate what we have built together over four remarkable days in Philadelphia.

## Call for Presiders

by Julie Gunkelman, Program Coordinator

The 52<sup>nd</sup> Annual Conference of the American Mathematical Association of Two-Year Colleges is heading to Philadelphia, and we are seeking volunteers to serve as Presiders for this year’s conference, *Life, Liberty, and the Pursuit of Mathematics*.

Presiders play a key role in supporting session presenters and creating a positive experience for attendees. Responsibilities include introducing speakers, keeping the session on schedule, and assisting with basic logistics to help everything run smoothly.

If you are willing to serve, please complete the Presider form at [www.amatyc.org/volunteer-to-serve](http://www.amatyc.org/volunteer-to-serve). Those who indicate their willingness to preside will receive a link this summer to select their presider assignments.

Thank you for helping make this conference a welcoming and well-organized professional gathering. We appreciate your willingness to serve and look forward to connecting in Philadelphia.

## Register Early for Philadelphia!

by Turi Suski, Conference Coordinator

Are you looking forward to the 2026 AMATYC Annual Conference? If you are planning to join us in Philadelphia for the semiquincentennial and your college prefers to pay your registration from the current year’s budget rather than waiting until the fall, please email Office Director Beverly Vance at [amatyc@amatyc.org](mailto:amatyc@amatyc.org) with the subject line “Conference Registration Now.”

Beverly will send you the necessary information so that your conference registration can be processed now.

# Shared Vision, Stronger Departments

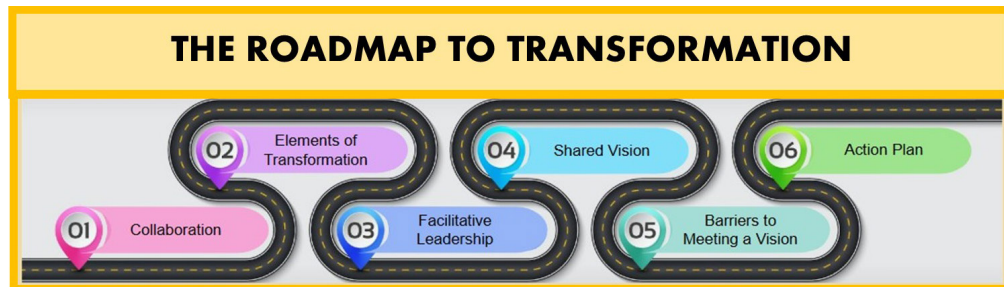
by Ann Sitomer, Dennis Ebersole, and Karen Gaines

Does your department have a shared vision for what students experience and learn in your classrooms? Do you agree on what mathematics is essential for students to know and the teaching practices that best support student learning? You and your colleagues may be more closely aligned in your vision than you realize. Most of us share a deep commitment to student success.

The Vision and Transformation Catalyst Tool (VTCT) is a resource departments can use to leverage local data, articulate a shared vision, and develop an action plan for moving forward together.

AMATYC's Teaching for PROWESS (TfP) project is wrapping up, and the VTCT is one of several tools developed through this project. It provides a roadmap for department-level change. The process begins with a two-day workshop at your college with your colleagues, led by trained facilitators. These facilitators will help you begin the process, including developing a two- to five-year action plan, and will continue to support your department as the plan is implemented and adapted to meet the needs of your students and department.

You can read more about the tool and about colleagues' experiences using the VTCT in the current issue of the *MathAMATYC Educator*, "The Vision and Transformation Catalyst Tool: A Roadmap for Building a Departmental Culture of Active Learning." If this is a journey your department would like to explore, please reach out to [TfPLeadership@amatyc.org](mailto:TfPLeadership@amatyc.org).



## Mathematics Intensive ANet: New Leadership and a New Name

by Peter Keep, Math Intensive ANet Chair

The Mathematics Intensive ANet is undergoing some exciting changes. You may recall from our previous update that members voted to change the name of the Math Intensive ANet to the Precalculus and Beyond ANet (approved by the AMATYC Board at the Spring Board Meeting). In addition to this change, we are also welcoming new leadership.

My name is Peter Keep, and I am excited to step into the role of chair for this Academic Network, continuing the excellent work led by Bob Cappetta. Over the past several years, the Math Intensive ANet has grown into a strong community of educators who share resources, exchange ideas, and contribute thoughtful recommendations and position statements. I hope our Academic Network continues to build on this momentum, and I am enthusiastic about several ideas that emerged during the fall conference to support this work moving forward.

As Bob has often pointed out, faculty who teach courses within the scope of the Math Intensive group—such as precalculus, calculus, differential equations, linear algebra, and discrete mathematics—are often the only instructors teaching these subjects at their institutions. Our group has consistently organized strong conference sessions that provide space for these faculty to connect, collaborate, and share ideas through discussion and themed sessions. At the same time, members expressed interest in creating opportunities to stay connected and share resources throughout the year.

To support this goal, we have begun compiling resources for faculty teaching these courses, including examples of effective open educational resources and active learning materials. We hope these documents and recommendations will be useful to instructors throughout the year and will help connect our conference conversations to ongoing work in our classrooms.

Another topic that emerged during discussions in Reno was the importance of establishing a clear classroom culture. We found broad agreement that being explicit about our expectations can help shape a classroom environment where the types of questions, skills, and behaviors that support success in mathematics are clearly valued. What proved more challenging was defining exactly what that culture should look like. This is where our ANet can play an important role. Our goal is to thoughtfully craft a shared statement describing what it means to be a successful student in courses like the ones we teach. We envision something supportive, written with students in mind, and flexible enough that instructors can adapt it while still maintaining their own teaching styles and course identities. Such a statement could also help guide our conversations about topics such as academic integrity, the use of mathematical software, and effective assessment practices.

I am truly excited about the direction of this work. I am grateful to be part of this professional community and honored to serve as chair of a group that has been so meaningful in my own professional development. I look forward to seeing many of you at the conference in Philadelphia, and I hope to continue hearing your ideas about how our community can stay connected and engaged throughout the year.

# Expanding Opportunities for Students and Faculty

by Dana Clahane,

Research & Mentoring Experiences ANet Chair

The Research & Mentoring Experiences for Students & Faculty (RMESF) ANet is now in its third year and continues to support the engagement of two-year college students and faculty in creative mathematical science activities on their campuses and in collaboration with other institutions. Engaging students with mathematical frontiers and stimulating faculty interest in these areas can have a significant impact on how mathematical science is perceived on our campuses. These experiences can increase students' capacity for learning while also providing valuable professional development opportunities for faculty.

We continue to hold monthly virtual organizational and mentoring meetings on the first Friday of each month. In addition, we host virtual Math Exploration Research Forums (MERFs) on the third Friday of each month from 11:00 am to noon Pacific Time. Faculty and students interested in attending, presenting, or joining the ANet are encouraged to complete the Google registration form at [www.tinyurl.com/3bjvupet](http://www.tinyurl.com/3bjvupet).

Recent MERF presentations include:

- December 2025: Aaron Matthews, a former Fullerton College student who is now a faculty member at California State University Fullerton and a software engineer, presented "Reliability Analysis of Systems."
- January 2026: "Topological Analysis of Early COVID-19 Data Using Kepler Mapper" was presented by Madeline Salter and Michael Timmons from Linn-Benton CC, along with Caleb Driskell, Cooper Kotyk, Yuliya Barashkina, and Braylon Joseph-Mosley from the University of Alaska Anchorage. These students are supported by a Center for Undergraduate Research in Mathematics (CURM) mini-grant.
- February 2026: Axel Brandt of John Carroll University presented "Coloring With Crayola Boxes," sharing combinatorics research conducted in collaboration with undergraduate students.

Members of the ANet have also collaborated on a proposal to the National Science Foundation's Innovation in Two-Year Colleges program within the Division of Undergraduate Education to broaden and support these ongoing activities. The grant application was submitted in December.

Finally, we are still working to identify two-year college faculty in the AMATYC Midwest Region who are engaging students or collaborating with colleagues on mathematics research or emerging applications such as data science. If you know faculty involved in this work, please refer them to me at [dana.clahane@amatyc.org](mailto:dana.clahane@amatyc.org). We know these faculty are out there, and we would love to connect with them.

# Call for Student Research League Evaluators

by Jon Anderson, Coordinator

AMATYC is seeking volunteers to serve as Student Research League (SRL) Evaluators. The primary responsibility of this role is to evaluate the first round of student submissions and help determine the three Regional Finalists. The evaluation process will be completed by June 30.

More information about the competition can be found on the Evaluation Process page at [www.amatyc.org/srl-evaluation-process](http://www.amatyc.org/srl-evaluation-process). You may also view the 2025 SRL competition to see last year's challenge question.

This commitment is for the 2026 competition only and concludes on June 30, 2026. Volunteers are welcome to serve again in future years.

Note: If you are mentoring a team for the 2026 SRL competition, you are not eligible to serve as an evaluator this year. However, mentors from previous years are welcome to volunteer as evaluators.

To volunteer or ask questions, please email Jon Anderson at [srl@amatyc.org](mailto:srl@amatyc.org). There is no need to submit a résumé or CV. Instead, please include a brief statement describing your interest in serving as an evaluator and any experience you feel is relevant to fairly evaluating student research. Previous experience is not required.

## Need a Roommate for Philly?

by Turi Suski, Conference Coordinator

Sharing a room at the conference hotel is a great way to reduce costs and enjoy the fellowship of a colleague during the conference. You may choose to team up with a colleague as your roommate, or you can complete the roommate request form at [www.amatyc.org/conference/2026-conference](http://www.amatyc.org/conference/2026-conference).

Roommate Network Director Sarah Miller will work to pair you with another conference attendee who is also interested in sharing a room. While AMATYC cannot guarantee a match, the pairing process has often been very successful. In many cases, paired roommates become good friends and continue rooming together at future conferences.

## AMATYC 2026 CALENDAR OF EVENTS

*The most current list of events may be found on the AMATYC Event webpage at [www.amatyc.org/events/showmonth/current](http://www.amatyc.org/events/showmonth/current).*

May 22: MMATYC Annual Conference, Cecil College, North East, MD.  
Website: [www.mmatyc.org](http://www.mmatyc.org)

November 19–22: 52<sup>nd</sup> AMATYC Annual Conference, Philadelphia Marriott Downtown, Philadelphia, PA.  
Contact: AMATYC Office, [amatyc@amatyc.org](mailto:amatyc@amatyc.org)

*Add or update affiliate conference information at [www.amatyc.org/affiliate-conferences](http://www.amatyc.org/affiliate-conferences).*

# Do I Really Need a Lesson Closure?

by Jaclyn Murawska, STEM Instructional Coach

Skokie - Morton Grove School District 69 • jackiemurawska@msn.com

Visualize a recent mathematics lesson—one that went exceptionally well. What do you see? Perhaps you see students actively engaged in doing and discussing mathematics. As you observe, you notice evidence that they are understanding the ideas and even expressing excitement about the mathematics they are exploring.

Then you glance at the clock. There are only two minutes left in class. Although the main task of the day has already been consolidated, students are still working on additional mathematical tasks and remain deeply engaged. Do you stop the students to close the lesson?

Early in my teaching career, my answer would have been no. I did not want to interrupt such productive mathematical thinking. Yet I often returned the next class period to a room full of blank stares. I would find myself wondering: Were we not all in this same room yesterday, discussing these ideas together? This illustrates the risk of skipping lesson closure, the component of instruction that helps solidify students' understanding and supports long-term retention.

“You need to do the closing for student achievement. The teacher helps the students turn meaning making into meaning made, and turns thinking into learning” (Liljedahl, 2024).

Even a brief closure is better than none at all. To understand why, it is helpful to examine what research suggests about lesson closure and then consider strategies for implementing it effectively.

Bloomquist (2010) categorized lesson closures into three types:

- Non-closure
- Teacher closure, in which the instructor summarizes the learning
- Student closure, which Bloomquist referred to as “lesson closure,” in which students summarize the learning

In a study of seventh-grade students, Bloomquist (2010) analyzed pretest and posttest scores from unit assessments and found that when teachers implemented student-led closure, students performed significantly better on the final assessment. Although the participants in Bloomquist's study were middle school students, the framework for lesson closure and its outcomes may reasonably extend to other educational contexts.

Community college instructors recognize that learning mathematics places significant cognitive demands on students. Strategies that reduce cognitive load can help students process and retain new knowledge. Bloomquist (2010) defined cognitive load as the degree to which the human neural network processes information. Unfamiliar or complex tasks increase the demand on cognitive resources, which in turn limits the amount of information that can be processed or remembered (Bloomquist, 2010). According to Bloomquist, student-led lesson closure can help reduce this cognitive load by giving students the opportunity to organize and articulate their understanding.

Research at the university level also highlights the importance of not skipping lesson closure. Muzsnay et al. (2025) investigated retrieval practice among first-year preservice teachers enrolled in number theory and algebra courses. Students completed a short two-problem test at the end of each lesson. When the researchers compared students with lower entry scores to those with higher entry scores, they found that this intervention reduced the impact

of prior academic performance and helped narrow the achievement gap.

Similarly, Paliwal (2023) examined the use of exit tickets with instructor feedback as a form of lesson closure in undergraduate algebra courses. The feedback helped students identify misconceptions while providing instructors with information to adjust instruction. The study compared three conditions: formative feedback with exit tickets, formative feedback with exit tickets combined with growth mindset instruction, and a control condition in which students watched a video solving problems related to the day's lesson. Students in both feedback groups performed significantly better on exams than those in the control group, demonstrating the value of lesson closure in which students actively summarize their learning.

Ready to incorporate lesson closure into your teaching? The following table presents several strategies for student-led closure, offering options beyond traditional exit tickets that can help students reflect on and consolidate their learning.

	Talk	Write	Do
Quick & Easy	Partner turn and talk: share one challenge from today's lesson	What's one thing you're wondering about?	Thumbs up or thumbs down for current understanding
↓	Small-group prompt: which problem-solving method did you prefer and why?	Describe the new theorem you proved or strategy you learned today.	Check your understanding: self-select “mild, medium, or spicy” problems to solve (Liljedahl, 2024)
Lesson-Specific	Whole class discussion: teacher scribes students' thinking to consolidate learning (Liljedahl, 2020)	Meaningful notes for my “future forgetful self:” record one example and things to remember (Liljedahl, 2020)	Exit Ticket: solve one problem on a worksheet or post-it. Instructors sort responses immediately.

The case for lesson closure led by students is clear. Lesson closure helps students retain knowledge, perform better on mathematics exams, and self-assess their mistakes. Lesson closure helps us as instructors to ask, Did I do a good job teaching? How will I improve tomorrow's lesson?

So yes, we do really need it.

## Message from the Website Coordinator

**Affiliate Presidents and Leaders** – visit [www.amatyc.org/affiliates-by-region](http://www.amatyc.org/affiliates-by-region) and [www.amatyc.org/affiliate-conferences](http://www.amatyc.org/affiliate-conferences) to keep your affiliate information up-to-date on the AMATYC website and to post your affiliate conference.

**Corrections or typos on the AMATYC website?** Please contact the Website Coordinator at [chris.riola@amatyc.org](mailto:chris.riola@amatyc.org). Be sure to include a link to the page needing the correction. Thank you!

# Compassion in the Classroom

by Ben Aschenbrenner, Equity ANet Chair

Recently, I sat down with Geillan Aly to discuss compassion in mathematics education. Geillan is the founder of Compassionate Math and will be our lead presenter for the 2026 Equity-sponsored session in Philadelphia, “We’re All Tired: Compassion as a Source of Strength.” Below is a brief snippet from our conversation.

**Aschenbrenner:** What does compassion mean, and why is it such an important concept for you in math education?

**Aly:** Let’s start with a definition of compassion. It comes from a book written by Kristin Neff in 2011, *Self-Compassion: The Proven Power of Being Kind to Yourself*. Compassion is the recognition and clear seeing of suffering. It involves feelings of kindness toward people who are suffering, so that a desire to help and to alleviate that suffering emerges. Compassion also involves recognizing our shared human condition, flawed and fragile as it is.

I don’t think many of the ways mathematics is traditionally taught recognize our shared human condition. Too often, math is positioned as something that separates people or emphasizes status. I say this all the time: human beings are mathematical beings. Compassion brings that humanity back into mathematics. Rochelle Gutierrez talks about the need to rehumanize math, and that’s the work I’m trying to do.

**Aschenbrenner:** Can you share an example of what compassion might look like in math education?

**Aly:** Imagine I’m grading an exam question that has two parts: Part A and Part B. A student answers Part A incorrectly but then uses that answer correctly to complete Part B. Part B ends up being “wrong” because it doesn’t match the answer key. With a compassionate lens, though, we pause to recognize what the student actually did well. We take the extra moment to acknowledge the reasoning and the work the student showed. In a compassionate framework, we ask, “Where is the value in this?” instead of focusing only on “What is wrong with this?”

**Aschenbrenner:** Why is compassion such an important concept in the moment we’re living in right now?

**Aly:** I think we need a stronger sense of connection with one another. With social media and AI, we’re seeing more layers and walls being built between people. We’re told that we’re more connected than ever, but in many ways we’re actually more isolated. The political climate contributes to that isolation. The lingering effects of COVID contribute to it as well. I think we need to reconnect—with ourselves, with our minds, and with our talents.

If we return to the definition of compassion, it includes kindness toward people who are suffering. Compassion goes beyond empathy because it includes action. It says, “I recognize your suffering, and I want to help reduce it.” In education, this can mean shifting our mindset.

Instead of lamenting students’ preparation, we approach them with curiosity. We ask about their lives and backgrounds. The work I try to do helps students understand that the circumstances they are in have nothing to do with their abilities, their intelligence, or their potential.

Many thanks to Geillan for sharing these insights. We hope you will join us in Philadelphia, where we will continue exploring compassion as a powerful force in mathematics education.

# Math Anxiety: A Taxing Problem

by Brian Cafarella, Ph.D.

Professor at Sinclair CC, Dayton, OH

How many students contend with math anxiety to some degree? Is it 40% or 50%? Perhaps 60% or even 70%? In fact, research suggests the number is much higher—over 90% of students experience some level of math anxiety. Like other forms of anxiety, math anxiety exists on a continuum. For some students, it appears as intense nervousness before a math class or exam. For others, it can be far more serious: students may avoid going to school because of math, experience panic attacks at the thought of a math class, or even feel physically ill. Unfortunately, for many students, fear of math becomes a barrier to attending college at all.

On March 6, 2026, I presented an AMATYC webinar titled “Helping Students Conquer Math Anxiety.” For more information about this and other AMATYC webinars, please visit [www.amatyc.org/webinars](http://www.amatyc.org/webinars) and scroll down to find the session. In this webinar I explored topics such as:

## The Root Causes of Math Anxiety

- What is the biggest cause of anxiety in general?
- Why is math often more feared than other subjects?
- Why do women and students of color report higher levels of math anxiety than Caucasian males?
- Why can math terminology, or “math talk,” feel so intimidating?
- What is the most common reason students fail math courses?

## Understanding Our Students

- Using math personality quizzes
- Incorporating learning style questionnaires
- Encouraging students to write a “math autobiography”

## Helping Students Navigate Math in the 2020s

- Engaging students while creating a supportive, non-threatening environment
- Helping students navigate increasingly complex math pathways
- Ensuring students know how to find and use quality online resources, including AI tools
- Understanding the strengths and challenges of different learning modalities

## Addressing the Most “Hated” and Feared Topics

- Which math topics students do struggle with most
- Strategies to help students manage test-taking anxiety

Math is often a subject students approach with fear and frustration. Before they even enter our classrooms, many believe they are destined to fail. Yet we know that mathematics is essential for completing most degree programs and for navigating many aspects of everyday life. When students develop confidence and competence in mathematics, they also develop valuable problem-solving skills for the real world.

No student is truly “bad at math.” Rather, students may lack certain skills, experiences, or supports—or they may be facing barriers that can be addressed. Watch the recording of this webinar to explore practical strategies and insights that can help students overcome math anxiety and build confidence in their mathematical abilities.

# Helping Students Discover Real-World Uses of Mathematics

by Kim Walters, AMATYC Southeast Vice President

In my Quantitative Reasoning course, Math in Your World, I strive to help students see meaningful, real-world applications of the mathematics we study in class. A few years ago, I had the opportunity to participate in a Community Engaged Learning program offered at my university, and since then I have been looking for ways to incorporate that experience into this course.

At a conference, I attended a presentation by an instructor who had successfully integrated community engaged learning into a Quantitative Reasoning (QR) course. That talk inspired me to explore how something similar might work for my students. I was fortunate to connect with a community partner from a local nonprofit organization that works to address food and housing insecurity in our county. She was interested in having someone help create and distribute surveys, and I was eager for my students to experience how data can be used for purposes beyond solving textbook problems.

As part of the project, my students design and administer a short survey to either volunteers or the clients served by the organization. They then analyze the data by creating frequency tables and graphs. Finally, students present their findings in a brief presentation to the CEO of the nonprofit, who later shares the results with the organization's board of directors.

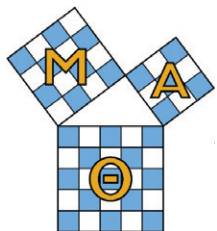
Each semester, she reminds my students how valuable their work is in helping inform decisions made by the organization. Like many nonprofits, they do not always have the time or personnel to collect and analyze data while also meeting the needs of the community they serve. Through this project, students see that their mathematical skills can contribute to meaningful work.

Every semester, at least one student tells me this was their favorite project because it was the first time they truly saw how mathematics could be used in the real world. Experiences like this reinforce the value of connecting classroom learning with community impact.

I would love to hear from others who are doing similar work or who have ideas for incorporating community engaged learning into their courses. If you would like more information about this project, contact me at [kim.walters@amatyc.org](mailto:kim.walters@amatyc.org).

## Mu Alpha Theta

by Mari Menard, Representative



email questions to [marimenard@amatyc.org](mailto:marimenard@amatyc.org)

Here's hoping the Spring semester is going well and that you are looking forward to the 2026 AMATYC Conference in Philadelphia, which is fast approaching. Attending provides an opportunity to enjoy a great conference, have great conversations, and learn about Mu Alpha Theta by visiting the Mu Alpha Theta table in the exhibit hall. If you are ready to learn more now or submit an application for a new chapter, visit the AMATYC Mu Alpha Theta website <https://bit.ly/AMATYCMuAlphaTheta> or

## Recommend a Keynote Speaker

AMATYC invites members to recommend a keynote speaker for a future conference. If you have heard an engaging speaker who would be a great fit for either the Thursday afternoon keynote or the Saturday breakfast keynote, submit their name and contact information at: [www.amatyc.org/recommend-a-keynote-speaker](http://www.amatyc.org/recommend-a-keynote-speaker)

All recommended speakers are reviewed and vetted by the AMATYC Board.

## Highlights of the January and February Board Meetings

by Nikita Patterson, Secretary

The 2026 Strategic Planning & Orientation meeting was held virtually on January 9–10, 2026. This was the first time the 2026–2027 Executive Board met for official business. The Board also met virtually on February 19, 2026.

Appointments made during these meetings include:

- Pat Riley, Assistant Program Coordinator
- Jillian Kiefer, Program Proposal Review At-Large Representative
- Rebecca Claxton, Project ACCESS Project Assistant
- Sam Pearsall, SML Test Development Team West Regional Representative
- Lusi Stephens, Program Proposal Review Spokane (NW) Representative
- Eunmi Joung, Program Proposal Review Reno (W) Representative
- Rachel Saidi, Two-Year College DataFest Coordinator

In addition, the Board approved a motion to add the position of Assistant Student Research League (SRL) Coordinator to the AMATYC Policy and Procedures Manual.

The AMATYC News is the official newsletter of the American Mathematical Association of Two-Year Colleges. It is published four times each year in Winter, Spring, Summer, and Fall. Your articles and announcements are welcome. Submission deadlines are November 25, February 25, June 1, and August 15 for the respective issues.

**Address changes should be sent to:**

**AMATYC Office**  
Southwest Tennessee CC  
5983 Macon Cove  
Memphis, TN 38134  
Phone 901.333.5643 Fax 901.333.5651  
[amatyc@amatyc.org](mailto:amatyc@amatyc.org)

**All other correspondence should be directed to:**

Asli Mutlu  
AMATYC News Editor  
Wake Technical CC  
6600 Louisburg Road  
Raleigh, NC 27616  
Phone 919.532.5583  
[AMATYCNews@amatyc.org](mailto:AMATYCNews@amatyc.org)

## Virtual Exchange Promotes Global Awareness

by Manisha Ranade, International Mathematics ANet Chair

Over the past several years, virtual exchange has grown significantly in popularity. It involves connecting our students with peers from another country through online platforms, with communication occurring synchronously, asynchronously, or both. These experiences broaden students' perspectives and increase their global awareness. When students collaborate on a shared, interdependent project, the experience becomes a Collaborative Online International Learning (COIL) project. COIL is considered a high-impact practice, though it requires careful preparation and support from the institution. The reward is that students gain meaningful, authentic interactions with international peers.

Along these lines, I have been wondering: why not create a virtual exchange program within the U.S. and Canada? Through AMATYC, we meet colleagues from colleges all across North America. Imagine a class in California connecting with a class in North Carolina, or students in Florida collaborating with students in Michigan. Even within our own countries, there are rich differences in culture, climate, and daily life that students would find engaging. These exchanges could strengthen intercultural competency, build empathy, and give students valuable experience working in diverse teams—skills that mirror the collaborative nature of the real world.

If you have not yet explored the resources available through the International Mathematics ANet, I encourage you to visit the ANet home page in myAMATYC. When you scroll down to the library section, you will find a collection of classroom materials, COIL examples, webinars, and other helpful resources.



Members of International Mathematics ANet

## Mathematics Intensive ANet: Reflections from a Former Chair

by Robert Cappetta

As I complete my fortieth year of teaching mathematics, I find myself asking a simple question: What do I really do? The easy answer is that I teach math, but that hardly captures the full picture. Today's students have access to an extraordinary range of resources available around the clock—including more than 700 videos I have created myself—so a motivated learner can hear many explanations beyond mine. With artificial intelligence offering instant answers and fully worked solutions, students can generate as many examples as they need. Colleges provide tutoring, and new online options extend support at any hour. The sheer variety of ways students can learn is remarkable. So what, exactly, is our role?

Six years after the pandemic, I am teaching students whose middle school math years included long stretches of remote learning. It is understandable that some arrive with less confidence in algebra and arithmetic than we might hope. At the same time, conversations about academic honesty are more visible than ever. If students have leaned on shortcuts before, how can we help them rebuild confidence in their own abilities? And when a student asks, "If AI can solve these challenging problems, why do I need to learn to do them myself?" once again I find myself asking: what exactly is our role?

There are, of course, clear and important answers. We design coherent sequences of lessons that help students connect ideas and extend their understanding. We choose levels of challenge that stretch our strongest students while still supporting those who are building their foundations. We create structures and timelines that help students develop productive learning habits. And, as two-year college faculty, we ensure our courses prepare students well for transfer. Yet beyond these essential responsibilities, what might be our most important task? Motivation.

It is not a skill most of us were taught in our undergraduate or graduate mathematics programs, so it is no surprise that many of us feel unprepared for this part of the work. That is why professional communities matter so much. AMATYC exists to help us share ideas, learn from one another, and grow in our practice—and there has rarely been a more important time to do exactly that.

So how do we inspire students to want to learn? How do we encourage them to invest the time and persistence that mathematics requires, especially in a world filled with more distractions than ever? How do we build meaningful conversations with students whose experiences may be very different from our own?

### FUTURE AMATYC CONFERENCES

2026	Philadelphia, PA	November 19–22
2027	Spokane, WA	November 11–14
2028	Phoenix, AZ	November 9–12

*For additional information, contact the AMATYC Office at [amatyc@amatyc.org](mailto:amatyc@amatyc.org).*

Asli Mutlu, Editor  
*AMATYC News*  
Southwest Tennessee CC  
5983 Macon Cove  
Memphis, TN 38134

## Focus on Affiliates: MMATYC

by Christine Mirbaha, MMATYC President

The Maryland Mathematical Association of Two-Year Colleges (MMATYC) is one of the Mid-Atlantic regional affiliates of AMATYC and was founded in 1974. As stated in our bylaws, our purposes are to:

- Encourage an active interest in mathematics and its teaching, and to work toward the improvement of mathematics education.
- Provide a forum for the exchange of ideas and information about mathematics and the teaching of mathematics at the two-year college level.
- Provide a voice and a means of influencing the mathematics curriculum in two-year colleges.
- Enhance the prestige of the mathematics teaching profession.

MMATYC holds two business meetings each year. Our January business meeting takes place during Maryland's annual Association of Faculties for Advancement of Community College Teaching (AFACCT) conference and is one of the conference's highlighted events. During this meeting, we elect officers, share updates from

AMATYC, recognize award recipients, and conduct other association business.

Our spring business meeting is held during the annual MMATYC Spring Conference. This meeting provides an opportunity to highlight the accomplishments and projects of AMATYC, MMATYC, and other Mid-Atlantic Region affiliates.

Traditionally, one of Maryland's 16 community colleges hosts the annual spring conference. This year's conference will be held at Cecil College in North East, Maryland, on Friday, May 22, 2026. Please visit the official MMATYC website at [www.mmatyc.org](http://www.mmatyc.org) for additional information about the spring conference as it becomes available. We would love to see you there.

In addition to conference information, the MMATYC website includes links to other AMATYC Mid-Atlantic affiliate sites, related statewide and national organizations, opportunities to become involved with MMATYC, and other information about the association.

Thank you for taking the time to learn more about MMATYC.



Volume 41 Number 2 Spring 2026

**AMATYC**  
**NEWS**®

ISSN: 0889-3845

Opening Doors Through Mathematics