The 2022-2023 AMATYC Executive Board

As a result of the AMATYC elections held in September 2021, there are four new members serving on AMATYC’s Executive Board.

- **George Hurlburt**, SUNY Corning CC in New York, is the new President-Elect. George is transitioning out of his role as the AMATYC Website Coordinator.
- **AJ Stachelek**, CUNY Hostos CC in New York, is the new Northeast VP. AJ recently transitioned out of his role as chair of the Equity Committee.
- **Brandon Bartley**, Jefferson Community & Technical College in Kentucky, is the new Midwest VP. Brandon is currently serving as the KYMATYC Past President.
- **Shannon Ruth**, GateWay CC in Arizona, is the new Southwest VP. Shannon is currently serving as the ArizMATYC Past President.

These new members of the board will serve alongside the following board members who will continue their service to AMATYC: Laura Watkins, President, Glendale CC, AZ; Kate Kozak, Past President, Coconino CC, AZ; Nancy Rivers, Secretary, Wake Tech CC, NC-Retired; Barbra Steinhurst, Treasurer, Portland CC, OR; Dennis Ebersole, Mid-Atlantic VP, Northampton CC, PA-Retired; Alvina Atkinson, Southeast VP, Georgia Gwinnett College, GA; Dale Johanson, Central VP, Northeast CC, NE; Sarah Pauley, Northwest VP, Western Wyoming CC, WY; and Eddie Tchertchian, West VP, Los Angeles Pierce College, CA.
The Power of an Invitation

Laura Watkins
Glendale CC • Glendale, AZ

In 1994 I was a married thirty-something woman with four young children, working on a bachelor’s degree in mathematics with the goal of finding a “good job” to help support our family. I happened to be walking down a hallway at Utah State University where the math faculty had offices. I was looking for the office of one of my professors but who that professor was is lost to me now. While walking down that hallway, I ran into Joe Koebbe, who had been my instructor for a handful of my mathematics courses. He asked me a simple question “What are you going to do after graduation?” I was going to find a job. I was going to help support my family. He asked me if I had ever considered graduate school. The answer to that question was no. He said he had some projects I might be interested in. He invited me to consider graduate school as well as to collaborate with him. That invitation opened my eyes to possibilities I hadn't even imagined. That invitation started me along a path that led to a M.S. and a Ph.D. in mathematics. That invitation led to a teaching position at Glendale Community College (GCC) in Glendale, AZ. In 2002 I arrived at GCC, where I met wonderful faculty who mentored me in so many ways. One of my mentors was Anne Dudley who during my first semester at GCC introduced me to AMATYC – she invited me to come to my first AMATYC conference. At the 2003 AMATYC Conference in Salt Lake City the creation of Project ACCCESS was announced, and I was invited to apply – I became a member of Cohort 1. It was at the 2009 AMATYC Conference that I was invited to apply for the Project ACCCESS coordinator position; I had the pleasure of serving in that position for six years. Eventually, I was invited to run for President-Elect of AMATYC. Now, I am very honored that the members of AMATYC elected me to serve as the president of the organization.

As I reflect on the journey that has led to this point in time, I can't help but recognize the importance of what we communicate to students and our colleagues. Sometimes our words need to convey compassion and empathy. Other times our words need to convey authority or regret. Our words are how we connect with others to share our thoughts, our experiences, even our emotions. Words that I find particularly powerful are the words of invitation. The Persian poet Hafiz said, “The words we speak become the house we live in.” The words we use build an imaginary “house” from which we experience, interpret, and perhaps even define the quality of our lives. As a mathematics educator focused on the teaching and learning of mathematics in the first two years of college, what kind of house do you want to live in? My house would be one where both my students, and colleagues, feel they have been invited to join me while feeling accepted, welcomed, and valued.

I know that our students are the reason we do what we do. We spend hours preparing and delivering the best instruction we can. In all of our efforts at preparation and delivery, how do we invite our students to join us in our mathematical house in a way that helps them to feel accepted, welcomed, and valued? Often, we teach more than 100 students per semester and finding ways to accomplish this task can be daunting.

As I think about my own mathematical house, which is perpetually being remodeled, I recognize the need for students to feel accepted, welcomed, and valued. In the beginning, it would have been easy for me to not feel accepted because I was so very different from my colleagues. Since it is difficult to remain in an environment where we feel we don’t belong, how do we help students feel accepted, that they belong in our classrooms? And how do we help them feel welcomed and valued in our classrooms? We learn our students’ preferred names and how to pronounce them. Speaking students’ names communicates that we recognize the student as an individual and that they are important. We implement strategies that build community within the classroom. Students working in pairs or small groups can support each other in their journey through mathematics. We draw on examples from students’ community or life experiences. Students come with knowledge and experiences that can be valued and leveraged in the classroom. We find time to chat with students outside of class. Speaking to students about their interests and goals helps them to view us as an interested mentor and a partner in their education. We model vulnerability and resilience. Sharing our own stories of failure and resilience helps students understand these difficult aspects of the learning process and creates a supportive and caring learning environment. As we continue to use practices like these we help our students feel connected to their peers and to us – and accepted as part of the community.

Let me close with a little challenge. Spend some time over the next few weeks thinking about the mathematical house you live in and how you are helping all of your students feel accepted. While you are reflecting, you are likely to find areas for improvement and it is easy to dwell on these. But it is just as important, perhaps more so, to celebrate your progress and successes in helping students feel accepted, welcomed, and valued.
Registration Open!
by Vinodh Chellamuthu, Coordinator

The 2022 Student Research League Competition is now open for registration! The competition will begin on Friday, March 18 and end on Monday, April 4. This year’s Challenge Problem will focus on the “Emerging Shift to Electric Vehicles.” Registration ends March 14.

Whether you have been a Faculty Mentor during the past years of the competition or have never mentored a team before, consider getting involved this year. To learn more about the tremendous positive impact the competition can have on students, check out the webinar held on November 9, “Student Research League: AMATYC’s Modeling and Research Contest,” available at www.amatyc.org/Webinars. At this webinar, we had the privilege of hearing from all the students on the 2021 first-place team. You will be inspired by their first-hand account of how they learned and grew from this experience. They also share some wise advice for future teams and mentors.

The competition also needs evaluators from every affiliate to help determine the winners for the 2022 SRL Competition. To learn more or share ideas about Student Research League, please join the SRL Community on myAMATYC (https://my.amatyc.org). If you have questions, contact Vinodh Chellamuthu at SRL@amatyc.org.

5th National Mathematics Summit
by Nancy Sattler

Registration is now open for the 5th National Math Summit to be held at the Marriott Atlanta Marquis on March 16-17, 2022, prior to the National Organization for Student Success (NOSS) Annual Meeting. Topics include institutional transformation, calculus reform, placement testing, corequisites, math anxiety, student success, active learning, equity, open educational resources, inquiry-based learning, mathematical identity, growth mindset, and promoting meaningful collaboration in online and hybrid math instruction. The cost of the two-day conference is $125. Register at www.thenoss.org/Math-Summit.

Herb Gross Presidential Award
by Kathryn Kozak, Past President

The Herb Gross Presidential Award recognizes exceptional service to AMATYC and to the mathematics profession. At the AMATYC Annual Conference in Phoenix, the Herb Gross Presidential Award was presented to George Hurlburt and Judy Williams. In addition to the visible service both of these individuals perform for AMATYC, they both do important work behind the scenes that most people do not see.

Along with teaching at Corning Community College in Corning, NY, George Hurlburt has been the website coordinator for AMATYC since 2012. During this time, he redesigned the entire website to interact with the new management system adopted by AMATYC. George always takes initiative to figure out the best way to post new information, asking for input whenever needed. He keeps members informed by adding information about sister organizations and about grants involving AMATYC, as well as AMATYC statements about topics such as racism. He also updates the job board to help members connect with job opportunities. And of course, he makes sure that the conference information is always up to date and easily accessed. To say George always responds quickly to website requests is an understatement. Even before an update is requested, George would anticipate that a change was needed and make sure that it was completed in a timely manner. It has been great working with George all these years.

Judy Williams has been the AMATYC Program Coordinator since 2013. This position is instrumental for AMATYC to host the high-quality conference we have known for years. The process to create the program doesn’t begin or end when a proposal is submitted. All year round Judy writes articles for the AMATYC News encouraging members to submit a presentation proposal. She answers many questions from people considering a proposal. Once the proposals are submitted, Judy’s work continues. After anonymizing all the proposals, she coordinates the work of the team of reviewers who carefully read and evaluate them. Using the reviewers’ comments, Judy and others on the conference committee plan the program for the AMATYC Annual Conference. Once the program is finalized, Judy works with her team and the AMATYC office to inform each person who proposed a session if their proposal was accepted or not. Judy remains in contact with all the presenters, always ready to answer their questions and provide advice. To help AMATYC members stay informed, Judy helps to create the mini program and the conference program, as well as writing newsletter articles about the conference. At the conference she works tirelessly to make sure that all presenters and participants have a memorable conference. Then the entire process starts again for the next conference. I am continually amazed at Judy’s energy and positive outlook.

George and Judy both perform very important activities behind the scenes for AMATYC. Their work helps AMATYC complete its mission and they are extremely deserving of this award.
Every two years, AMATYC presents the AMATYC Teaching Excellence Award to outstanding teachers. Thank you to Pearson, and to Chris Hoag from Pearson, for supporting the AMATYC Teaching Excellence (TE) Award. The 2021 Teaching Excellence Award recipients are Jessica Bernard, Fan Chen, and Jennifer Travis.

Jessica Bernard has been a mathematics instructor at Portland CC since September 2010. She is known for researching new techniques to engage her students in the classroom. Jessica collaborates with colleagues and is well known for sharing the results of her efforts with her campus community as well as frequently speaking at local, regional, and national conferences. One of her interests is helping students acquire the study skills necessary to be successful studying mathematics in college. In partnership with a colleague, she has created a non-monetized YouTube channel dedicated to helping all students. One colleague observes that Jessica closely monitors her students’ progress and when she sees them slipping, she reaches out to them through email and phone calls—there is no doubt students know that Jessica is on their side. In the words of one of her students, “She sees every student as an individual, and cares deeply about her students’ dreams as well as academics.”

Fan Chen is a Mathematics Associate Professor and an Assistant Dean of Architecture, Art, Math, and Science at El Paso CC. She has been teaching at El Paso CC since August of 2005. Fan left a career in mechanical engineering for a career in teaching, where she uses project-based learning in order to engage her students in the mathematics while striving to create an equitable and enriching learning environment.

For all students. In the words of her nominator, “Professor Chen is an outstanding education innovator.” With respect to technology, Fan is a pioneer and early adopter, which helps not only her students but faculty and staff adjust to learning and working online. In the words of one of her students, “I feel that she uses strategies in her classroom that are beneficial to the students. Ms. Chen has her students in mind at all times and pushes students to do their very best in her class...”

Jennifer Travis has been a faculty member at Lone Star College—North Harris since 2005. She endeavors to help her students connect with math concepts, including being involved with the MAAs Preparation for Industrial Careers in Mathematical Sciences program. Jennifer’s nominator notes, “She passionately mentored her students with the aim of immersing them in an intensive and transformative research experience in mathematics, in which they learn to view themselves as producers of knowledge as opposed to consumers of knowledge.” One of her students remarked on her commitment to a positive learning environment. During the fall 2020 semester, Jennifer volunteered to return to campus for hybrid classes in addition to her all-online classes, to help students at her campus who were more likely to be first-generation college students, lack internet access at home, and struggle with online learning in general. In addition to serving her students, Jennifer serves the AMATYC community as the AMATYC News editor.

The awardees were honored during the Thursday keynote session of the AMATYC Annual Conference, where President Kate Kozak presented each awardee with a medalion from AMATYC. Thank you to Pearson for their generous and continued support of the Teaching Excellence award, which allowed each awardee to receive a check for $500. Thank you to the members of the 2021 TE Award Committee for their work in reading the nominations and making the incredibly difficult decision of selecting three awardees. Members of the committee included: Spencer Bartholomew, Susan Bornsen, Debbie Garrison, Kendall Jacobs, Patrick Kimani, Diane Koening, Chris Ward, and Chris Yuen. Thank you to those who were willing to put forth the time and effort necessary to honor their colleagues for the outstanding work they do. It is difficult to read all of the nomination packets and not be inspired by the work done by each of the nominees.

Student Mathematics League
by Matthew Pragel, Coordinator

Round 1 of the 2021–2022 AMATYC Student Mathematics League competition was held October 23–November 6. Great job to all of the students who competed! The results will be posted at www.amatyc.org/SMLScoreboard as soon as they are available. Round 2 of the competition will be held February 19–March 5.

The Faculty Math League competition was held during the AMATYC Annual Conference in Phoenix. Congratulations to the Northeast Region, who retained control of the Steve Blasberg Faculty Mathematics League Award trophy. The top participant honors, along with a gift card donated by Mu Alpha Theta, went to Aisha Arroyo of Middlesex CC in Massachusetts.

Northeast wins the Faculty Mathematics League Regional Award
Photo by Aisha Arroyo
The recipients of the Leila and Simon Peskoff Award are Matthew Pragel of Harrisburg Area CC and Laurie Keatts of Catawba Valley CC. This award is given annually to an AMATYC Project ACCCESS Fellow who has contributed to the mathematics education profession in the first two years of college. This award includes a lifetime membership in AMATYC.

Laurie is a member of ACCCESS Cohort 14 and serves as the Southeast regional representative on AMATYC’s Equity Committee. She gave a presentation, “Engaging Students in Hypothesis Testing Using Bean Sorting,” at the Phoenix conference. Matthew is a member of ACCCESS Cohort 9 and a former PSMATYC affiliate president. He currently serves as the AMATYC Student Math League Coordinator, and he helped facilitate the Faculty Math League at the Phoenix conference.

Nominations for the 2022 Leila and Simon Peskoff Award are due by May 1, 2022. For more information, visit www.amatyc.org/PeskoffAward.

One student was also recognized by the AMATYC Foundation at the Phoenix conference. Congratulations to Amanda Nolan, the 2021 Wanda Garner Presidential Scholarship awardee. Amanda was nominated by her Phoenix College professor, Pam Miller, and the ArizMATYC affiliate. The $1,000 scholarship is given annually to a student nominated by an AMATYC affiliate and randomly selected from all nominations.

The recipients of the Margie Hobbs Award are Grace Pai of Guttman CC-CUNY and Guillermo Alvarez Pardo of Cuesta College. This award honors the memory of Margie Hobbs, a long-time AMATYC member and conference coordinator, and is given annually to an AMATYC member who is presenting at the AMATYC Annual Conference for the first time. The award comes with a monetary award to help defray conference expenses.


Nominations for the 2022 Margie Hobbs award are due by June 1, 2022. For more information, visit www.amatyc.org/MargieHobbsAward.

AMATYC recognized four members with awards at the 2021 AMATYC Annual Conference in Phoenix. A student scholarship was also awarded. These awards are supported by members and friends through their donations to the AMATYC Foundation.

Congratulations to all 2021 award and scholarship recipients.

The 2021 recipients of the Margie Hobbs Award are Grace Pai of Guttman CC-CUNY and Guillermo Alvarez Pardo of Cuesta College. This award honors the memory of Margie Hobbs, a long-time AMATYC member and conference coordinator, and is given annually to an AMATYC member who is presenting at the AMATYC Annual Conference for the first time. The award comes with a monetary award to help defray conference expenses.


Nominations for the 2022 Margie Hobbs award are due by June 1, 2022. For more information, visit www.amatyc.org/MargieHobbsAward.

CBMS2021: It’s Not Too Late!

Every five years the Conference Board of the Mathematical Sciences (CBMS) administers a survey of two-year college mathematics programs. The resulting reports contain valuable information about enrollment trends, instructional practices, and other important topics. Over 200 two-year colleges were selected in the sample for the 2021 CBMS survey. Department chairs at the sampled colleges received an email and link to the survey in October 2021. The quality of information in the CBMS report depends on getting responses from as many colleges as possible. Check with your department chair to see if your college is included in the sample. If so, it’s not too late to respond!
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Project ACCCESS

Cohort 16 Fellows
Finish Strong
by Jennifer Rice, Collin College

The 47th AMATYC Annual Conference was a welcome retreat for the attendees, especially the returning Project ACCCESS fellows of Cohort 16. We laughed among ourselves about the tumultuous journey this has been. We began our adventure in the fall of 2019 with bright eyes, excitement, and a hunger to learn from each other and hone our craft. At the 2019 conference, we began planning projects we would begin in the Spring of 2020. And we did begin . . .

Around spring break, most of us hit the wall called COVID – our lives, and projects, and classes came to a screeching halt. All of a sudden, we all had a new project–how do we continue to teach, and more importantly, how do we help our students continue to learn, in the midst of a pandemic? Project ACCCESS fellows are new to teaching. That is the whole point of the program. We need mentors and instruction and guidance so we can develop into not just good, but great teachers. Many of us had never taught online. I had one week to transition from face-to-face classes to exclusively online.

Not just the fellows of Cohort 16, but all of us learned a great deal during 2020. We learned how to teach students effectively against all odds. We learned about our students’ resiliency and determination, as well as our own. ACCCESS fellows started new projects that reflected changing circumstances. And finally, two years later, we were able to meet again and share what we learned.

The fresh faces I remembered from two years earlier showed weather from the storm. We were tired, but we were stronger and grateful for each other. Our Cohort of colleagues and friends will always have the best story of any Cohort. We were tried like no other, and I am proud to say we did not give up!

I will be eternally grateful for my experience in Project ACCCESS. The lessons I learned through this fellowship have widened my perspective on every aspect of teaching mathematics. How the brain learns, equity in teaching and in the classroom, and how to individually connect with students – these are just a few of the ideas I will continue to explore and build upon. Ideas I might not have considered without Project ACCCESS; ideas I know will make me a great teacher!

Fired Up in Phoenix!
by Lisa Feinman, Coordinator

After a year-long hiatus, Project ACCCESS is back in full swing! Nine members of Cohort 16 were able to finish up their fellowship, and we were thrilled to welcome twenty new Fellows to Cohort 17. Sessions at the AMATYC Annual Conference in Phoenix included “How the Brain Learns and Remembers,” “Active Inclusivity,” and “Exploring Racial Equity on Personal and Interpersonal Levels.” Thanks to all who presented during our sessions: Marty Kellum*, Elizabeth Weaver*, Jon Tyler*, Sarah Van Asten, Anne Vance, Rob Eby*, Jessica Bernards*, Jonathan Weisbrod, and Matthew Pragel* (*ACCCESS Alumni).

As in years past, the poster session featured Cohort 16 Fellows presenting projects they implemented in their classes. Cohort 17 Fellows met with mentors during the conference to help formulate ideas for projects, which they will present at the poster session in Toronto. Thank you to those who served as mentors for the Fellows this year and in years past. If you are interested in being a mentor for Cohort 18, contact Vicki Todd, Project Assistant, at v_todd@southwesterncc.edu.

If you will be in your first four years of teaching full-time at a community college during the 2022–2023 academic year, please consider applying for Cohort 18 of AMATYC Project ACCCESS. This cohort will meet for the first time at the 2022 AMATYC Annual Conference in Toronto. If your department has recently hired colleagues who are eligible, please encourage them to apply. Application deadline is May 15, 2022. Details about Project ACCCESS can be found at www.amatyc.org/ACCCESS.

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Project ACCCESS Cohort 16 at the AMATYC Annual Conference in Phoenix

Back row (left to right): Ivan Retamoso, Mark Lydon, Farrah Chmilnitzky, Susan Ficken, Jennifer Rice, Ashley Pratt, Melissa Menning

Front row (left to right): Katey Ellis, Sohely Perven, Manisha Ranade
Grants: Igniting Concepts Into Projects
by Megan Breit-Goodwin, Grants Coordinator

One of the aspects I appreciate most about our AMATYC community is our shared love of teaching and learning and the excitement for innovation in our work as math educators. I was so happy to return in person to the AMATYC Annual Conference in Phoenix, and then to reconnect at the virtual days that I attended from home. It was energizing to be with our community and connect about the challenges and the bright spots we have experienced in our teaching these past two years. Our community is nothing short of amazing in the ways we have continued to care for each other so that we could better care for and be present for our students. Thank you for being part of AMATYC and being a colleague to me.

The foundation of a strong grant-funded project can be built around something as small as a single question that came up in your teaching. I'm curious to know what you have been working on in your teaching and within your college that has brought you joy. Have there been some discoveries from pandemic teaching that have surprised you, that you want to explore more? Have you encountered new areas of teaching and learning that you would like to build community around?

One of my roles as AMATYC Grants Coordinator is to connect with AMATYC members about questions and ideas that could lead to a partnership within a funded project. A concept does not need to be formally developed to start a conversation. It is exciting to hear about the authentic spark that connected you to the concept.

If you would like to connect about your ideas or share thoughts about potential funded projects, please contact me at megan.breit-goodwin@anokaramsey.edu.

In Memory of Darrell H. Abney
by Michael Pemberton

It is with profound sadness that I share with you the passing of Darrell H. Abney, retired professor of mathematics from Maysville Community and Technical College (MCTC) in Maysville, Kentucky.

Darrell arrived in Maysville as the founding member of the mathematics department when MCTC opened its doors in the fall of 1968. Over the next 47 years, 32 at Maysville and 15 at Nashville State Technical Institute, Darrell became a leader in addressing curriculum issues such as the development of an alternative Intermediate Algebra course for community colleges and changes in the math curriculum for prospective elementary teachers. Darrell was also an advocate for incorporating technology and alternative teaching methods in the classroom, having led an effort to get all Kentucky community colleges connected to the Internet, and also co-authoring several mathematics and computer textbooks.

Darrell was active in the Kentucky Mathematical Association of Two-Year Colleges, having served as its President and Historian in the early 1990s. Several friends from AMATYC will also remember Darrell as a contributing writer for Beyond Crossroads: Implementing Mathematics Standards in the First Two Years of College and his work as an investigator for several AMATYC grants awarded by the National Science Foundation. A regular AMATYC conference attendee and presenter, Darrell received an AMATYC INPUT Award in 2003 for his work on Reform Intermediate Algebra in a Community College System with co-authors Kathy Mowers, Dana Calland, and Lillie Crowley.

I first met Darrell in 2010, when he served as the chair of my interview committee. Although Darrell and I were colleagues for a short period of time before his retirement from MCTC in 2015, I will always remember him as a great friend and mentor. Darrell took immense pride in advising and encouraging younger colleagues to fulfill their goals. He was instrumental in guiding me during my early years teaching at a community college, which provided me with countless opportunities to grow as a new teacher and as a professional. Little did I know that an invitation to travel with him to Boston for my first AMATYC conference would mean so much personally. We worked together integrating many of the ideas that we learned at AMATYC conferences into the college’s redesign of developmental mathematics, incorporating academic and student success strategies and support services within developmental education, and to inspire the next generation of STEM scholars and teachers. Darrell will be dearly missed and remembered by the many lives that he touched.

Darrell is survived by his wife, Kay, of 50 years; daughters Kate and Elizabeth; and son Darrell H. Abney Jr, as well as numerous cousins, nieces, nephews, and grandchildren.
Fan-flaming-tastic in Phoenix, 2021!
by Ana Jiménez, Phoenix Local Events Coordinator

Over 500 mathematics educators and students from across the nation and beyond descended on Phoenix, Arizona for a fabulous four days of mathematics, pedagogy, and inspiration sprinkled with plenty of extracurricular fun!

In addition to learning from their colleagues’ many excellent presentations, AMATYC attendees enjoyed visiting with one another over several meals, celebrating at the upbeat Regional Meetings, and perusing the commercial exhibits. They greeted old friends and made new ones, and cheerfully recognized their colleagues who received various AMATYC awards. Keynote speakers Lindy Elkins-Tanton and Talithia Williams were unforgettable highlights.

Lindy Elkins-Tanton wowed us with her presentation on NASA’s plans to visit Psyche, a metallic asteroid the likes of which humans have never descended upon before. The story of the project’s origin, upcoming launch, and the subsequent inclusive and inquiry-based projects surrounding the project left us encouraged. Elkins-Tanton has blazed a trail of inclusivity in the Psyche project and we are excited to see the final chapter of the launch preparations.

Talithia Williams inspired us with her journey as a woman of color in statistics. With her humor and wit, Williams shared ways to excite our students’ interest in mathematics, elevating all learners to their potential in STEM.

The Local Events Committee did an outstanding job making sure that the intense and fruitful learning from enriching AMATYC presentations was balanced with fun and frivolity. From desert hikes to puzzles, axe throwing to photo booths, Phoenix mascots to brewery outings, there was something for everyone.

As Local Events Coordinator, it was my honor and privilege to work with the entire Conference Committee and welcome you all to Arizona. I look forward to another stellar and welcoming conference in Toronto, Canada in 2022.

Get your Passport for Toronto
If you are not a Canadian resident, you will need a passport for the 2022 AMATYC Annual Conference in Toronto. The U.S. Department of State encourages you to apply at least 4-6 months before planned travel. Apply or renew now!

AMATYC Foundation 2021 Conference Update
by Jim Ham, Foundation Chair

The financial support of AMATYC members and supporters in 2021 was amazing. Donations received in 2021 totaled about $45,807.

The Foundation awarded three prizes to donors at the 2021 AMATYC Annual Conference in Phoenix. All 2021 donors were included in the raffle, including those who could not attend the conference.

• The Northeast region had the highest participation rate, so a member from this region, John McColgan from Roxbury CC, was randomly selected from donating regional members to receive a one-year AMATYC membership.

• The Mid-Atlantic region had the largest median donation, so a member from this region, Evan Evans from Frederick CC, was randomly selected from donating regional members to receive a two-year AMATYC membership.

• The final prize, a conference registration to next year’s conference in Toronto, went to Bukurie Gjoci from CUNY-LaGuardia CC, who was randomly selected from among all 2021 donors (who had given by Friday, October 29).

Thanks to everyone who participated in AMATYC’s 2021 fundraising efforts. Through your generosity, AMATYC continues to support mathematics students and faculty members in the first two years of college.

The Foundation welcomes donations throughout the year. To donate, visit www.amatyc.org/FoundationDonation. We hope you will continue to support the AMATYC Foundation in 2022.

AMATYC Community Project 2021 Update

Thanks to the generosity of AMATYC members, the Kamanzi Secondary School will receive $7,530 to help their students. These funds will wipe out the outstanding debt owed for books and materials for 100 students, purchase uniforms for 50 students, and buy feminine sanitary products for the female students! Words cannot adequately express the hope and relief this gift will bring to the families of these students, who struggle to put food on the table, let alone pay for school supplies and uniforms. Moreover, the entire Kamanzi community benefits when inequities are dismantled with books and materials put into one pool for everyone’s use, and for girls in particular who miss school due to insufficient menstrual products.

The ArizMATYC Local Events Committee thanks all who donated to this year’s AMATYC Community Project.
Igniting the Last Decade
by Jennifer Ackerman and Maria Andersen

In 2011, the AMATYC Board put out a call for ideas to entertain conference attendees on Friday night of the 2012 conference. Maria Andersen proposed a fast-paced idea: the Ignite Session. At Ignite, each presenter has 5 minutes to share their mathematical passion, while 20 slides are advanced automatically every 15 seconds. This event gives attendees a place to showcase ideas that came in after the conference deadline and also provides a low-pressure way for newbies to “try out” presenting to an audience.

Fred Feldon took over as ITLC chair that year and thus Ignite fell into his lap. That first event was a huge hit and became an annual tradition, spearheaded lovingly by Fred. At the 2021 Phoenix Ignite, Fred passed the torch to Eddie Tchertchian. And as a surprise to Fred, Eddie lined up speakers for a special surprise presentation to thank Fred! Fifteen seconds couldn’t contain what each presenter had to say about Fred. Thank you, Fred, for all your efforts to bring people together to share new and fun ideas!

Thank You to our Corporate Sponsors
by Crystal Wiggins, Advertising Chair and Todd Stine, Exhibits Chair

The 47th AMATYC Annual Conference in Phoenix was a success! It felt great to return to an in-person conference and see all the familiar and new faces. The Exhibit Hall was a smashing hit and that is all thanks to our dedicated exhibitors. We would like to give a special thanks to our AMAZING corporate partners:

- Hawkes Learning
- McGraw Hill
- Wiley
- Derivita
- Pearson

Phoenix RePHlections
by Judy Williams, Program Coordinator

What happens when over 500 mathematicians gather for the first time in two years? They get Fired Up for Math at the 47th AMATYC Annual Conference! Excitement filled the halls of the Sheraton Phoenix Downtown Hotel between sessions as everyone talked with old friends and made new ones. Speakers kept the session rooms warmed up sharing new ideas for teaching and learning as well as equity and inclusion.

At the Phoenix Farewell Session Sunday morning, President Kate Kozak asked, “Was this good?” Rumor has it that AMATYC is the first organization in our Presidential Exchange network to meet face-to-face since the pandemic began. And everyone agreed, “This WAS good!”

Those in the Farewell Session were also asked to share a takeaway idea. New sources of data, online drawing tools, and requiring more written and oral explanations were mentioned as ideas that could be implemented immediately. An oft-quoted phrase was to tell students struggling with a concept that they hadn’t finished learning that idea “yet.” Our keynote speakers, Lindy Elkins-Tanton and Talithia Williams, were cited as sources of inspiration based on their persistence and their ability to be undeterred by obstacles that came up along their path.

The shared energy was evident. Attendees saw their own burnout eased during the conference and were headed home to enthusiastically share these experiences with colleagues. Everyone was urged to encourage their colleagues to join the Virtual Days November 5-6 for even more ideas about assessment, technology, and inclusion. Those who participated heard about topics such as statistical thinking and social justice, national standards for math education for nurses, and having fun with math.

Let’s keep the Phoenix fire burning until we gather together again in 2022 in Toronto where You’re Welcome.

Presiders Keep the Fire Stoked!
by Michael Pemberton, Assistant Program Coordinator

A special thank you goes to all presiders during the 47th AMATYC Annual Conference and Virtual Days. These volunteers played an important role, assisting speakers, keeping sessions on track, and providing valuable feedback for future conferences. The conference would not run smoothly without their help!

Don’t miss your chance to serve as a presider in Toronto or at the Virtual Days next year. We can’t do it without you and your willingness to volunteer is greatly appreciated! It is never too early to volunteer. Simply fill out the presider form on the AMATYC website.
In Memory of
Franklin D. Demana
by Gregory D. Foley

Mathematics education giant Frank Demana passed away peacefully at home on September 29, 2021. Born on November 22, 1938, and raised in Springfield, Ohio. Frank earned a bachelor’s degree in mathematics from the University of Dayton and master’s and Ph.D. degrees in mathematics from Michigan State University. He was a teaching assistant at both these universities and an instructor at Lansing CC. Beginning in 1966, Frank taught mathematics at The Ohio State University for more than three decades.

An educational visionary who promoted student visualization through the effective use of technology in the teaching and learning of mathematics, Frank cofounded the international Teachers Teaching with Technology professional development program and the annual International Conference on Technology in Collegiate Mathematics. Frank directed or codirected NSF–sponsored projects and other grant activities totaling more than $10 million. In addition to frequent presentations at local, national, and international professional meetings, Frank published a variety of articles on computer- and calculator-enhanced mathematics instruction.

Frank received three major lifetime achievement awards in mathematics education: the 1997 Glenn Gilbert National Leadership Award from the National Council of Supervisors of Mathematics, the 1998 Christofferson-Fawcett Mathematics Education Award from the Ohio Council of Teachers of Mathematics, and the 2015 Mathematics Education Trust Award from the National Council of Teachers of Mathematics. Demana was also the lead author on numerous mathematics textbooks.

Frank created a bridge from a major research university mathematics department to schools, teachers, and students. On multiple occasions, Frank taught for extended periods in K-12 schools in various Midwestern cities, to try out new teaching techniques with actual students in actual classrooms.

All of us who engaged with Frank over the years learned from him, laughed with him, and were challenged to become better teachers and better people. It is difficult to put into words the influence that Frank had on me personally. Frank taught me the power of hard, thoughtful, caring work. He encouraged me to focus on what matters and to do my best. I have been blessed with many marvelous mathematical mentors. Frank was certainly one of the very best.

Teaching for PROWESS:
Opportunities for Departmental Transformation
By Karen Gaines, TfP Project Director

The world of education changes every day as a result of exciting new research, leading to much-needed opportunities for transforming education for our students. The Teaching for PROWESS (TfP) project (Teaching for PROWESS: Increasing Student Success in Community College Mathematics through Active Learning and Systemic Instructional Change, NSF DUE-2013493, 2012962, 2013232, 2013550) currently has two opportunities open to mathematics departments. The first opportunity is using a diagnostic tool for a department’s self-study of implementation of the recommendations of AMATYC’s standards-related documents. The TfP Professional Development Team is working on a set of rubrics to help departments highlight their strengths and weaknesses in the areas of: (1) Student Learning and the Learning Environment, (2) Instruction, (3) Curriculum and Program Development, (4) Assessment of Student Learning, (5) Professionalism, (6) Diversity, Equity, and Inclusion, and (7) Climate for Change. We are looking for departments who would be willing to pilot one or more of these rubrics in 2022. The process would involve:

- members of the department individually evaluating between 8 and 16 criteria (per rubric of your choice);
- the department discussing and reaching a consensus on their score on each criterion; and
- providing feedback on the rubric itself to the TfP Professional Development Team.

The second opportunity is for colleges to join the TfP project. The project is looking for six community colleges, who are interested in increasing student success in STEM courses by embracing active learning guiding principles, to submit a project proposal by April 15, 2022. These colleges will form IMPACT Teams, plan a three-year funded project up to $150,000, enact change in the curriculum and classroom, and evaluate that change. If approved, these colleges will join the Teaching for PROWESS project on July 1, 2022. To learn more about TfP and access the request for proposals, visit https://teachingforprowess.wordpress.com.

If you are interested in either of these opportunities, please contact Karen Gaines at karengaines@amatyc.org.
I am happy to share that AMATYC successfully returned to its annual in-person conference and equity was an integral part of it! At the 2021 AMATYC Conference in Phoenix, the themed session hosted by the Equity ANet grew substantially from the initial one held in 2019 in Milwaukee. Not only did it grow as measured by the number of attendees joining us on the first (very early) morning of the conference, but also regarding the variety of insights presented and the diversity of voices presenting. Beyond the themed session, several other equity-centered presentations occurred each day, opening my eyes to new ideas, alternate lenses, and unrecognized (and often rendered invisible) realities. Engaging with other AMATYC members about equity issues always motivates me to continually center and recenter equity in all my work.

This ANet will always be a big part of my AMATYC experience; however, I will be moving into my new position as Northeast Regional Vice President this year and will no longer be the chair of this ANet. As the outgoing chair of the Equity ANet, I want to thank all the members who have made the past two years of work possible. We have accomplished so much in such a short time, and I hope that every member finds themselves moved by this work, as the ripples extend outward through collaboration and honest sharing among its members. With that said, I am very excited to welcome Benjamin Aschenbrenner as the new Chair of the Equity ANet. He is one of the individuals who helped move much of the equity work forward, and often pushes me in ways that help me grow in my own equity journey. I encourage you to reach out to him and join this ANet at whatever level works best for you. Please contact him at equityinmathed@gmail.com with questions, comments, or tips regarding equity.

Here is one last challenge to all AMATYC members from my position as outgoing chair: As you strive to infuse more equity into your teaching, consider this simple question: How do I get to really know who my students are, as opposed to who I might think they are?

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**Future AMATYC Conferences**

2022  Toronto, Canada  November 17–20
2023  Omaha, NE  November 9–12
2024  Atlanta, GA  November 14–17
2025  Reno, NV  November 13–16

For additional information, contact the AMATYC Office at amatyca@amatyc.org.

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**AMATYC’s Equity Journey**

by Kathryn Kozak, Past President, and Nancy Rivers, Secretary

Just like so many of its members, AMATYC is on its own equity journey. This journey involves responding to recent events that many consider racist actions by others, changing its bylaws to provide equity to different membership categories, adopting new methods of conducting AMATYC business that are more equitable to our members, and writing position statements to guide AMATYC members in making changes in their departments, colleges, and states. Though this part of the journey has been challenging, it has also been rewarding.

After the death of George Floyd, the AMATYC Executive Board wrote a Response to Systemic Racism. After racist acts against people of Asian descent, the Board wrote a Response to Anti-Asian Racism. In addition, AMATYC members signed their name to the Mathematical Association of America’s (MAA) Anti-science Policy and the Censure of Discourse on Race and Racism statement. Writing and signing these statements helped AMATYC realize that it needed to revise its statement on a Welcoming Environment. A task force was created to undertake this revision, and a new Welcoming and Inclusive Environment statement was approved by the AMATYC Executive Board at the Fall Board Meeting in 2021. All of these statements can be read on the AMATYC website at www.amatyca.org/PolicyWelcomingEnv.

Some steps on a journey are intentional while others are taken out of necessity. The pandemic forced us to move our 2020 AMATYC Annual Conference online. The 2020 Delegate Assembly was held virtually as well. In addition, all forums that would have been held in Spokane in 2020 were held virtually in October of 2020. We had significantly more participation in virtual hearings than we typically have on the Thursday evening of an in-person conference. The organization saw new participants in our hearings, conference, and Delegate Assembly as the inequity of travel funds was not a factor. Therefore, hearings were again held virtually in August of 2021, the 2021 AMATYC Annual Conference contained a virtual component, and the Delegate Assembly was again held virtually. Plans for 2022 include the continuation of these more equitable meetings.

At the AMATYC Delegate Assembly in 2019, a delegate commented that adjunct and retired members not being able to vote or hold leadership positions was an equity concern. A task force was charged to revise the AMATYC Bylaws and the Policy and Procedures Manual (PPM) to address this issue. The task force suggested a change to the Bylaws that was approved by the 2021 Delegate Assembly and changes to the PPM that were approved by the AMATYC Executive Board. With these approvals, adjunct and retired members of AMATYC have the same privileges as regular members of AMATYC, and will be able to vote in elections and serve in leadership positions.

In 2020, the AMATYC Delegate Assembly approved the position statement titled Diversity, Equity, and Inclusion in Mathematics. Position statements developed or revised since then consider equity issues when they are developed. This will allow AMATYC members to be more responsive to equity issues in the future. The hope is that position statements provide the guidance that is needed when changes are being implemented in a department, college, or state.

Some members of the AMATYC Executive Board have joined together as a book club to discuss equity issues through the reading of different books. The group started with the book called White Fragility: Why It’s so Hard for White People to Talk About Racism by Robin DiAngelo, and then read How to Be an Antiracist by Ibram X. Kendi. Now the group is beginning the book The Sum of Us: What Racism Costs Everyone and How We Can Prosper Together by Heather McGhee. The process of reading and discussing these books has been very enlightening to members of the book club. The group highly suggests that everyone should read these books, as they will help you on your own equity journey.
Division/Department Leadership ANet
by Christine Mirbaha, Chair

Thank you to everyone who came to the Division/Department Leadership ANet events during the AMATYC Annual Conference in Phoenix. Seeing everyone in person was wonderful! Our meeting and sharing session were held back-to-back on Thursday afternoon, providing us with time to discuss some of the important issues facing those in leadership positions at their college, as well as hear the latest AMATYC and Division/Department Leadership ANet news.

Our meeting was very informative and productive. Chris Ward was announced as the incoming chair of the ANet. We heard updates regarding various AMATYC initiatives including IMPACT Live! and traveling workshops. We also discussed plans for a themed session regarding Division/Department Leadership issues, as well as other plans for the future. At the sharing session, leaders were able to discuss issues they have faced in their positions, as well as offer insights for others facing challenges. Some of the topics were related to the COVID-19 crisis. However, much of the conversation involved challenges that were unrelated to the pandemic.

At the virtual Delegate Assembly on November 6, our position statement, The Academic Preparation of Faculty Teaching Mathematics in the First Two Years of College, was approved. So, we can now focus on other position papers needing review and possible revision.

If you are interested in mathematics department leadership topics, or if you know of someone who would benefit from the support this group provides, the Division/Department Leadership ANet is a great way to become involved! To become a member of the ANet, please contact Chris Ward (chrisward@southernm.edu) or join our community on myAMATYC (https://my.amatyc.org).

Things in Motion Stay in Motion
by Pat Riley, Webinar Coordinator, and Mari Menard, Incoming Webinar Coordinator

What a changing world we live in. Change is always a constant, but even more so as we continue to navigate through uncharted pandemic times. We have all seen many examples of how change and technology have improved our teaching by learning new techniques to reach students remotely and by finding new resources to use in our classes. Conversely, we have also seen new challenges in working with students in less than ideal settings.

Change has come to the AMATYC Webinar Series as well. Over the past two years we have hosted webinars in a variety of formats, including highly attended traditional webinars, active participation webinars, two-part webinars, and many other formats. We have changed processes and procedures to make it easier for people to obtain the materials when they cannot attend. The Webinar Series will probably see additional changes in the coming months. One recent change is a new coordinator, with Mari Menard taking over the webinar responsibilities from previous coordinator Pat Riley. While much of what people have come to expect from the Webinar Series will continue, Mari will bring fresh ideas and will flavor the series with her own style.

Here are some comments from Pat and Mari:

Pat: It has been a pleasure and an honor serving as Webinar Coordinator for the past several years. When I took on this role, there was no hint that the pandemic was approaching. Then everything switched to remote and people were looking for ways to teach effectively and connect with their students in a virtual environment. The webinar schedule quickly filled up as many of our national colleagues were eager to share their expertise and experience with AMATYC members. I have met so many people and made so many positive connections over the past few years that I am in a much better position professionally and in the classroom (virtual or physical) than I was before. However, it is time to pass the controls on to AMATYC’s new Webinar Coordinator, Mari Menard.

Mari: For so many of us the pandemic has changed the way we think as well as what we can do. For example, I had never thought of hosting or presenting a webinar, but now I am using webinars to connect with students on a weekly basis. I look forward to this new opportunity to work with AMATYC members to help the Webinar program grow and improve.

For more details about AMATYC Webinars, contact Mari Menard at marimenard@amatyc.org or visit www.amatyc.org/Webinars.

New Webinar Coordinator - Mari Menard

Mari is a Professor of Mathematics at Lone Star College-Kingwood. She has been teaching for 24 years, including 19 years at LSC-Kingwood. She has a profound love for teaching mathematics and appreciates the opportunity to grow both personally and professionally at her campus. From learning new methods of teaching online to developing skills to work with others, she strives to be productive and helpful to both students and colleagues. She enjoys teaching corequisite courses with the corresponding credit level course, as well as other favorite math courses such as trigonometry and precalculus. She and her husband Ward live in Kingwood, Texas, and she enjoys gardening and exercising. She is very excited to be a part of the AMATYC professional development team and would like to thank them for this opportunity.

SML Problem Corner
Can YOU work a Student Mathematics League problem? This one is from the Fall 2019 competition.

Find the sum of all base-10 eight-digit numbers (the first digit cannot be zero) that contain no digits other than 0 or 1 (for example: 10100101, 10000000, 11111111).
Introducing New Volunteer Leaders

**Division/Department Leadership ANet – Chris Ward**

Chris Ward is an Assistant Professor of Mathematics at Southern West Virginia Community and Technical College (SWVCTC), teaching at a branch campus in Foster, West Virginia. After retiring from his role as a Chief Petty Officer in the U.S. Navy in 2006, he earned his B.S. in Mathematics and Computer Science at Saint Martin’s University and then his M.S. in Mathematics from Washington State University. During his time at SWVCTC, he has served on the Assessment Committee, Curriculum and Instruction Committee, and Faculty Senate. He is now the Faculty Senate Chair and the Director of Math and Sciences at his college, and also serves as President of WVMATYC. In his short time at AMATYC, he has provided input to various position statements and also served as Historian. Chris is looking forward to serving as Chair of the Division/Department Leadership ANet.

**Equity ANet – Ben Aschenbrenner**

Ben Aschenbrenner is an Associate Professor of Mathematics at Ivy Tech CC in Lake County, Indiana. He is a passionate educator, not only about teaching, but he loves all humans and the challenges of 21st century math education and the complexity of unraveling our country’s complicated and painful history. Though the pandemic has challenged his sense of place and his ability to reach his students, it has deepened his sense of urgency around the critical issues facing our communities and our country. Higher education, especially the mathematics departments within our institutions, have an opportunity to influence the direction we take and the way we think about the decisions we face. As the new Chair of the Equity ANet, Ben is looking forward to deeper connections within AMATYC and with the members of the Equity ANet in particular.

**Placement and Assessment ANet – Christine Mirbaha**

Christine Mirbaha is a Professor of Mathematics at the Community College of Baltimore County (CCBC), where she has taught for over 30 years. She has held several positions at CCBC-Dundalk, including Mathematics Coordinator, Mathematics Department Chair, and Developmental Mathematics Coordinator. Her AMATYC service includes membership on several committees and ANets, as well as representing the Mid-Atlantic Region on multiple committees (now ANets). She served as the Division/Department Leadership ANet Leader from 2016 through 2021 and has also served on the Nominating Committee, Mathematics Excellence Committee, and the Teaching Excellence Committee. Christine is active in her affiliate, MMATYC, currently serving as Secretary and Delegate. Personal interests include volunteering for her church, puzzles, games, music, reading, and history.

**Mu Alpha Theta Honor Society**

by Jonathan Weisbrod, Liaison

The Mu Alpha Theta National Convention is ON and in-person in the Washington DC area, July 10-15. **Online registration begins February 1 and is due by May 1.** Now is the time for fundraising, travel arrangements, and student recruitment. I hope to see more and more two-year college chapters each year. Additional details including the Sponsor Packet can be found at www.mualphatheta.org. If your chapter is attending the convention for the first time, please consider applying for a Convention Grant.

Finally, scholarship and award application deadlines are quickly approaching. Scholarship applications are due February 1. Please encourage your students to apply. Award nominations have several different deadlines, with the earliest being February 1.

More information about Mu Alpha Theta can be found at www.mualphatheta.org. Any questions can be directed to the national office at info@mualphatheta.org.

**StatPREP Workshop in May 2022**

by Kathryn Kozak and Ambika Silva

StatPREP (NSF DUE-1626337) is a grant-funded program that provides professional development and curricular materials to help mathematics faculty bring a data-centered approach to their introductory statistics classes.

After what feels like a very long time, StatPREP is pleased to announce their return to an in-person workshop. On May 20-21, 2022, there will be an in-person workshop in Fort Myers, FL. Statistics courses should be data-centric! This workshop will help faculty members center their classes around data. Participants will be introduced to free online tools from StatPREP that can help their students learn fundamental concepts in introductory statistics. Hands-on computer activities will guide participants as they use some of the Little Apps activities featured at www.statprep.org/LittleAppSite.

During the workshop participants will explore the Little Apps, be introduced to RStudio, and learn how to bring data into their classes. This is a great workshop to attend to learn how to incorporate real data into your course. To apply for the workshop, visit www.maa.org/statprep. **Applications are due February 28, 2022.**
Highlights of the 2021 Fall AMATYC Board Meeting and Delegate Assembly
by Nancy Rivers, Secretary

The 2021 Fall AMATYC Board meeting was held in two parts, the first part in Phoenix on October 24–27 and the second part virtually following the Delegate Assembly on November 6.

The Board considered six position statements, which had been discussed in virtual forums during the spring and summer. Here is a summary of the Board’s actions on these position statements:

• Approved the following position statements:
  o Corequisite Mathematics Courses
  o Proctored Testing and Controlled Assessments for Courses Taught at a Distance
  o Course Materials for Teaching and Learning

• Approved the spirit of the following position statements:
  o Mathematics Pathways
  o Initial Placement of Students into the Mathematics Curriculum

• Did not approve the position statement titled The Academic Preparation of Mathematics Faculty in the First Two Years of College.

All six were approved by the Delegate Assembly on November 6, 2021, and thus were adopted by AMATYC.

Other actions taken by the Board include:


• Adopted an updated Policy on a Welcoming and Inclusive Environment. This policy is available at www.amatyc.org/PolicyWelcomingEnv.

• Approved the 2022 AMATYC Budget.

• Approved the formation of the new Mathematics Pathways ANet.

• Pending membership verification, approved the following appointments:
  o Benjamin Aschenbrenner, Ivy Tech CC, Chair of Equity ANet
  o Natalia Postrigan, Pace University, Chair of Mathematics and Its Applications for Careers ANet
  o Helen Burn, Highline CC, Chair of Pathways ANet
  o Frank Marfai, Phoenix College, Chair of Research in Mathematics Education at Two Year Colleges ANet
  o Kelly Fitzpatrick, County College of Morris, Chair of AMATYC/ASA Joint Committee
  o Nikita Patterson, Georgia State University, Local Events Coordinator for 2024 AMATYC Annual Conference in Atlanta
  o Mari Menard, Lone Star College-Kingwood, Webinar Coordinator

• Approved policy changes to finances, conference lodging support, conference registration formula, solicitation and gift giving, Website Coordinator duties, and naming of AMATYC News issues.

• Established the annual Webscription, effective December 1, 2021.

• Approved policy changes pertaining to membership as a result of the 2021 Delegate Assembly’s approval of amendments to Article III of the AMATYC Bylaws, giving adjunct and retiree members the right to vote, serve as delegates, and hold leadership positions.

The 2021 Delegate Assembly also approved an amendment of Article XIII of the AMATYC Bylaws, allowing hearings of proposed bylaws amendments to be held virtually.

New Mobile App for myAMATYC
by Karen Gaines, Online Community Coordinator

The much-anticipated myAMATYC mobile app is now available. The installation process is quick, and the app will enable members to easily engage with all the content on myAMATYC. Here are the steps to get connected:

1. On your mobile device, navigate to your platform’s App Store (Google Play Store or Apple App Store).
2. Search for Connected Community.
3. Download the app.
4. Use the domain name: my amatyc.org
5. Sign in with your regular AMATYC login once, and then the app should be configured for future use.

The mobile app’s interface is very different from the website version of myAMATYC, but all content and functions are available. Download the app and start exploring now!

For any questions, suggestions, or feedback on the website or the mobile app, email Karen Gaines at occ@amatyc.org.
The Precalculus Conundrum
by Robert Cappetta, Chair

Throughout my career I have considered a course called precalculus algebra the most difficult course to teach, due to the number of unrelated topics. It was impossible to teach these concepts at the depth needed. Many precalculus instructors seem to share this perspective, believing that there is insufficient time to cover the required topics in depth, or there are too many topics included. In a poll of AMATYC members who teach precalculus, over 70% of respondents claimed there was not sufficient time to cover the required topics.

The precalculus sequence varies widely from institution to institution, in the number of courses, the names of the courses, and how topics are divided among the courses. In addition to standard topics from algebra and trigonometry, the precalculus sequence often includes advanced topics such as matrices, sequences and series, the Binomial Theorem, mathematical induction, vectors, polar coordinates, and complex numbers.

Active learning strategies are tremendously effective in improving student understanding. However, it seems unlikely that a course focused on active learning with rich problems would be able to cover all the concepts traditionally encountered in precalculus. Could people who study fewer topics in greater depth be well-prepared for calculus?

In the past, topics such as the rational zero test, the boundedness theorem, Descartes’ Rule of Signs, and polynomial graphing techniques were considered essential. With current technology, are these strategies still essential? Which precalculus topics are the most essential and which ones should be optional?

There are many designs for the precalculus sequence. Some institutions offer separate courses in college algebra, precalculus algebra, and precalculus trigonometry. Other institutions offer a two-course sequence. Another option is to offer calculus with a precalculus corequisite. The University of Texas Dana Center has redesigned the precalculus curriculum so that students ready for intermediate algebra can prepare for calculus by taking two six-credit courses focused on modeling with functions. In examining these options, many questions arise. How much time should be spent reviewing topics from college algebra? Should some topics be covered once in the first course and in greater depth in the second course? What is the role of modeling in each course? How much trigonometry should be included? What are the challenges and benefits of offering a combined college algebra/precalculus algebra course? What do students need to know to be successful in calculus?

While teaching at a research university, I was surprised at the relatively small number of topics in the precalculus curriculum. Why did two-year colleges cover so many more topics? Perhaps the reason is the variety of receiving institutions. If a two-year college has transfer agreements with multiple universities, a decision to remove content may result in the course not transferring. In places with statewide curricula, the precalculus topic lists can be very long, presumably to satisfy the concerns of many differing institutions. Certainly, modernizing the precalculus curriculum will be challenging and we will need to collaborate with colleagues at universities.

It is time for AMATYC to discuss the most important elements of a modern precalculus curriculum. Please consider participating in this process. Your input is needed to help shape the future of precalculus. To be notified of upcoming discussions, please join the mathematics intensive community on myAMATYC (https://my.amatyc.org).

Looking for New Technology Ideas? TPSE Math Videos
by Nancy Sattler

The Teaching Strategies and Practices subgroup of TPSE Math (Transforming Post-Secondary Education in Mathematics) has commissioned a set of short videos to explain various technology tools that can be used to engage students in the learning of mathematics. The videos give a brief description of the tool, the pedagogical purpose, and an explanation of how the tool can support the learning goals of mathematics courses and enhance the student’s experience. The video shows the tool in use from both faculty and student perspectives. These videos and tips are available to all classroom teachers free of charge.

Tools featured in the videos include Desmos, Discord, NearPod, Perusall, VoiceThread, and Wonder.me. The collection of videos will continue to grow. AMATYC members Ana Jiménez, Local Events Coordinator for AMATYC’s Phoenix conference, and Luke Walsh, a frequent presenter at AMATYC conferences and Ignite, have each created a video. Check them out at www.tpsemath.org/teaching-strategies-and-practices.

Standards Committee & IMPACT Live!
by Evan Evans, Digital Coordinator, Julie Phelps, Standards Committee Chair, and Karen Gaines, Online Community Coordinator

The Mathematics Standards in the First Two Years of College (IMPACT) Committee and IMPACT Live! are honoring the Bee Gees in 2022 to continue to grow and build momentum, “ah, ha, ha, stayin’ aLIVE, stayin’ aLIVE.”

In an effort to keep IMPACT aLIVE in 2022 and beyond, the Standards Committee is developing a timeline and process for reviewing and updating our organization’s signature document.

The review will be done by the Standards committee members, with input from our Academic Networks (ANets). Our goal is to ensure the document stays relevant and true to its origins—a living document. We will continue to highlight the document’s four pillars of PROWESS through our Spotlight of the Month guest hosts and monthly Live!Wire podcasts.

If you are interested in being a part of the IMPACT review team contact Julie Phelps at jphelps@amatyc.org. Also visit the IMPACT Live! site to check out the latest news, hosts, and podcasts that support the IMPACT document and help keep it aLIVE!

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Focus on Affiliates: IMATYC
by Curtis Mitchell, IMATYC President, and Laura Walters, IMATYC Past President

The Iowa Mathematical Association of Two-Year Colleges (IMATYC) meets every October for our annual one-day conference. Last year's conference was virtual, hosted by Iowa Central CC. The conference featured a presentation from the Iowa Department of Education regarding developmental education. David Busch from Iowa Central CC reported on the work of the Iowa Higher Education Mathematics Transition Advisory Council on math placement, and the attendees gave feedback. We also discussed other topics of current importance, such as corequisites and open educational resources.

The 2022 conference will be held on October 14 at Kirkwood CC in Cedar Rapids, IA. We are hoping to meet in-person for the first time since 2019, but are also exploring ways to make at least some sessions accessible online. We welcome anyone who wants to attend, regardless of their state of residency! David Gisch from Des Moines Area CC also facilitated an Iowa corequisite summit in January 2022. We hope to continue monthly thematic discussions throughout the year.

We rotate the positions of President and Secretary each year to correspond to the conference host. For 2021, the President was Laura Walters and the Secretary was Mandy Kehm, both from Iowa Central CC. For 2022, the President is Curtis Mitchell and the Secretary is Tyler Mitchell (no relation), both from Kirkwood CC. Susan Harthun from Kirkwood CC is the Treasurer for both years.

More information about IMATYC is available at www.imatyc.org.