

AMATYC NEWSSM

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Reinvigorate Your Classroom, Mind & Body in San Diego

by Tammi Marshall, San Diego Local Events Coordinator



As you plan for the new school year, I hope you are also planning to visit San Diego in November for the AMATYC Annual Conference to help reinvigorate your mind and body. The leaves will have turned colors, the weather will be getting colder, and storms may be setting in (possibly the

first snow will have happened for some). But in San Diego, November is the sunniest month of the year and the average temperature is around 70 degrees. What better excuse do you need?

Reinvigorate your mind and classroom with the many sessions and events to choose from at the conference. The AMATYC Annual Conference is a great place to get innovative ideas for updated curriculum, or for your classroom. It is also a wonderful place to network with community college math instructors from all over the United States and Canada.

Not only will the conference in San Diego give you the opportunity to reinvigorate your mind and classroom but your body as well. The Local



Horton Plaza Shopping Mall
(Courtesy of Joanne DiBona, www.sandiego.org)

Events Committee is working hard to create some wellness classes to give you that upper edge on taking care of yourself while you are away. At the conference, you will find many opportunities for guided walks; yoga, dance, or Pilates classes. Maybe there will even be time for a friendly volleyball or badminton game.

There is so much to do in the fall in San Diego as it is truly an outdoor city. With the weather still nice, you can take a walk along the boardwalk or beach, visit the world famous San Diego Zoo or Sea World, take a Harbor Cruise, stroll through Balboa Park or Old Town,

or do some shopping at Horton Plaza (an outdoor mall downtown). The ocean water is still warm so take that surfing lesson you have always wanted to do, go kayaking or paddle boarding. This doesn't include the 17 museums in Balboa Park, the USS Midway Museum (an aircraft carrier), or San Diego Mission de Alcala (the first mission in California). There is more to do in America's Finest City than you could possibly imagine.

We look forward to welcoming you to the beautiful city of San Diego. For more information visit www.sandiego.org/meeting-planners/syisd/amatyc.



Daytime Skyline (Courtesy of USS Midway Museum)



Cheetah Outpost (Courtesy of San Diego Zoo Safari Park)



Will I See You at #43?

Jane Tanner

Onondaga CC • Syracuse, NY

"If you can't stop thinking about it, don't stop working for it." - Michael Jordan

By now you are aware that the 43rd Annual AMATYC Conference is November 9-12, 2017, in San Diego. I hope you are planning to be in San Diego. But, if you are still undecided, I'm hoping my article convinces you to come to San Diego and "have a prime time" at our conference! As Charles Dickens wrote "The most important thing in life is to stop saying 'I wish' and start saying 'I will.' Consider nothing impossible, then treat possibilities as probabilities." I hope that instead of saying that you wish that you could go to the AMATYC conference, that you will say I WILL go to the conference!

When I teach, it is crucial for me to motivate my students to appreciate a subject that they don't necessarily like. I try to provide interesting tidbits that might just tickle their fancy and turn them on to the beauty of mathematics. Warning, these tidbits must be delivered enthusiastically or no student will believe you!

It is my turn to motivate you about our conference - #43 - using the

techniques that I might use in class. I have done some "research" (is Wikipedia research?) on the number 43 in order to whet your appetite.

Interesting tidbits about 43:

- 43 is the 14th smallest prime number.
- 43 is a twin prime along with its pair 41. What is a twin prime? A twin prime is a prime number that is 2 more or 2 less than another prime number. (I would ask my students for other examples of twin primes.)
- 43 is the smallest prime that is not a Chen prime. What is a Chen prime? A prime number is a Chen prime if 2 more than the prime number is either a prime or a product of two primes. Two more than 43 is 45 which isn't prime and it isn't the product of two primes. What is the next prime that is not a Chen prime?
- 43 is the third Wagstaff prime. What is a Wagstaff prime? A Wagstaff prime is a prime number $\frac{2^q+1}{3}$ of the

form where q is an odd prime. What are the first two Wagstaff prime numbers and what is the next one after 43?

- 43 is the fourth term of Sylvester's sequence. This sequence is one in which each member is the product of the previous members plus one. What are the first three terms of this sequence and what is the next one after 43?
- 43 is the smallest prime number that can be expressed as the sum of 2, 3, 4, or 5 different primes. For example, $43 = 2 + 41$ and $43 = 11 + 13 + 19$.
- 43 is the largest non-McNugget number. I bet you didn't know that there is such a thing as a McNugget number! When this concept was proposed, McDonald's sold Chicken McNuggets in boxes of 6, 9 or 20 (excluding Happy Meals). A number is a McNugget number if you can buy boxes of McNuggets to obtain exactly that number. For example, if you wanted to purchase 18 McNuggets, you could buy three six piece boxes or

➤ *Continued on page 11*

Collaboration Corner

AMATYC has been well-represented in the activities of Transforming Post-Secondary Education in Mathematics (TPSE Math). TPSE Math aims to effect constructive change in mathematics education at U.S. community colleges, four-year colleges and research universities.

Vision: Post-secondary education in mathematics will enable any student, regardless of his or her chosen program of study, to develop the mathematical knowledge and skills necessary for productive engagement in society and in the workplace.

Mission: TPSE Math will facilitate an inclusive movement to strengthen post-secondary education in mathematics by working closely with--and mobilizing when necessary--faculty leaders, university administrations, membership

associations, and relevant disciplinary societies in the pursuit of mathematically rich and relevant education for all students, whatever their chosen field of study. TPSE Math will identify innovative practices where they exist, advocate for innovation where they do not, and work with and through partners to implement and scale effective practices.

TPSE Math Priorities

- **Lower-Division Pathways:** TPSE is part of the seven-member AMPSS coalition, developing multiple math pathways in two- and four-year institutions to better align coursework with students' programs of study and increase completion rates.
- **Upper-Division Pathways:** TPSE promotes reform of upper-division cur-

ricula in response to evolving career opportunities and demand from other departments for mathematics courses.

- **Teaching Technologies and Methodologies:** TPSE advises Ithaca, a research group that studies the uses of technology to improve teaching and learning.
- **Broader Graduate Education:** TPSE promotes greater diversity in the discipline, career pathways outside of academia, and better training of graduate students to be more effective teachers.

This information was taken from www.tpsemath.org/. Check this site frequently as there is information about meetings in which you may be interested.

Having a Prime Time in November

by Judy Williams, Program Coordinator

After you have read all the conference information in this newsletter, you will be ready for a prime time in San Diego. Find information on the Themed Sessions in articles from the Statistics Committee (page 8) and the Teacher Preparation Committee (page 8). Read about *AMATYC IMPACT* (on this page). The Research in Education for Two-Year Colleges Committee is sponsoring a Thursday night event and Symposium on Friday and Saturday during the conference (page 10).

Thursday afternoon at 12:40 pm learn about grant opportunities with speakers from the National Science Foundation. Share and hear about new ways to support your AMATYC Affiliate in the Affiliate Sharing Session at 1:50 pm before heading to the Opening Session followed by the Grand Opening of the Exhibit Hall.

Participate in the forums Thursday evening to discover more about position papers on developmental math, adjunct working conditions, mathematics for students in two-year terminal programs as well as give input on the third standards document, *AMATYC IMPACT*.

Bring your calculators for the Faculty Math League contest Friday afternoon to bring the coveted plexiglass trophy home to your region. Then choose an ANet or Academic Committee meeting to see how to be more involved in AMATYC.

Also, check the sign-up sheet outside the Impromptu Room in Marina 2 each day. See who has decided to get together about a last-minute new idea or a continuation of discussions from a session. Consider initiating a discussion yourself.

How many new ideas or new friends can you find at the 43rd Annual AMATYC Conference, November 9-12, 2017? 2, 3, 5, 7, 11, ...?

AMATYC Mathematics Excellence Award

by Nancy Sattler, ME Award Committee Chair

Consider honoring a colleague through an AMATYC Mathematics Excellence Award nomination. The award, which is presented every two years, recognizes educators who have made outstanding contributions to mathematics or mathematics education at the two-year college. The Mathematics Excellence (ME) Award Committee will consider each of the nominations in accordance with the following criteria: National reputation; Leadership and activities in professional organizations; Professional talks and presentations; Awards and grants received; Publications; Professional activities on a regional, state, and national scale; and Teaching expertise.

Go to www.amatyc.org/MathExcellenceAward for frequently asked questions and nomination packet requirements. Nomination packets must be sent by email in a PDF file by Wednesday, November 1, 2017, to Nancy Sattler at nsattler@terra.edu.

All AMATYC Members Welcome!

Attend the Kick-off Meeting
of the newly created Pathways Subcommittee
Co-sponsored by
Mathematics Intensive Committee &
Developmental Mathematics Committee

Wednesday, November 8
5:00 p.m. - 6:00 p.m. PST
Sheraton San Diego Hotel and Marina

AMATYC IMPACT

Coming Soon!

by Nancy Sattler and
Mary Beth Orrange,
co-chairs *AMATYC IMPACT*

AMATYC's third standards document is coming to the AMATYC conference in San Diego in November! *AMATYC IMPACT: Improving Mathematical Prowess And College Teaching* will present clear guidance of how to IMPACT the mathematical prowess of students. This guidance is meant to inspire faculty, departments, institutions, and policymakers to examine, assess, and take action to improve every component of mathematics education in the first two years of college.

At the conference in San Diego, members can attend the Thursday evening forum to give input to the document or attend the Chat and Chew or Poster Session. If you are a delegate, you will be asked to approve the philosophy and spirit of *AMATYC IMPACT* at the Delegate Assembly in San Diego. Members can also attend four different regular sessions to learn more about *AMATYC IMPACT*.

- *AMATYC IMPACT: Understanding PRowess – Making Sense of Proficiency*
- *AMATYC IMPACT: Understanding PrOWess – Student and Faculty OWnership*
- *AMATYC IMPACT: Understanding ProwEss – Engagement*
- *AMATYC IMPACT: Understanding ProweSS – The Battle for Student Success*

Teaching mathematics in the 21st century brings new opportunities and challenges to the mathematics community and especially in the first two years of college. In an *AMATYC IMPACT* institution, faculty will focus on facilitating conceptual understanding and procedural fluency, in addition to fostering student engagement and student success; students will be mathematically proficient, take ownership for their learning and be engaged in the learning process; institutions will promote student success through student engagement and course completion. Consider the IMPACT that you can have in your classroom and get ready for *AMATYC IMPACT* coming soon.

Exhibits and Commercial Presentations Heat Up in Sunny San Diego

by James Martin, Exhibits Chair, and Nathalie Vega-Rhodes, Advertising Chair



For many conference attendees, the Grand Opening of the Exhibit Hall is a highlight of the conference. Be part of the Grand Opening Thursday at the Sheraton San Diego Hotel & Marina at 4:30 pm when Exhibits Chair James Martin and Local Events Coordinator Tammi Marshall will cut the ribbon to allow entry into the Exhibit Hall. Then go meet

the exhibitors and find the answers about their company and products for a chance to win the trivia hunt prizes. Be sure to have your SCAVENGER HUNT ENTRY FORM handy when you enter the hall. Also check out which exhibitors have the best treats to share at their booth!

Although the exhibitors will be available for all attendees Friday, 9:15 am-5:00 pm, with a 50 minute break at 12:35 pm for their lunch, and Saturday, 9:45 am-1:00 pm, you can get information about textbook updates and technology innovations without missing any conference sessions. Use the dedicated exhibit times Friday, 9:15-10:15 am, after the Regional Breakfast Meetings and Saturday, 10:00-10:45 am, following the keynote speaker at the Awards Breakfast.

The Exhibit Hall is a great place to meet many of the authors of your course materials and get up-to-date editions for course materials you are using or considering for adoption. Check publishers' booths for announcements about this. Also, some of these authors will be participating in commercial presentations during the conference. Check the miniprogram for a list of these sessions which explain best practices for use of specific products. Pearson Education will again offer Continuing Education Units (CEUs) for one of its sessions. Look for more details on this in the miniprogram, too.



Whenever you visit the Exhibit Hall, kindly thank the Exhibitor Representatives for being present at our conference. Especially thank those Exhibitors who are providing extra support to AMATYC in so many ways – funding an item distributed at the conference, hosting a reception or an event, or conducting a commercial presentation to assist AMATYC attendees

in the use of their products. Please let them know how much they are appreciated. Thank you and see you in Sunny Southern California!

Going Green

by Jim Ham, AMATYC President-Elect

Currently, AMATYC members receive an email with a link to an electronic version of each of the AMATYC publications and a printed version mailed to their home or office. Some AMATYC members have requested to receive AMATYC publications in electronic format only. This would save printing and postage expenses, and may save a few trees.

To accommodate this request, AMATYC is planning to pilot a going green program beginning in 2018, where members will have the option to select how they receive two of the AMATYC publications: the four annual issues of the AMATYC News and the April conference flyer.

If you would like to continue to receive your AMATYC publications in print format, there is nothing you need to do. However, if you would like to receive these two 2018 AMATYC publications in electronic format only, you will need to change your member profile at the AMATYC website. To do this, sign in at the AMATYC website, click on the Manage Profile link, click on the Edit Bio button, then select YES to one or both of the first two questions under the Additional Information section. Be sure to save your profile changes.

The going green option in this pilot can be initiated or changed at any time by altering member profile preferences at the AMATYC website. AMATYC will continue to serve members with the same great publications, but with more individual control over how the publications are received.

It's a Prime Time for Posters

by Honey Kirk, AMATYC Assistant Conference Coordinator

Be sure to add the Poster Session to your personal schedule on the conference app for Friday, November 10 in the Sheraton San Diego Hotel & Marina from 1:45-3:45 pm. Of the 48 posters this year, 19 will be presented by AMATYC Project ACCESS fellows showing their work on projects related to their teaching careers. Additionally there will be such topics as flipped classrooms, Fibonacci numbers and mathematical induction, English language learners (ELLs), using mobile apps, Sudoku puzzles, Weekend College, self-directed learning, and incorporating taxes into classroom activities. Browsing hours will begin at 11:00 am on Friday but the presenters will only be in attendance during the scheduled session.

AMATYC Elections for the 2018-2019 Executive Board

by Nancy Sattler, Nominating Committee Chair

Regular (voting) members will be sent an email beginning September 15 with the link to “register” to vote in the election of the 2018-2019 AMATYC Executive Board. Be sure that your primary email address is correct in the AMATYC database. Electronic ballots for each AMATYC region will ask you to vote for one of the candidates for each office: President-Elect, Secretary, and Regional Vice President. Electronic ballots must be cast between September 15, and September 30, 2017. Members may request a paper ballot by contacting Nancy Sattler (nsattler@terra.edu) before September 1, 2017. All paper ballots must be postmarked no later than September 30 to be valid.

AMATYC is counting on you to cast your vote. Please take time to vote for those who will lead AMATYC for the next two years. Officers will be announced by an email to all AMATYC members and at the 2017 AMATYC Annual Conference in San Diego. The new members of the Executive Board take office January 1, 2018. Regular members as of June 30, 2017, are eligible to vote. Eligible voters who do not receive an email with the link to vote beginning September 15 should contact the AMATYC office at amatyc@amatyc.org.

Information on all candidates can be found on the AMATYC website (www.amatyc.org) and the election website (<http://amatyc-vote.org/2017>) after September 15, 2017.

2018-2019 AMATYC Board Slate of Candidates

President-Elect:

Kathryn (Kate) Kozak, Coconino CC
Julie Phelps, Valencia College

Secretary:

Behnaz Rouhani, Perimeter College/Georgia State University
Shannon Solis, San Jacinto College

Northeast VP:

Sophia Georgiakaki, Tompkins Cortland CC
Jane-Marie Wright, Suffolk County CC
Chris Yuen, University at Buffalo

Mid-Atlantic VP:

Dan Fahringer, Harrisburg Area CC

Southeast VP:

Jerrett Dumouchel, Florida State College
Nancy Rivers, Wake Tech CC
Shawanda Thomas, Lawson State CC

Midwest VP:

Diane Koenig, Rock Valley College
Jon Oaks, Macomb CC

Central VP:

Rochelle Beatty, Kansas City CC
Megan Breit-Goodwin, Anoka-Ramsey CC

Southwest VP:

Rachel Bates, Redlands CC
April Ström, Scottsdale CC

Northwest VP:

Liz Hylton, Central Oregon CC
Sarah Pauley, Western Wyoming CC
Debra Swedberg, Casper College

West VP:

Oiyin Pauline Chow, Harrisburg Area CC (emerita)
Eric Matsuoka, Leeward CC

AMATYC Traveling Workshop on Inquiry-Based Lessons

by Janet Zupkus, MATYCONN President

The Mathematical Association of Two-Year Colleges in Connecticut (MATYCONN) was awarded an AMATYC traveling workshop grant to fund a full day workshop held on April 21, 2017, on inquiry-based lessons at Naugatuck Valley CC in Waterbury, CT. The workshop was facilitated by Christine Von Reese and Volker Ecke of Westfield State University, in Westfield, MA. Von Reese and Ecke have several years experience teaching courses using this pedagogy. The workshop was rich in discussion of the learning curve, student interaction, classroom management and research associated with using this pedagogy. Videos of students engaged in this learning environment were shared. The attendees had time to review printed resources with inquiry-based lesson ideas on many different math topics and applications. The workshop also gave attendees the opportunity to practice teaching an inquiry-based lesson to their peers which was an invaluable experience. The attendees provided very positive feedback on the workshop. MATYCONN would not have been able to provide this worthwhile workshop to its members without the AMATYC grant.

The AMATYC Foundation Is Counting on You!

Have you made your contribution to the AMATYC



Foundation this year? Each year the AMATYC Foundation supports the work of AMATYC in various ways. The Foundation has contributed money towards the standards project, *AMATYC IMPACT*, and each year provides money to subsidize two cohorts of ACCESS fellows to attend the AMATYC Annual Conference. Consider making a contribution now. It is easy! Members can contribute at www.amatyc.org/donations. Support your profession by making a contribution to the AMATYC Foundation today!

A Simple Tool for Assessment and Communication: Vignette from One Professor

by Behnaz Rouhani, Placement and Assessment
Committee Chair

The following is an interesting vignette about one professor named Diego.

Diego is teaching a beginner math course to first semester college students. They all started out optimistic, but soon as the work progressed, many were making poor decisions such as skipping class, not doing the homework, not participating or paying attention in class, missing assignments, and eventually falling behind. Those in dire need of help are usually the ones who, often due to a hectic work and school schedule, cannot go for tutoring or seek help from their instructor. Preparing for mathematics tests need not be an overwhelming process for students. So, to help students review course material before each test, Diego put together an activity that gets students actively involved in their own learning and provides them the opportunity to discuss course content with their peers, eventually helping them become confident learners.

The activity is called “Take a Fresh Look-Math Is Easy.” Two weeks before each test the professor posts a blank “Take a Fresh Look-Math Is Easy” list in class and asks students to visit the list and identify areas in which they need help and put their name beside that topic. Then, everyone is asked to write their name in front of the area in which they are willing to help in class. To ensure that all students have the opportunity and the incentive to participate, students are asked to volunteer only once. If there are two volunteers for an area, they are asked to pair up and address the area together. Successful completion of this exercise entitles each presenter to four bonus points on their upcoming test.

After the list is completed if there is any area for which there is no volunteer to help, the professor’s name will go there. Beginning with the next class session, topics are covered in class by students who volunteered to help in 5-10 minute short presentations.

This exercise proved to be very successful, actively involving students in their own learning and helping each other, creating a true learning community. Results of the first test confirmed the success of this exercise as test grades were slightly higher. The real improvement was noticed on the second test and onward. Students’ creativity and eagerness to help each other led some to prepare handouts for everyone, or to present a concept map on the board, or to lead a question and answer session during their presentation. This exercise allowed the quiet students to find and use their voices to teach others, and encouraged and empowered everyone to be engaged in meaningful and worthwhile discussion of mathematics.

Committee participation is open to all AMATYC members. To learn more about the AMATYC Placement & Assessment Committee or to be involved throughout the year, email the chair of the committee, Behnaz Rouhani at brouhani@gsu.edu.

Student Mathematics League

by Steve Hundert, SML Coordinator

Both rounds of the Student Mathematics League competition have been completed and the final results are in.

Final Team Results

1. West Valley College (CA) 304.5 points
2. East Los Angeles College (CA) 272.0 points
3. Bellevue College (WA) 249.0 points
4. Los Angeles City College (CA) 248.5 points
5. Pasadena City College (CA) 243.0 points
6. Brookdale CC (NJ) 223.5 points
7. Las Positas College (CA) 219.0 points
7. Normandale CC (MN) 219.0 points
9. El Camino College (CA) 218.5 points
10. Santa Monica College (CA) 218.0 points

Final Individual Results

1. Brendan Brzycki Los Angeles City College 66.5 points
2. Seung Jo Yoo Fullerton College 66.0 points
3. Shuai Xue College of San Mateo 65.5 points
4. Isaac Hillerman Howard CC 65.0 points
5. Yueyun Chen East Los Angeles College 63.0 points
6. Bill Zhu West Valley College 60.5 points
7. Jared Kittleson Corning CC 60.0 points
8. Nikhil Mandava Mission College 59.0 points
9. Jessica Zheng West Valley College 58.5 points
10. Lina Sun Pasadena City College 57.0 points

Top Schools and Students by Region

- Northeast: Suffolk County CC (NY)
Jared Kittleson, Corning CC (NY)
- Mid-Atlantic: Brookdale CC (NJ)
Isaac Hillerman, Howard CC (MD)
- Southeast: Georgia State University, Perimeter College (GA)
Lily Turaski, Pellissippi State CC (TN)
- Midwest: College of DuPage (IL)
Ajay Arora, Schoolcraft College (MI)
- Central: Normandale CC (MN)
Kyle Hayes, Normandale CC (MN)
- Southwest: Austin CC (TX)
Tien Le, Collin College (TX)
- Northwest: Bellevue College (WA)
Wenshun Zhou, Bellevue College (WA)
- West: West Valley College (CA)
Brendan Brzycki, Los Angeles City College (CA)

A very grateful thank you to all of the moderators who give the exams, grade them, and post the grades on the scoreboard. Also thanks to George Hulburt who runs the website and scoreboard, T.J. Duda and the test development team, Randy Schwartz for supplying the short answers posted on the website, and the AMATYC Office for their assistance.

If your school does not currently participate in the SML, why not? You can read about the SML on the webpage at www.amatyc.org/StudentMathLeague or email stevenh@csmd.edu with any questions. Don't forget to register your school in August at the AMATYC SML website for next year's competition.

See you in San Diego! Show off your mathematical prowess at the ultra competitive Steve Blasberg Faculty Mathematics League Competition!

Highlights of the 2017 AMATYC Spring Board Meeting

by Michelle Duda, Board Secretary

The AMATYC Executive Board met at Southwest Tennessee CC in Memphis on April 21-24, 2017. Highlights of the meeting included:

- The Board approved the 2018-2023 Strategic Plan.
- A new ad hoc committee, Mathematics Standards in the First Two Years of College, was formed. Two positions, Committee Chair and Standards Digital Coordinator, were also approved.
- The slate of candidates for the 2018-2019 AMATYC Executive Board was set.
- The 2017 Teaching Excellence Award winners were announced.
- The reduced retiree conference registration rate for members will continue for the 2017 and 2018 AMATYC Annual Conferences.
- A reduced adjunct conference registration rate for members will be available for 2017 and 2018.
- Effective July 1, 2018, the annual membership dues for a regular individual AMATYC member will be \$90.
- Institutional member dues were set at \$510, effective July 1, 2018, through June 30, 2019.
- AMATYC will continue to provide each AMATYC affiliate organization with one affiliate scholarship per year for 2018-2020. Each scholarship provides one discount member conference registration.
- Starting in 2018 with Cohort 15, the maximum size of each cohort of AMATYC Project ACCESS will be increased from 24 to 30.
- The AMATYC Student Research League was established.
- New positions were approved including Journal Assistant Editor, Faculty Mathematics League Facilitator, Student Research League Evaluation Coordinator, and Student Research League Development Coordinator.

The following appointments and reappointments were approved:

- **Kim McHale** as Midwest Regional Representative and **Pat Riley** as At-Large Representative to the ITLC
- **Preeti Singh** as the Southwest Regional Representative on the Math Intensive Committee
- **Helen Burn** as the Northwest Regional Representative to the Math Intensive Committee
- **Paul Walcher** as the At-Large Representative to the Placement and Assessment Committee
- **Michael Pemberton** as the Milwaukee Regional Representative on the AMATYC Program Committee
- **Mary Beth Tsai** as an At-Large Member of the AMATYC Program Committee
- **Michael Sullivan** to the StatPREP Advisory Committee
- **Barbra Steinhurst** as the Listserv Assistant on the Project ACCESS Team
- **Cheryl Cleaves** to the AMATYC Foundation Board as a member-at-large
- **Wendi Morrison** as Editing Director
- **Amber Rust**, Mid-Atlantic Region, and **Jane-Marie Wright**, Northeast Region, to the *MathAMATYC Educator* Editorial Panel
- **Judy Williams** as Program Coordinator
- **Steven Hundert** as Student Mathematics League Coordinator

Full minutes of the meeting may be found on the AMATYC website: www.amatyc.org/BoardMinutesMotions.

A Mathematical Legacy

by Judy Williams and
Kathleen B. Yan (ACCESS Fellow Cohort 12)

In 1989 Ed Anderson joined the faculty at the Manassas Campus of Northern Virginia CC (NVCC) where he worked until his retirement in March, 2011. When he passed away August 3, 2011, his obituary said he will be remembered as a kind, gentle, loving person and a wonderful math instructor. Those of us on the Local Events Committee for 2008 AMATYC Annual Conference in Washington, DC will remember Ed in his red vest working long hours in the Hospitality Room, always with a smile for everyone.



Ed Anderson

In 2007, one of Anderson's students, Kathleen Yan, with his sponsorship, received the VMATYC Glenn Fox Scholarship, presented annually to a student with high academic performance who has expressed interest in a career in mathematics, computer science, or mathematics education. Yan, after receiving her A.S. in Mathematics from NVCC, earned a B.A. in Mathematics at the University of Virginia as well as an M.A. in Mathematics from the University of Georgia and an M.S. in Operations Research from George Mason University. Four years ago, she joined the mathematics faculty at NVCC. She is also active in AMATYC as an ACCESS Fellow, Cohort 12, attending conferences in New Orleans and Denver, where she participated in the Poster Session.



Thoang Tran, recipient of the Glenn Fox Scholarship, is congratulated by Kate Yan

Yan has continued Ed Anderson's mathematical legacy by sponsoring her student, Thoang Tran, for the Glenn Fox Scholarship, which she received at the VMATYC Conference this past April. Tran, a recent immigrant from Vietnam, overcame language and financial barriers to become an outstanding mathematics and computer science student. After receiving her A.S. in Computer Science from NVCC this May, she plans to attend Virginia Tech University this fall, where she has already been accepted to pursue her goal to become a high school computer science teacher.

As mathematics educators, we sometimes wonder what impact our work may be having. The story of Ed Anderson's mathematical legacy should provide inspiration to all of us.

Our deepest sympathy goes out to Beverly Vance, AMATYC Office Director, on the passing of her husband, John, on June 7, 2017. Kindly remember Beverly and her children, Lee, Kelsi (Lee's fiancé), and Lauren, in your thoughts and prayers.

Condolences can be sent to Beverly at AMATYC, 5983 Macon Cove, Memphis, TN 38134.

Teacher Preparation Committee News

by Andy D. Jones, Chair

The AMATYC Teacher Preparation Committee has launched *It Worked for Me: Activities from the Classroom*, an AMATYC member-sourced electronic collection of innovative lessons, activities, and best practices for use in mathematics courses for prospective teachers. The committee has a goal to collect, post, and share at least 43 different resources before its meeting at the 43rd Annual AMATYC Conference in San Diego this November. Visit www.sites.google.com/site/amatycprep/home/works-for-me to contribute ideas.

The Teacher Preparation Committee will sponsor the themed session “Engaging Future Teachers with Concepts of Rational Numbers” during the 2017 AMATYC Conference. A team of six committee members will share classroom ideas, activities, and research for teaching rational number concepts in courses that prepare prospective teachers. Topics will include modeling fraction algorithms with manipulatives, prospective teachers’ thinking about proportionality, connections between music and rational numbers, and alternative ways to think about fraction comparison. Don’t miss this themed session on the first morning of the conference, Thursday, November 9, from 9:10–11:05 am.

Join the Teacher Preparation Committee to discuss general issues pertaining to teacher preparation and to plan future activities during the dedicated committee meeting time on Friday, November 10, from 4:00–5:00 p.m. Committee members should suggest discussion and agenda ideas by sending them to the committee chair in advance of the conference. Anyone interested in preparing future teachers is welcome to attend.

Connect with other passionate AMATYC members to improve the mathematical preparation of future teachers by self-enrolling in the Teacher Preparation group at www.amatyc.org. To learn more about the Teacher Preparation Committee and its activities, visit the committee website www.sites.google.com/site/amatycprep or contact Chair Andy Jones at jonesad@pgcc.edu.

Statistics Committee

by Julie Hanson, Chair

The AMATYC/ASA Joint Committee (AMATYC’s Joint Committee with the American Statistical Association) sponsors a series of webinars related to teaching statistics. Robert Carver, Monica Dabos, Joe Gerda, Kathy Kubo, Megan Mocko, Rebecca Wong, and Beverly Wood presented a webinar titled “Teaching with GAISE: Statistical Literacy for the 21st Century” in May. The presenters talked about making changes to an introductory statistics course that are consistent with the 2016 GAISE (Guidelines for Assessment and Instruction in Statistics Education) College Report. The AMATYC Executive Board voted to endorse the 2016 GAISE College Report at the Spring Board Meeting. It is available at www.amstat.org/asa/files/pdfs/GAISE/GaiseCollege_Full.pdf. The recording of this webinar, as well as other previous webinars, is available at www.amatyc.org/Webinars.

The 2017 AMATYC Annual Conference will include several professional development opportunities for teachers of statistics. There will be 50-minute sessions on topics relevant to teaching statistics. In addition, the AMATYC Statistics Committee is sponsoring a themed session titled “Data Science and the Introductory Statistics Course.” It will be held Thursday, November 9, from 9:10–11:05 am and will include six 15-minute presentations. The themed session will include ideas for engaging students in data science, sources of real data that can be used in an introductory statistics course, discussing methods of data cleaning and graphical methods for visualizing data, learning about the ASA DataFest student competition, and developing a two-year college data science certificate program. The AMATYC Statistics Committee meeting will be held at 4:00 pm on Friday, November 10. All interested AMATYC members are welcome to attend.

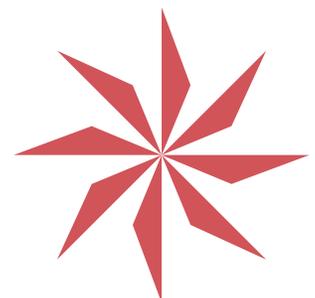
If you teach statistics, please consider joining the AMATYC Statistics Committee. Contact Julie Hanson at julie.hanson@clinton.edu to join or to learn more about the committee.

StatPREP Update

by Kathryn Kozak

StatPREP is an initiative of the Mathematical Association of America (MAA) in conjunction with AMATYC and the American Statistical Association (ASA). StatPREP will foster the widespread use of data-centered methods and pedagogies in introductory statistics courses through a series of workshops. The first StatPREP workshops took place in Santa Clarita, CA, and Minneapolis, MN, during June 2017. Following the workshop, participants will be working during this academic year to integrate what they learned into their introductory statistics courses. They will have support via an online community composed of other participants and workshop leaders, monitored by the hub leader of their respective workshop. At a minimum, all participants will share how they have integrated the material into their courses. Participants will return for a follow up workshop at the same location in the summer of 2018.

The hub leaders are faculty from the two institutions that are hosting the summer workshops. The institutions were chosen to reflect locations that would provide easy access to a large number of college statistics instructors. In the summer of 2018, there will be two new workshops in two new locations around the country. The StatPREP team will start the process of choosing the new colleges and the locations soon. If you are interested in applying to be a host institution, please visit <http://statprep.org> for more information and the application. The goal of the StatPREP team is to select institutions that are well-positioned to support the vision of StatPREP to improve statistics education by more data-centric approaches to teaching. The new hubs will be regionally-based, and geographically well-positioned to allow easy access for the participants to attend the workshop and then remain in contact with their workshop cohort.



Developmental Math Committee

by Paula Wilhite, Chair

A recording of the webinar “Incorporating Discovery into Developmental Mathematics,” presented in April, is now posted on the AMATYC website. This webinar is a presentation of activities and assignments that increase student engagement in discovery to promote deeper understanding. Many thanks to George Woodbury for an excellent job!

The third drafts for both proposed position statements, “Addressing Critical Factors for Student Success” and “The Science of Learning,” were completed in June. Forums for these position statements will be held on Thursday evening at the AMATYC Annual Conference in San Diego. Please see the conference program for more information on time and location.

At the 2016 AMATYC Annual Conference in Denver, a revised description of the DMC was proposed. This description can be found at <https://sites.google.com/site/amatycdmc>. (The current DMC description can be found at www.amatyc.org/AMATYCCcommittees#Developmental.) In early June, DMC members received a notice of the proposed change via an email message. A decision will be determined in October by an electronic ballot. The following is the proposed DMC description:

The purpose of the Developmental Mathematics Committee (DMC) of AMATYC is to improve the quality of developmental mathematics programs in colleges by providing a forum for the exchange of ideas.

In addition, the DMC strives to

- Provide opportunities for professional development on proven practice for developmental mathematics faculty;
- Share best practices for curriculum and instruction that promote successful matriculation into gateway college mathematics courses and other courses requiring quantitative tools;
- Increase involvement with national policy-making boards on issues related to college-readiness;
- Strengthen connections with other professional organizations regarding concerns of developmental mathematics; and
- Communicate the issues of developmental mathematics reform and the consequences of recent state-required mandates.

Professional Development Update

by Julie Gunkelman, Coordinator

The 2017 Webinar Series, supported by McGraw-Hill, brings professional development right to your office every month. There have been several webinars since the first of the year. Please see the archives on the AMATYC website for webinars you may have missed or would like to view again.

The AMATYC Traveling Workshop Grants that were awarded in the summer of 2016 have helped fund several Traveling Workshops that have taken place around the country. As part of the grant process, all traveling workshop directors will be sharing their experiences from the workshops in the *AMATYC News*. If bringing a Traveling Workshop to your campus or affiliate meeting sounds appealing, please contact the Professional Development Coordinator via the contact form on the Professional Development webpage.

Innovative Teaching and Learning Committee

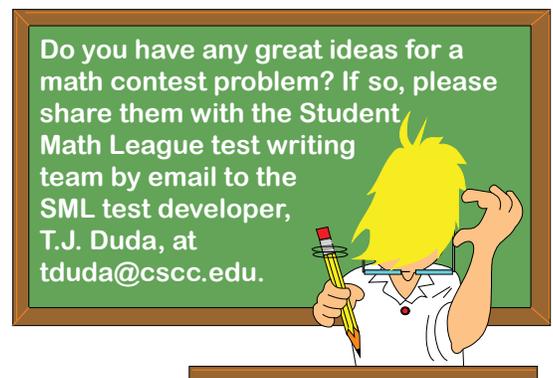
by Dan Petrak, Chair

The Innovative Teaching and Learning Committee (ITLC) cosponsored two webinars this spring. “Incorporating Discovery Learning into Developmental Mathematics” by George Woodbury and “MINTS: Math Interactive Notebook Teaching Strategies” by Christian Leone and Sylvia San Pedro. You are encouraged to watch the recording of these outstanding webinars at www.amatyc.org/webinars. If you have a presentation or idea to share with your colleagues, please reach out to AMATYC Professional Development Coordinator, Julie Gunkelman, at amatycpdc@gmail.com about presenting a webinar.

One of the highlights of the 2017 AMATYC Annual Conference in San Diego is the Friday night Ignite event. The ITLC is once again looking forward to hosting this fun and fast-paced experience where slides are automatically advanced every 15 seconds and speakers have exactly five minutes to share their passion! Please attend the Ignite event at the conference to learn and have fun! If you are interested in presenting, please contact Fred Feldon at ffeldon@coastline.edu.

Whether attending the conference or not this fall, you are invited to engage in relevant conversations about teaching and learning right now by joining the ITLC Google Group. Once you request to join the group by going directly to <https://groups.google.com/d/forum/amatyc-itlc>, you can interact with other ITLC members about a variety of topics including online teaching, open educational resources, student engagement or any other topic you want to pose to the group. The ITLC has been charged with making major revision to the Position Statement on *Distance Education in College Mathematics Courses in the First Two Years of College*. Thank you to those who have offered input into this document. Several meetings were held this past spring and summer over Google Hangout to edit the document. These documents are posted on the ITLC Google Group page and you are invited to view and comment on them there. The hope is to have a draft to bring to the AMATYC Executive Board by the fall of 2017.

Contact Dan Petrak at dgpetrak@dmacc.edu if you have any questions or ideas for our committee.



RMETYC Committee: Gearing Up for San Diego

by John T. Smith, Chair

RMETYC members have been hard at work preparing a noteworthy array of presentations for the 2017 AMATYC Annual Conference in San Diego. The sixth annual RMETYC Research Session will be held Thursday, November 9, at 7:00 pm. Chris Rasmussen, editor of the *International Journal of Research in Undergraduate Mathematics Education*, kicks off the session with his talk titled "A Case Study of Departmental Change." Rasmussen will discuss the successes and lessons learned by faculty and administrators engaged in a substantial effort to improve the teaching and learning of the Precalculus to Calculus 2 courses. Following the opening talk, three breakout sessions will feature nine research talks with discussion across a variety of topics.

Friday, November 10, and Saturday, November 11, RMETYC will be hosting a "Scholarship of Teaching and Learning (SoTL) Symposium." Friday will feature a keynote talk titled "Exploring Teaching and Learning in College Mathematics," presented by Jacqueline Dewar, editor of the MAA publication, *Doing the Scholarship of Teaching and Learning in Mathematics*. A two-hour workshop, "Embarking on Inquiry in Your Classroom," led by Ann Sitomer and Dewar will follow. Saturday will feature a second workshop, "Moving from Reflective Teaching to Classroom Inquiry," with John T. Smith and Megan Breit-Goodwin facilitating. Refer to <http://rmetyc.blogspot.com/> for information on the symposium, Thursday evening's Research Session talks and presenters, and the AMATYC Research Associate Program.

Please do not forget the RMETYC meeting, Friday, November 10. This meeting is open to all conference attendees. You are invited to become a member of the vibrant community of researchers and practitioners. To learn more about RMETYC please visit the AMATYC website, www.amatyc.org, or the RMETYC blog at <http://rmetyc.blogspot.com>. If you would like to join in the work of RMETYC, please email John T. Smith at jtsmith2@pstcc.edu.

ANets on the Move

by Judy King, Adjunct Faculty Issues ANet Leader

In two separate joint presentations, AMATYC's four ANets (Adjunct Faculty Issues, Department/Division Leadership, International Mathematics, and Mathematics for Liberal Arts) described for attendees the re-formation, goals, current projects, and future of the ANets. In January they were at Harford College in Bel Air, MD, for the Association of Faculties for Advancement of Community College Teaching, and in April at Bristol CC in Fall River, MA, for AMATYC's New England affiliate, NEMATYC. Fear Not! If you missed either of these, the ANets will be in San Diego in November!

Currently, the AFI ANet is tweaking the position paper, *Working Conditions for Adjunct Faculty*, to ready it for its input hearing at the Thursday night forums at AMATYC's next conference.

For more information, contact Judy King, turkcay@comcast.net.

Future AMATYC Conferences

2017	San Diego, CA	November 9-12
2018	Orlando, FL	November 15-18
2019	Milwaukee, WI	November 14-17
2020	Spokane, WA	November 12-15
2021	Phoenix, AZ	November 4-7
2022	Toronto, Canada	November 17-20

For additional information, contact the AMATYC Office at amatyc@amatyc.org or 901.333.5643.

Grants Update

by Dennis Ebersole, Coordinator

AMATYC IMPACT, the successor to *Crossroads in Mathematics* and *Beyond Crossroads*, will be considered by the Delegate Assembly at the 2017 Annual Conference in San Diego. The process of finding funding sources and writing grants to assist AMATYC in disseminating these standards and providing the professional development needed to implement the standards has begun. Some ideas for dissemination and professional development include professionally created videos to be made available on AMATYC's website, face-to-face workshops and conferences, expanding the traveling workshop program, and providing online professional development on different aspects of the standards. Contact Dennis at debersole@northampton.edu with additional suggestions.

Grant Writing Tip #3: Make sure that the project you are proposing is one that matches the grant program's Request For Proposals (RFP). Reviewers will rate an otherwise quality proposal low if it does not address the goals of the grant program. See previous editions of the *AMATYC News* for Grant Writing Tips #1 and #2.

The *AMATYC News* is the official newsletter of the American Mathematical Association of Two-Year Colleges and is published four times per year in January, April, August, and October. Your articles, announcements, comments, and letters to the Editor are welcome. Submit all materials by November 25, February 25, June 1, and August 15 for the respective issues.

Address changes should be sent to:

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AMATYC 101 Webinar

Wednesday, October 25, 4:00 pm EST

- Will San Diego be your first conference?
- Want to know more about what to expect?
- Want tips on maximizing your conference experience?



Join members of the Conference Committee and Executive Board for this information-packed hour. Bring your questions!

Details for the webinar registration will be available at www.amatyc.org soon.

➤ **President's Message, Cont'd from page 2**

- two nine piece boxes. You cannot buy 43 McNuggets – try it! It is also easy to show that you can purchase 44, 45, 46, 47, 48 and 49 McNuggets and you can keep on adding boxes of 6 to one of those to get any other number larger than 49. So, what if you do consider the 4 piece McNugget Happy Meal? What is the largest non-McNugget number then? Also, in some countries there are 10 piece (instead of 9) McNugget boxes. If this is the case, there is no largest non-McNugget number because there is no way to get any odd number of McNuggets.
- 43 is the number of consecutive hits Sheldon (*Big Bang Theory*) does with a Hacky Sack (See *Big Bang Theory*, Season 6, Episode 08 - “The 43 Peculiarity.”)
 - Augustus De Morgan was 43 years old in the year 43². Of course, anyone born in 1806 could say that including Elizabeth Barrett Browning.
 - There are 43 species of birds in Antarctica.

If these tidbits about 43 aren't enticing enough for you to come to San Diego to see how mathematicians “have a prime time,” maybe finding out more about our new standards document, *AMATYC IMPACT*, will be the catch to get you there. This document will expand the existing standards presented in *Crossroads in Mathematics* and *Beyond Crossroads*. There will be a forum on Thursday evening to discuss the document before the concept is voted on at the Delegate Assembly. In keeping with the “43 theme,” I decided to look at what was on page 43 in *Beyond Crossroads*. There is a quote from Godfrey Harold Hardy in *A Mathematician's Apology*, 1941, p. 25: “The mathematician's patterns, like the painter's or poet's, must be beautiful; the ideas, like the colours or the words, must fit together in a harmonious way.” Isn't this exactly what I am trying to do when I bring interesting tidbits to class or to convince you to come to San Diego?

By the way, did you know that it takes 43 muscles to frown? Please don't use those muscles, turn the frown upside down and come to San Diego in November! Rumi, a Persian poet, jurist, and theologian, said “Your heart knows the way. Run in that direction.” See you there!

New in San Diego

by Honey Kirk, Assistant Conference Coordinator and
Judy Williams, Program Coordinator

Chat & Chew

AMATYC 2017 is on the West Coast so everyone should be awake and ready for an early start. Chat & Chew will begin



on Thursday at 8:00 am. This is your opportunity to join three different table discussions while you enjoy a complimentary pastry from AMATYC Corporate Partners, Hawkes Learning and McGraw-Hill Education. Every 15 minutes discussions on varied topics led by a facilitator will begin. Included in this hour are exciting topics such as “Fantastic Apps and Where to Find Them,” “How to Keep Up with Millennials and Get Them Engaged in Learning Math,” “Developing an Anxiety-Free Attitude,” “Sudoku – Rules, Origins, Puzzles,” and “Searching for Effective Projects for Elementary Statistics Students,” as well as “Help with the Guidebook App.”

Be sure to bring your own beverage (BYOB).

Camps & Clubs Showcase

San Diego will be the site of another first for AMATYC. Thursday at 1:50 pm, stop by the showcase to see what your colleagues have been doing with math clubs or camps for their own students or those in the community. Talk with one or several groups to hear about what they have done and get ideas for your own camp or club. Selected topics include “Chartering a Mu Alpha Theta Chapter,” “Running a Fun Summer Math Camp for Kids,” and “Book Clubs - Not Just for English People.”

AMATYC CALENDAR OF EVENTS

Check the AMATYC website, www.amatyc.org, for information on conferences and meetings from other organizations.

September 30, 2017: 2017 LaMsMATYC Annual Conference, Pearl River CC-Forrest County Center, Hattisburg, MS. Website: <http://lamsmatyc.wixsite.com/home>

October 6, 2017: Fall ArizMATYC Conference, Chandler-Gilbert CC, Chandler, AZ. Website: www.arizmatyc.org

October 6-7, 2017: FTYCMA Fall Retreat, State College of Florida, Bradenton, FL. Contact: C. Altay Özgener, ozgenea@scf.edu. Website: <http://scf1.scf.edu/ftycma/html/events.html>

October 7, 2017: MATYC NJ Fall Conference, Raritan Valley CC, Branchburg, NJ. Contact: Gabriela Sprague, gsprague@brookdalecc.edu. Website: www.brookdalecc.edu/stem-institute/mathematics/matycnj/

October 7, 2017: 24th Annual WisMATYC Conference, Blackhawk Technical College, Janesville, WI. Website: <http://wis.matyc.org>

October 20-21, 2017: MichMATYC Annual Conference, Baker College, Muskegon, MI. Contact: David Tannor, davetannor@gmail.com. Website: <https://sites.google.com/view/2017-michmatyc-conference/home>

November 9-12, 2017: 43rd Annual AMATYC Conference, San Diego, CA. Contact: AMATYC Office, amatyc@amatyc.org. Website: www.amatyc.org

December 8-9, 2017: CMC³ 45th Annual Fall Conference, Hyatt Regency Monterey Hotel and Spa, Monterey, CA. Contact: Mark Harbison, mark.harbison@losrios.edu. Website: www.cmc3.org

A form is available at www.amatyc.org/AffiliateConferences to update or add affiliate conference information.

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Focus on Affiliates: MMATYC

MMATYC Holds Its First Two-Day Conference



MMATYC held its Annual Spring Conference on June 1-2, 2017, at the CC of Baltimore County's Owings Mills Center. The theme was "Mathletes and Manipulatives: Active Learning for the 21st Century."

Thursday (June 1st) was dedicated to Kathleen Offenholley's lively AMATYC professional development workshop on using games in mathematics classrooms. Participants were actively engaged throughout the day playing games, creating games and sharing ideas. Attendees enjoyed a workshop where they could have fun and

play games while learning, were pleased to see how adding games to their classes did not have to be complicated, and were eager to incorporate games into their classes to help ease students' math anxieties.

Friday's agenda included something for everyone, as well. There were several presentations on a variety of topics delivered by colleagues from Maryland, Delaware, Connecticut, Indiana, and Louisiana that were spread across three breakout sessions, ensuring that everyone was actively learning throughout the day. The keynote speaker, Rick Cleary of Babson College, enthralled everyone with his entertaining and informative presentation, "The Big Ideas in Mathematics and Sports." Mathematical areas he covered included probability, modeling, topology, and operations research.

Thank you to AMATYC and the Professional Development Committee for providing the workshop grant that helped make MMATYC's two-day conference a rousing success! All of the games Kathleen presented during the first part of the workshop are described in more detail on her blog, <https://mathgames.commonsc.gc.cuny.edu/>. The games developed through the NSF grant are available in PC and Mac formats at <https://mathgamesforstem.wordpress.com/>.

For more information about MMATYC go to the website: www.mmatyc.org.

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