

See You in Jacksonville!

by Jerrett Dumouchel, Jacksonville LEC



Jacksonville Beach/Courtesy of Visit Jacksonville

News highlighted a few of the fun and entertaining activities to do in downtown Jacksonville and its surrounding areas. It is now time to explore what the rest of this great city of Jacksonville has to offer Williams

he previous *AMATYC*

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See You in Jacksonville!

Jacksonville has to offer. While in Jacksonville, a must-see area known as The Beaches is collectively made up of Mayport, Atlantic Beach, Neptune Beach and Jacksonville Beach. The Mayport area of The Beaches is home to one of the nation's finest naval facilities, the Mayport Naval Station. At the naval station is the beautiful Kathryn Abby Hanna Park. Hanna Park has 1.5 miles of coastline and 447 acres of coastal hammock full of great hiking and biking trails. South of Mayport you will find many great attractions, one of which is the Beaches Town Center. The Town Center is a

quaint area full of local shops and restaurants serving some of the best and freshest seafood that you will ever have. If catching your own fresh fish is more your style, then be sure to head to the Jacksonville Beach Pier and spend some relaxing time fishing in the Atlantic Ocean. For family-fun activities, stop by Adventure Landing for a game of minigolf and go-kart racing. At the south end of The Beaches, you will also find the world-renowned golf course TPC Sawgrass, home of The Players Championship.

Two more fantastic areas of Jacksonville are the Arlington and Southside districts. One of the main attractions in the Arlington district is the Timucuan Ecological and Historical Preserve. The Timucuan Preserve is one of the last unspoiled costal wetlands on the Atlantic coast. There you will find the Fort Caroline National Memorial and the Kingsley Plantation. Both showcase very different time periods of the First Coast. If high-end shopping and well-known restaurants are more your thing, then be sure to head to the St. Johns Town Center, located in the Southside district of Jacksonville. This outdoor mall is a great place to enjoy the great Florida weather.



St. Johns Town Center/Courtesy of Visit Jacksonville



Jacksonville Zoo and Gardens/Courtesy of Visit Jacksonville

Speaking of enjoying the great Florida weather, be sure to head to the Northside and visit Big and Little Talbot Island State Parks. Little Talbot Island is one of the only remaining undeveloped barrier islands in Northeast Florida. Just north of Little Talbot Island is Big Talbot Island. This island is a bird-watchers and photographers escape. Explore the island on one of its hiking trails, or rent a boat or kayak and appreciate the island from the water. While on the Northside, head over to the Jacksonville Zoo and Gardens. This 110-acre zoo is home to more than 2,000 animals including elephants, giraffes, komodo dragons, and jaguars. It is also home to themed gardens that are a joy to view yearlong. Not far from the zoo is one of the twelve Anheuser-Busch breweries located in the United States. The brewery gives free daily tours to the public.

Now that you have an idea of all of the exciting things to do, I bet you cannot wait for the AMATYC Annual Conference so you can finally explore Jacksonville for yourself. At Jacksonville, you can discover your river of knowledge and experience your ocean of dreams. See you in November!

President's Message



An International **Experience**



Iim Roznowski **Delta College** University Center, MI

One of the responsibilities of the AMATYC President is to represent the association and its members at a variety of meetings and conferences. These include AMATYC affiliate meetings, Joint Mathematics Meetings every January, and the semiannual meetings of the Conference Board of the Mathematical Sciences. This past summer I was fortunate to have the opportunity to represent AMATYC at the 12th International Congress on Mathematical Education (ICME-12) in Seoul, Korea. The weeklong congress is held every four years and provides a chance for the international mathematics community to meet, discuss issues, and share solutions.

For this congress, the United States was asked to be one of five national teams (USA, India, Singapore, Korea, and Spanish Cultural Heritage) to host a booth at the exhibits. The U.S. planning team decided to use the exhibit to showcase the wide variety of mathematics associations and groups we have in our country. AMATYC was well represented in the exhibit with materials prepared by Christine Shott and the AMATYC office team. The exhibit included samples of Beyond Crossroads, MathAMATYC Educator, and the AMATYC News. AMATYC President-Elect Nancy Sattler and I spent a good deal of time at the exhibit meeting with congress attendees and answering their questions about AMATYC.

For the past several congresses, AMATYC representatives have been involved in the planning of a discussion group on problems and challenges in non-university tertiary mathematics education. In Seoul, Low-Ee Huei Wuan (Singapore Polytechnic) and I led the discussion group planning team, which included Auxencia Limjap (De La Salle University, Philippines) and AMATYC members Vilma Mesa (University of Michigan) and Steve Krevisky

(Middlesex CC). Attendees at the discussion group session came from many countries including, Australia, Canada, China, Israel, Iran, Philippines, United Arab Emirates, and United States. During the discussion, I was struck by the commonality of the issues being dealt with around the world. An attendee from Israel talked about the need of his students for a refresher on their secondary mathematics between their years of compulsory military service and their admission to university. A teacher from Australia brought up the issue of retraining older students to find jobs in a new economic environment. The two issues which most of this "international" discussion centered on were the use of technology in the classroom and classroom research.

The relationship between research and practice, and information and communication technology, were also the subjects of two of the seven theme groups of recipients of travel grants provided through a National Science Foundation grant to the National Council of Teachers of Mathematics. Grant recipients came from all levels of mathematics education in the U.S. and included several community college teachers. Each theme group leader will be compiling reports from grant recipients. When published, these reports will provide a great overview of the sessions and discussions that were part of ICME-12.

If you are planning to attend the AMATYC Annual Conference in Jacksonville this November and want to hear more about ICME-12 or international mathematics in general, you might consider the following:

- W11-"Innovative Ideas About Mathematics Education from Around the World"; Vilma Mesa, Fary Sami, Myong-Hi (Nina)
- S138-"International Math Conferences: River of Knowledge, (Pacific) Ocean of Dreams"; Steve Krevisky and Barbara Leitherer
- Meetings of the International Mathematics Subcommittee of the Division/Department Issues Committee.

Attending an international event such as ICME can broaden your perspective beyond the walls of your classroom and the borders of your state or country. If you like to plan ahead, ICME-13 (www.icme13.org) will be in Hamburg, Germany, in 2016, July 24 through July 31. Hope to see you there.

Teaching Excellence Award

by Nancy Sattler, AMATYC President-Elect

Time is running out! Do you have a colleague who has made an impact on the educational community through his or her teaching? You can honor your colleague by nominating him or her for the AMATYC Teaching Excellence (TE) Award, which is intended for educators, both full-time and adjunct, who have made outstanding contributions to mathematics or mathematics education while teaching at a two-year college. The TE Award Committee is composed of representatives from each of AMATYC's eight regions and President-Elect, Nancy Sattler. Multiple awards are given every two years. The next TE Awards will be presented at the 2013 AMATYC Annual Conference in Anaheim, CA, which will be held October 31 through November 3. The deadline for application is December 6, 2012.

Nominees must be AMATYC members whose primary assigned duties are delivering instruction in an associate degree-granting program. Nominees must have the equivalent of a minimum of 5 years of full-time teaching experience. Individuals can be selected for the award only once. Further information can be found at www.amatyc.org/awards/TeachingExcellence. An electronic packet of a single pdf file should be submitted by December 6, 2012, to Nancy Sattler at nsattler@terra.edu. Take the time today to recognize a colleague by submitting a nomination packet for him or her for the 2013 AMATYC TE Award.

Project ACCCESS

by Laura Watkins, AMATYC Project ACCCESS Coordinator

Project ACCCESS is pleased to announce the selection of twentyfive Fellows to attend the



AMATYC Annual Conferences in Jacksonville, FL and Anaheim, CA. The Fellows are:

> Jennifer Applebee, Middlesex County College, NJ Mariano Arellano, Harper College, IL Leslie Banta, Mendocino College, CA Heather Barker, Piedmont CC, NC Jessica Bernards, Portland CC, OR Mike Bostick, Central Wyoming College, WY Diann DeJulia, Pellissippi State CC, TN Mark DeSmet, Cabrillo College, CA Joshua Hammond, Jefferson CC, NY Andrea Hoagland, Lansing CC, MI Johnny Hu, Whatcom CC, WA Jesse Kiefner, CC of Baltimore County, MD Eliza Lee, Lansing CC, MI Padmal Mahawanniarachchi, Shelton State CC. AL Everett McIlwain, Lansing CC, MI Sarah Miller, CC of Baltimore County, MD Brittany Mosby, Pellissippi State CC, TN Jennifer Nohai-Seaman, Housatonic CC, CT Jon Oaks, Macomb CC, MI Michael Pemberton, Maysville Community & Technical College, KY Matthew Pragel, Harrisburg Area CC, PA Jim Rhodes, Polk State College, FL Lisa Sallee, CC of Baltimore County, MD Elizabeth Steen, North Hennepin CC, MN Steven Zollinger, Snow College, UT

Want to Serve on the AMATYC **Executive Board?**

by Rob Farinelli, AMATYC Past President

Don't delay! Consider placing your name in nomination for an AMATYC Executive Board position in the next election. The AMATYC Nominating Committee seeks recommendations and nominations for AMATYC National officers and Regional Vice Presidents to serve for the 2014-2015 term. Nominations are due February 1, 2013.

The offices to be filled in the 2013 election are President-Elect, Secretary, and Vice President for each of the eight regions. Any regular or life member of AMATYC is eligible to run for office. Slating two candidates for each office is the goal of the Nominating Committee and the AMATYC Executive Board. For more information about the duties and requirements of the offices and the nomination process, visit www.amatyc.org/Get-Involved/nomination-board.htm.

The Nominating Committee includes twelve members who represent a cross-section of AMATYC's delegates, members, and leadership, with at least one member from each region. If you have guestions, or wish to recommend yourself or someone else for an office, contact one of the members of the Nominating Committee listed below.

Jane-Marie Wright (Northeast, wright@sunysuffolk.edu) Christine Mirbaha (Mid-Atlantic, cmirbaha@ccbcmd.edu) Rvan Kasha (Southeast, rkasha@valenciacollege.edu) Jim Trefzger (Midwest, JTrefzger@aol.com) Donna Kessler (Central, donnak@macc.edu) Chris Oehrlein (Southwest, coehrlein@occc.edu) Charlie Naffziger (Northwest, cnaffziger@cocc.edu) Stephen Toner (West, Stephen.Toner@vvc.edu) Pauline Chow (At-Large, opchow@hacc.edu) Andy Jones (At-Large, JonesAD@pgcc.edu) Bob Malena (At-Large, bmalena@ccac.edu) Rob Farinelli (Past-President, rfarinelli@csmd.edu)



The report of the 2010 survey of mathematics departments, titled CBMS2010, Statistical Abstract of Undergraduate Programs in the Mathematical Sciences in the United States, is available online at www.ams.org/profession/data/cbms-survey/cbms2010-work.

The hardcopy publication will be available in fall 2012.

Check out Chapters 6 and 7 with data and information about two-year colleges!

Every five years since 1965, a comprehensive study of undergraduate programs in the mathematical sciences in the United States has been undertaken under the auspices of the Conference Board of the Mathematical Sciences (CBMS), with funding from the National Science Foundation and support from the mathematical sciences professional societies. If you have any questions, please contact Rikki Blair at richelle.blair@sbcglobal.net.

AMATYC Position Openings Research Associate and Professional Developmen

Consulting Professor

Interested in conducting classroom research? Thinking of applying for a sabbatical? AMATYC has two positions to support you.

AMATYC Research Associate

An AMATYC Research Associate appointment is an opportunity for AMATYC members who are interested in doing classroom research or research on practices in mathematics instruction at two-year colleges. The research may be in conjunction with activities such as graduate work, a sabbatical, or a grant.

AMATYC Consulting Professor

An AMATYC Consulting Professor appointment is an avenue for AMATYC members to pursue a project related to two-year college mathematics that interests them. The project may be related to classroom practice, professional development, or any idea that will help achieve the mission and goals of AMATYC.

Requests for either position can be made at any time during the year. To apply, members should submit a statement of interest, an outline of the research or project proposal, a resume, and letters of support from their institution and/or graduate program to the AMATYC Interim Executive Director Cheryl Cleaves (ccleaves@ amatyc.org).

A committee of the AMATYC Executive Board will provide technical support and determine the ways that AMATYC will be able to offer support for the research or project. The final outline of the research or project will be presented to the Board for approval, pending receipt of a letter from the applicant's institution and/or graduate program.

The appointee will be expected to report back to the AMATYC Board and share the results from their research or project through articles in MathAMATYC Educator or sessions at an AMATYC Annual Conference.

Professional Development Coordinator and Grants Coordinator

The success of AMATYC is based on the involvement of its members. In the previous issue of the AMATYC News, you were provided with information about the positions of Traveling Workshop Coordinator and MathAMATYC Educator Editor. In this issue is information about submitting nominations for the AMATYC Executive Board. In addition, AMATYC is also looking for a member who is interested in assuming a leadership role as Professional Development Coordinator or Grants Coordinator.

Professional Development Coordinator

The Professional Development Coordinator serves a major role in the promotion of professional development opportunities for AMATYC members. The Professional Development Coordinator will work with the Executive Board, the AMATYC Office, and the AMATYC membership to coordinate professional development opportunities for two-year college mathematics instructors. He or she will also be an ex officio member of the Professional Development Committee of the AMATYC Executive Board.

The position is open following a resignation, and the initial appointment will complete the unfinished term that runs through December 31, 2014. The regular term length for this position is three years.

Grants Coordinator

The Grants Coordinator works on AMATYC grant activities by identifying appropriate grant opportunities and seeking grants to fulfill the mission and goals of AMATYC. The person in this position will also be expected to provide appropriate collaboration and assistance to AMATYC members interested in submitting grant proposals. The appointment would begin January 1, 2013, and will run for three years.

Both positions offer support to attend the AMATYC Annual Conference. A complete list of qualifications and duties for all positions is available at www.amatyc.org. Interested AMATYC regular or life members should submit a letter of interest, a resume, and a letter of support from their supervisor. Materials for the position of Professional Development Coordinator should be sent to Jim Ham (jaham1729@gmail.com). Materials for the position of Grants Coordinator should be sent to Jim Roznowski (jimroznowski@amatyc.org).

AMATYC Calendar of Events

November 8-11, 2012 38th Annual AMATYC Conference, Jacksonville, FL. Contact: AMATYC Office, amatyc@amatyc.org

December 7-8, 2012 CMC³ Monterey Conference, Monterey, CA. Website: cmc3.org/ conference/Monterey11/Monterey11.html

February 21-23, 2013 TexMATYC Conference, Westin Galleria and Westin Oaks Hotels, Houston, TX. Website: www.texmatyc.org

April 5-6, 2013 VMATYC Conference, Wytheville CC, Wytheville, VA. Contact: Mike Kirby, mkirby@tcc.edu. Website: www.vmatyc.org

April 12, 2013 NEBMATYC Conference, Central CC, Hastings, NE. Contact: Bonny Rainforth, bonnyrainforth@cccneb.edu or Amy Wahlmeier, awahlmeier@cccneb.edu. Website: www.northeast.edu/Organizations/NEBMATYC

April 12-14, 2013 46th NYSMATYC Annual Conference, The Queensbury Hotel, Glens Falls, NY. Website: www.nysmatyc.org

October 31- November 3, 2013 39th Annual **AMATYC Conference**, Anaheim, CA. Contact: AMATYC Office, amatyc@amatyc.org

A form is available to update or add affiliate conference information. The form can be found at www. amatyc.org/affiliates/affiliates-conferences.htm.

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

Conference Corner

New Conference Registration Check-in

by Beverly Vance, AMATYC Office Director



The AMATYC Annual Conference registration area is going to look and work differently this year. AMATYC has partnered with ExpoLogic to provide electronic self-check-in and self-registration. Gone will be the "pre-registered" booths where, in the past, you stood in lines to pick up your name badge.

Prior to the conference, you will receive, if you have not received it already, an email with a registration barcode. Print out

the email with the barcode and bring it with you, or, save it to your smart phone. All full-conference pre-registered attendees, including speakers and presiders, will begin at one of four self-check-in kiosks. Simply go to an available kiosk, hold the printed barcode or your phone under the scanner to have your name appear on the screen. If you misplace your barcode, do not worry. You can check-in by typing your last name on the TouchSmart screen!

Once your name appears on the screen, select the print icon. Your name badge, along with meal tickets and a ribbon ticket (if applicable) will print. After collecting these items, you will proceed to the next station to pick up your remaining conference materials: badge holder, program, and bag. If you do not receive a ribbon ticket, you are done and on your way! For those eligible for ribbons, you will simply move to the ribbon station, show the staff member your ticket and get your ribbons. Speakers and presiders will then move to the Presenter and Presider Check-In

Important Note: Single-day registrations will not be able to scan their barcode to check-in. Single-day attendees will need to stop at the designated booth to pick up their badge prior to going to the materials station. Also, if you owe a balance, or if you register onsite paying by check or cash, you will need to stop at the cashier's window before moving to the materials station.

Online registration will remain open continuously through October and November including regular registration hours at the conference. There will also be two laptops set up in the onsite registration area to allow you to self-register and pay by credit card. You will then be able to take your registration barcode and enter the self-checkin area without having to fill-out a paper form or pay at the cashier's window!

As always, there will be staff available to help you with the check-in process. You are encouraged to pre-register and take care of any balances due before your arrival in Jacksonville to make the new process a breeze!

AMATYC Conference has **gone Mobile!**by Keven Dockter, Conference Coordinator

With over half of all people walking around with a smart phone or tablet, the AMATYC Conference Committee asked the Executive Board to approve the purchase of a conference app for the 2012 AMATYC Annual Conference in Jacksonville. It is with great excitement to announce that AMATYC will be using the Guidebook app during the conference.

The Guidebook app is a highly recommended, simple to use app, that will allow the attendee to view the complete conference schedule,

create their own personal schedule, check out who is exhibiting and where they are located, view a map of



the conference facilities, and much more. You will be able to access Twitter and tweet about the conference (#amatyc12), view information about local restaurants collected by the local committee, or create a photo album with all the other attendees of the conference.

The app is compatible with iPhones, iPads, iPod Touches and Android devices. Windows Phone 7 and Blackberry users, and people without any of these devices, can access the same information via the mobile site at m.guidebook.com. To download this free app, you will need to go to AMATYC's landing page, guidebook.com/g/ AMATYC2012/, and follow the directions. You can also download Guidebook at the Apple App Store or Android Marketplace or visit guidebook.com/getit. Once you have downloaded the Guidebook app

Scan to download!



you will need to search for the AMATYC Annual Conference. You can also download the app by scanning the QR code.

While you can download Guidebook at any time, the app for the conference will not be available until November 1. At that time you will receive an email with these same instructions! If you want more information on the app, stop by the session, S009, "Using the Conference App," scheduled for Thursday morning in Jacksonville.

Future AMATYC Conferences

2013	Anaheim, CA	October 31-November 3
2014	Nashville, TN	November 13-16
2015	New Orleans, LA	November 19-22
2016	Denver, CO	November 17-20
2016	Denver, CO	November 17-20
2017	San Diego, CA	November 9-12
2018	Orlando, FL	November 15-18

For additional information, contact the AMATYC Office at amatyc@amatyc.org or 901.333.6243.

Conference Corner

Call for Proposals for 2013

by Judy Williams, Program Coordinator



The 39th Annual AMATYC Conference will be held in Anaheim, CA, October 31-November 3, 2013. The theme, "MATH: There's No End to the Fun!" brings to mind both the conference location near Disneyland and California Adventure Park, as well as the conference opportunities designed to

thrill participants and challenge them to a never-ending quest for professional excellence.

A strong, exciting program requires high-quality, innovative proposals covering a full range of topics appropriate for the first two years of undergraduate education in mathematics, or the professional development of two-year college faculty. Our members are exceptionally talented as is demonstrated each year by the outstanding presentations that are expected at AMATYC Annual Conferences. Share your expertise with your colleagues in Anaheim by submitting a proposal to present a session or workshop at the 39th Annual AMATYC Conference. Proposals will be accepted electronically through the AMATYC website at www.amatyc.org beginning November 1, 2012, through February 1, 2013. Proposals from two-year college educators are particularly encouraged. All proposals will be objectively reviewed by the program committee and may not promote or highlight a commercially available product.

Presentations containing information that attendees can apply immediately are the hallmark of AMATYC's conferences. Broad topic areas include, but are not limited to, effective methods of instruction, addressing different learning styles, maximizing the learning environment, assessment of student learning, two-year college mathematics curriculum, reform efforts impacting content or pedagogy, topics that enhance the professional growth of mathematics faculty, and topics that address content of interest to AMATYC's academic committees. Please see the proposal information on AMATYC's website for additional topic details, and check the website for a complete listing of AMATYC's academic com-

Proposals for Anaheim will have options for several new or revised Program Code areas such as Curriculum Redesign (CR - Restructuring content or delivery of a course or sequence of courses), Distance Learning (DL - Hybrid or Online Classes), and Instructional Technology (IT - Computer software, Internet resources, graphing calculators, etc.). You will also see that if your proposal includes a panel format, the members of the panel must be listed as presenters of the

Help ensure that there will be no end to the mathematical fun in Anaheim from October 31 to November 3, 2013. Send in your proposal without delay!

Calling for Presiders in Jacksonville!

We need more attendees wearing presider ribbons. Please offer your help! Apply online at: www.amatyc.org/Events/conferences/2012Jacksonville/presenters/ presider-application.htm.

Pre-conference Workshop

Reminder: A pre-conference workshop, "Identifying and Addressing Difficult Concepts for Students in the Introductory Statistics Course," will be held from 8:30 am - 4:30 pm on Wednesday, November 7, 2012, at the Hyatt Regency Jacksonville Riverfront. The workshop will be provided by CAUSE (Consortium for the Advancement of Undergraduate Statistics Education) and SCHEMATYC (Statistical Content Helping to Empower Mathematicians at Two-Years Colleges). The program is designed to benefit both new and experienced statistics instructors. Content will include the presentation of instructional techniques to facilitate the teaching and learning of difficult statistical concepts and discussion of the Guidelines for Assessment and Instruction in Statistics Education (GAISE) objectives.

Participants are responsible for their own transportation, lodging, parking, and lunch (restaurants within walking distance), and are encouraged to bring their own laptops. See you in Jacksonville!

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 27, March 1, June 1, and August 15 for the respective issues.

Address changes should be sent to:

AMATYC Office

Southwest Tennessee CC 5983 Macon Cove Memphis, TN 38134 Phone 901.333.6243 Fax 901.333.6251 amatyc@amatyc.org

All other correspondence should be directed to:

David Tannor AMATYC News Editor Muskegon CC 221 S. Quarterline Rd. Muskegon, MI 49442 Phone 231.777.0609 Fax 231.777.0487 AMATYCNews@amatyc.org

Focus on Affiliate: MATYCONN

by Teresa Foley (MATYCONN President) and Rachael Schettenhelm (MATYCONN Vice President)

The Mathematical Association of Two-Year Colleges of Connecticut (MATYCONN) is the Connecticut affiliate of AMATYC and has approximately eighty members across the twelve community colleges in the state. Traditionally this affiliate holds a fall and spring conference each year where professional presentations are made to, and by, members. For the past twenty-two years, MATYCONN has held an annual statewide mathematics competition and offered scholarship opportunities for any student enrolled in a community college in Connecticut.

In early February 2012, MATYCONN and Connecticut's higher education community were rousted into action when the Higher Education and Employment Advancement Committee in the State Legislature proposed a bill titled "An Act Concerning Open Access to College Level Courses" or Senate Bill 40 (SB-40) as it was commonly referred to. The stated purpose of the bill was "to allow all students open access to entry level courses in a college level program and prohibit public institutions of higher education from forcing any student to enroll in a remedial course." The proposed bill consisted of two parts. First, public colleges can recommend but not require a student to enroll in a remedial course and second, remedial support has to be offered "in the classroom to students who demonstrate shortcomings in any entry level courses in a college level program."

A bill like this would pose many challenges to post-secondary institutions. Just like any state, Connecticut places a large number of incoming freshmen into developmental courses. Colleges and universities across the State offer a wide variety of initiatives to help students learn the mathematics they need to meet the requirements of their desired career program. Four community colleges in the state participate in $Statway^{TM}$, and all of the two- and four-year colleges and universities in Connecticut offer some combination of self-paced, hybrid, online, and traditional or on-ground mathematics courses at both the developmental and non-developmental (credit) levels. In addition, all of the public colleges and universities in Connecticut use multiple assessment measures for placement purposes. However, despite these efforts, with the passing of such a bill, higher education institutions would be faced with the challenge of embedding in-class remedial support for students who have for example, barely acquired the necessary skill or prerequisite for an entry level course.

During this past spring, MATYCONN members and college faculty across the state ventured outside the comfort of their classrooms on a public relations/education campaign. Through public hearings held by the Higher Education and Employment Advancement Committee, work by the Board of Regents (which governs seventeen of the eighteen institutions of public higher education in the state), meetings with the Committee co-chairs and faculty from all disciplines at a number of colleges, email campaigns
to Committee members and State Legislators, and meetings with the editorial board of the statewide newspapers, the bill went
through a number of revisions before it was signed into law by the governor on May 31, 2012. The law, which is now referred to as
Public Act 12-40 or PA12-40 requires that by the fall of 2014 public colleges and universities in Connecticut:

- 1) use multiple measures of assessment to determine students' skill level and for students who are "likely to succeed in college level work" be offered embedded (in-class) remedial support in entry level courses,
- 2) offer students who are below "the skill level required for success in college level work" the opportunity to participate in an intensive college readiness program before the start of the subsequent semester, and
- 3) offer students a maximum of one semester of remedial support that is not embedded provided that such support is intended to advance students toward earning a degree.

In addition, the law requires that by July 2014, all public school districts will have set in place ways to evaluate eighth and tenth graders for their potential for college readiness. The law also requires that by fall of 2016, all public school districts and institutions of higher education complete curricular alignments in language arts and mathematics based on the Common Core State Standards indicators of readiness for college level work. (Additional assessments can be used for adults who are entering college after spending time in the workforce.)

Grant Opportunities

by Dana Calland

Upcoming grant opportunity for the AMATYC membership:

Education and Interdisciplinary Research (EIR) www.nsf.gov/funding/pgm_summ.jsp?pims_id=5610

Full Proposal Target Date: October 31, 2012

Description: EIR supports activities in conjunction with NSF-wide programs such as Faculty Early Career Development (CAREER), Research Experiences for Undergraduates (REU), and programs aimed at women, minorities, and persons with disabilities. Further information about all of these programs and activities is available in the Crosscutting Investment Strategies section of the NSF Guide to Programs.

Since the bill was passed into law, administrators and faculty, which includes MATYCONN members, have been named to system and/or college wide committees charged with developing solutions to issues raised by PA12-40 or "An Act Concerning Open Access to College Level Courses." For MATYCONN members across the state, the year ahead promises to be filled with many activities both in and out of the classroom as work is done to address students' mathematical learning needs on many different levels.

If you have any questions concerning MATYCONN, visit www.matyconn.org or contact Teresa Foley at tfoley@acc.commnet.edu, or Rachael Schettenhelm at rschettenhelm@gwcc.commnet.edu.

Letter to the Editor

The opinions expressed here are those of the author and do not necessarily reflect those of AMATYC.

Issues Faced by Colleges and Students by Tuncay Aktosun (Professor of Mathematics, University of Texas

by Tuncay Aktosun (Professor of Mathematics, University of Texas at Arlington)

As enrollment in degree-granting postsecondary institutions continues to grow, the many challenges in undergraduate education in the U.S. today remain unresolved. This higher number of enrolled students brings the expectation for a proportionately higher number of students to graduate. Based on my personal observations as a mathematics professor, some issues affecting graduation faced both by students and colleges include:

- The rising cost of higher education, which results in many students taking courses at two-year colleges and transferring credits to fouryear institutions. State universities receive less state funding as a result.
- Lack of college readiness, which results in a higher failure rate in standard college courses, many remedial courses, and shifting resources to teach pre-college level courses.
- Diminishing grade value/credit transferability, which results in grades not reflecting a student's true ability, and need for placement exams for individual courses at colleges.
- Delayed graduation, which results in economic losses and waste of valuable time.

How can we all deal with such issues? There are no easy solutions to problems of such grand scales. Many initiatives by the federal government, states, and institutions are being taken and efforts are being made to address such issues. Some examples are the use of computer and online resources, collaboration between two- and four-year institutions to facilitate college readiness and credit transferability, and mentoring programs for retention and timely graduation.

In addition to all such efforts, there may be readily available resources that do not require additional investment, be these from a financial, personal, institutional, or national perspective. I would like to propose one such approach, namely using the College-Level Examination Program (CLEP) to address some of the challenges listed above. CLEP allows students to earn college credit by demonstrating their mastery of introductory college-level material; those who achieve a passing score on a CLEP exam move on to more advanced, higher-level courses. For example, some first-year college students can take CLEP exams to satisfy General Education requirements, thus allowing them to advance in their major courses faster. Other CLEP exams can be used as prerequisites to core courses; a STEM major may use Pre-calculus as a prerequisite, while a non-STEM major may take CLEP Algebra to meet that requirement. By demonstrating knowledge and mastery through CLEP exams, students can save tuition money, save a semester, and reduce time to a bachelor's degree.

For institutions, awarding college credit based on a rigorous and widely-recognized standardized exam may be a better and less costly alternative to having each individual department administering its own introductory college-level classes, its own individual assessment, and its own individual scoring. In addition, using the standardized CLEP exams as a way to gauge proficiency prior to course work may be a way to improve quality of entering college students.

Southwest AMATYC Regional Conference

by Kathryn Kozak, Southwest Region VP

The Southwest Region of AMATYC is hosting an AMATYC Regional meeting June 14-15, 2013. The meeting will be held in Flagstaff, AZ. Besides all of the incredible information you can learn at the conference, there are many exciting recreational opportunities in the Flagstaff area. Flagstaff is at 7000 feet, so the temperature in June is in the mid 80s. Flagstaff is at the base of the San Francisco Peaks with numerous hiking and biking trails in the area, is a one-and-a-half-hour drive from Grand Canyon National Park, minutes from three other national parks, 40 minutes from Sedona, and about an hour from Meteor Crater. After a twoand-a-half-hour drive from the Phoenix airport through cactus, shrub brush, and pine trees, you will arrive in Flagstaff for one and a half fun filled days with fellow mathematics teachers. ArizMATYC, NMMATYC,

OKMATYC, and TexMATYC look forward to hosting this event for you. Look for more information at tinyurl.com/SWAMATYC and in the next edition of the AMATYC News.





Reminders!

Teaching Excellence Award Nomination Deadline: **December 6, 2012**

Call for Nominations for the AMATYC Executive Board Deadline: **February 1, 2013**

Call for Presenters (Proposals) for the 2013 AMATYC Conference in Anaheim Deadline: **February 1, 2013**

For more information visit www.amatyc.org

StatwayTM and QuantwayTM

Faculty Engagement ... and Excitement ... In Statway™ and Quantway™

2012 National Forum for the Networked Improvement Communities (Carnegie Foundation for the Advancement of Teaching)

by Julie Phelps and Jack Rotman, AMATYC Liaisons to Carnegie Pathways

For the past two years, we have served as AMATYC Liaisons to the Pathways work of the Carnegie Foundation for the Advancement of Teaching (CFAT). The Pathways provide an alternative that allows students to complete a college-credit math course within two semesters (or terms) beginning at the level of elementary algebra. StatwayTM focuses on college introductory statistics, while *Quantway*TM focuses on college quantitative reasoning or literacy.

A basic methodology of the Pathways is a cooperative effort among faculty and staff at all of the institutions involved in this initiative, using a Networked Improvement Community (NIC). Each summer, the NIC hosts a joint meeting coordinated and supported by the CFAT. This year's event was called the first National Forum. About 150 math faculty were among approximately 250 people who gathered in Santa Cruz (California) in late July. We, the AMATYC Liaisons, attended this meeting and participated in many sessions. We also had discussions with a number of faculty, and we would like to share some of their comments.

A common theme in the faculty perspective was the excitement about using teaching methods-in particular group work and learning from a context-learned at the joint meeting. As one participant put it: "Finally real contextual problems." Many faculty regard the Pathways work as putting together the best pedagogy for students. Others are exploring these teaching methods for the first time. Faculty reported that students might take some time to acclimate to these teaching pedagogies.

The deepest faculty engagement within the NIC generally is directed at curriculum practices. Faculty involved in curriculum development are very supportive of the Pathways' goal of shortening the number of courses for students. Although Carnegie holds copyright for the curriculum materials, the direction for changes comes from these faculty. As an example, a group of QuantwayTM faculty have volunteered to create changes for several lessons this fall, using input from other NIC faculty.

Not all colleges in the NIC are using Lesson Study; when it works well, faculty using Lesson Study are very satisfied with the results. One person commented that it is not part of the local 'culture' to observe each other. For those using Lesson Study, faculty teams use the lesson study process on one or two lessons per semester. In some cases, the process results in suggestions for changing curriculum materials, and those doing the revisions consider these inputs.

The largest area of both excitement and concern among faculty deals with professional development. Pathways materials address a set of student development goals such as growth mindset, productive struggle, and productive persistence. In a broad fashion, this need for professional development is central to the existence of NIC. NIC provides expert resources and associated research as well as collaboration with other teaching faculty. For the curious, here are thumbnail definitions:

- Growth Mindset: A belief that acquiring intelligence for, and learning mathematics responds to effort and strategies, as opposed to the belief that the mind is fixed relative to learning mathematics. Research associates a growth mindset with higher levels of learning.
- Productive Struggle: The process of working through a meaningful challenge involving mathematical reasoning, often focused on a problem in context. Research associates productive struggle with higher levels of learning with understanding.
- Productive Persistence: An attitude of continuing to learn over time, involving appropriate tools and a positive belief about the results; often measured by a combination of course completion and continuing a sequence as needed.

Few math faculty have a formal background in these concepts. Nonetheless, working with such concepts expands faculty understanding of students. We noticed that several faculty were inspired to participate in the Pathways work because of the rigorous research behind these efforts.

Faculty at the National Forum reported diverse levels of comfort with teaching methods that are emphasized in modules and lessons. For some, this represents their first attempt at group-based learning. As such, they may be uncomfortable with the process. Other faculty have already been polishing their use of group learning and have found the process easier. The expertise and comfort with group learning is an area of future work for the NIC.

One of the unique characteristics of the Pathways work is that colleges make a commitment to the NIC. An individual faculty member cannot make this commitment. Colleges currently in the NIC are a combination of faculty-inspired,

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Committee Reports

Division/Department Issues Committee

by Sean Simpson, Chair

The Division/Department Issues Committee (DDIC) responds to issues regarding department chairs, adjunct faculty, qualifications, mentoring of faculty, diversity and international mathematics education. During the AMATYC Annual Conference in Jacksonville, DDIC will have another chairs colloquium. It has been a huge success in the past, and the committee anticipates this one to be no different. In addition, the committee will be having its annual meeting in Jacksonville at 4:00 pm on Friday, November 9. Please stop by if you are at the conference! The committee will be taking a look at a couple of position statements and perhaps reaffirming them. DDIC is always happy to have some new faces in the crowd!

For those who cannot be in Jacksonville (or cannot be at the committee meeting), you can still be a part of the committee. Some preliminary work on position statements will be discussed via email this fall, and you are invited to participate. For more information on this, or about the committee in general, please contact the committee chair, Sean Simpson, at Sean.Simpson@sunywcc.edu.

Mathematics for AAS Programs Committee

by Ned W. Schillow, Chair

On the surface there might not seem to be a common thread between service learning in medical facilities, medication in the blood stream, design creation in the fashion industry, function transformations, girl scout cookie sales, and optical interferometers. However, the Friday morning themed session at the 38th AMATYC Annual Conference, "Authentic Applications: Legitimizing the Mathematics We Teach"—as presented by the Mathematics for AAS Programs Committee—should nicely tie these topics together. Thanks goes to Shane Tang, Lasse Savola, David Tannor, Mark Harbison, and Patricia Hirschy who join committee chair Ned Schillow in sharing their insights and experiences with these topics.

Realistically, students enrolled in career-intensive programs of study including technology, business, health sciences, fashion and design, culinary arts, and the like, deserve mathematics courses which support their academic endeavors. To that end, the Mathematics for AAS Programs Committee continues to focus on real-world applications and investigations which help students legitimize their need to develop mathematical fluency relative to their chosen profession.

Conference participants are also encouraged to attend the Friday afternoon 4:00 pm committee meeting. Prior membership on the committee is not a pre-requisite! The agenda will include open discussion regarding challenges faced in teaching mathematics in conjunction with AAS programs and initiating

a repository of sample problems and resource references which can help support the incorporation of authentic applications in courses.

Mathematics Intensive Committee

by Sandy Poinsett, Chair

The Mathematics Intensive Committee is currently composed of two subcommittees: Pre-calculus and Calculus. At the AMATYC Annual Conference in Jacksonville, the Mathematics Intensive Committee will meet and discuss a variety of issues pertaining to college algebra, student readiness for calculus, and STEM issues as related to other disciplines, along with planning future sessions for the 39th AMATYC Annual Conference, which will be held in Anaheim, CA.

During the conference in Jacksonville, the committee will host a symposium entitled "Modeling and Applications" which will include presentations on Thursday given by Gary Rockswold on "Why Students Need Modeling" and Sheldon Gordon on "Mathematical Modeling: The Right Courses for the Right Reasons." Also, included in the symposium activities, will be a special hands-on workshop on Friday, led by Gary and Sheldon, giving participants a chance to experience a variety of modeling and application problems that can be used in their classroom. The committee encourages all those interested in including more modeling and applications in their courses to join this symposium. On Friday afternoon, the committee will have its committee meeting and on Saturday, it will host a "Sharing Session" discussing topics on including more modeling and application problems in courses, and varying teaching strategies to reach a variety of learning styles.

Be sure to check out the webinars posted on the AMATYC website. The Mathematics Intensive Committee has sponsored several webinars and more are to come this fall. Committee participation is open to all AMATYC members. To learn more about the AMATYC Mathematics Intensive Committee or to be involved throughout the year, email the chair of the committee, Sandy Poinsett at sandrap@csmd.edu or visit www.amatyc.org.

Placement and Assessment Committee

by Beth Edmonds, Chair

The Placement and Assessment Committee (PAC) has three sessions scheduled for the AMATYC Annual Conference this November. Each session will have a unique format, and all conference attendees are invited to participate whether or not they are committee members.

The PAC's first scheduled session titled "Aspects of Placement and Assessment" will be held on Thursday, November 8 from 9:00 am - 10:55 am. This year's speakers will be sharing their expertise in the following short presentations: "Using Portfolios for Assessment in a College Geometry Class" by Jodi Cotten, "Assessment in Online Courses" by Behnaz Rouhani, "Achieving a 42% Increase in Placement into Credited Math Courses"

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>> Committee Reports, Continued from page 10

by David Usinski, "Assessing Student Learning Using Gateway Exams" by Mary Brown, "Assessment in My Portfolio" by Steven J. Wilson, and "Poverty, Math, and Assessment" by Laura Reed. Drop in to hear one presentation or stay for the entire event.

The second session will be held on Thursday, November 8 from 11:20 am - 12:10 pm to discuss the business of the Placement and Assessment Committee. Items on the agenda include AMATYC position statements and possible effects on placement testing of Common Core State Standards. The third session will be on Friday, November 9 from 4:00 pm - 5:30 pm. The extended time frame for this session allows participants to engage in discussions on current topics regarding placement and assessment. These discussions will take place in a World Café format. Diane Maldonado, one of the conference keynote speakers, has graciously agreed to join this last session. Consider adding this session to your own conference schedule as it promises to be an enlightening time.

Student Mathematics League

by Susan R. Strickland, Coordinator

Welcome to a new year for the Student Mathematics League (SML). Round 1 will take place from Friday, October 19 through Saturday, November 3, 2012, and Round 2 will take place from Friday, February 15, 2013, through Saturday, March 9. If you are not already doing so, please consider forming a team to partici-



pate in next year's SML. You may not have a student who will score well enough to rank in the top 10, but you and your students will enjoy working together prior to the tests and going over problems after the results have been released. It is a win-win situation for you and for your students.

A number of two-year institutions now offer four-year programs and degrees and therefore may be ineligible to participate in the SML competitions. If an institution would like to participate, a committee has been formed which will review the programs offered at the school and make a determination as to their eligibility for participation in the SML.

While you are planning which sessions to attend at the AMATYC Annual Conference in Jacksonville, do not forget the Faculty Mathematics League competition to be held on Friday, November 9, 2012. As always, bring a calculator and a competitive spirit! Awards for the top regional teams will be given at the regional luncheons. Last vear's Charles Miller Memorial Scholarship recipient and the team receiving the Glenn Smith Team Award will be announced and recognized at the Saturday breakfast. For more information on the SML competition or eligibility for participation, send an email to the SML Coordinator, Susan Strickland at sml@amatyc.org.

2012 MathAMATYC Educator **Advertisers**

by Louise Olshan, AMATYC Advertising Chair

AMATYC is very appreciative of companies who choose to advertise with the organization. Such advertisement allows these companies to reach the AMATYC membership and share information with them. This year's advertisers in the MathAMATYC Educator are: HandyGraph, Hawkes Learning Systems, Texas Instruments, Virtual Nerd, and WebAssign. Please be sure to read the ads that are placed in the MathAMATYC Educator and extend an AMATYC thank you when you meet representatives of these companies.

In 2012, AMATYC had two Corporate Partners: Hawkes Learning Systems, which as one of its benefits, chose to place ads in the MathAMATYC Educator, and McGraw-Hill. McGraw-Hill did not select to have print ads but has chosen other benefits available to Corporate Partners.

Once again please be sure to extend an AMATYC thank you when you meet representatives of the AMATYC Corporate Partners.

>> Faculty Engagement, Continued from page 9

and administratively-led, membership. When the commitment is faculty led, we observe a higher level of faculty satisfaction and understanding. On the other hand, when the college administration invites math faculty to be involved, faculty members eventually have a satisfying experience.

Learning the Pathways work could be a challenge. For people in their first year, the learning curve is steep, and this creates frustrations. We were thoroughly impressed by the professionalism of the faculty involved in learning this system. These participants were driven by their desire to help students reach their goals and succeed. As a closing note, our terms as AMATYC Liaisons have expired as of August 2012, but Carnegie and AMATYC will still be working together in different ways. Stay tuned! In the meantime, any questions you might have about the Carnegie Pathways are welcome.

David Tannor, Editor AMATYC News Southwest Tennessee CC 5983 Macon Cove Memphis. TN 38134

AMATYC Foundation Reaches Out! Show Your Region Pride!

The AMATYC Foundation has challenged each region to support AMATYC by supporting the Foundation. Beginning with the start of registration for the 2012 AMATYC Annual Conference in Jacksonville and ending Saturday noon, November 10, 2012, the AMATYC Foundation will be tracking contributions of conference attendees to the AMATYC Foundation by AMATYC regions. The region that has the greatest percentage of attendees making a contribution will have bragging rights and one member from the region will be awarded a complimentary discount conference registration for the 2013 AMATYC Annual Conference in Anaheim, CA. The lucky potential region winner will be drawn from those who have made contributions by the Friday Regional Meeting (November 9) in Jacksonville.

Here is how you participate.

- Make a contribution to the AMATYC Foundation with your conference registration or at the conference before the Friday Regional Meeting to be eligible for the drawings.
- Attend the Friday Regional Meeting. Each region will draw a
 potential region winner. Your vice president will have tickets
 for each person who has already contributed and additional
 contributions will be collected at the meeting.
- Encourage regional attendees to continue to make contributions so that your region can take home the prize (and have bragging rights). The region with the highest percentage of conference attendees contributing will be the winning region.

Like Second Chances?

There will be a second prize of a one-year AMATYC membership to the region contributing the largest dollar amount. That potential winner will also be selected from all contributors at a drawing at the Regional Meeting on Friday.

Everyone Wins!

The winning regions will have a year's worth of bragging rights, and you know how the VPs love to do that. Your gifts will help the AMATYC Foundation in its support of AMATYC projects. You can direct your gift to the AMATYC Foundation general fund, restrict it for a special project, or restrict it to the AMATYC Endowment that allows only for a portion of the proceeds generated from your donation to be spent for AMATYC special projects.

What's Your Number? Wear it Proudly!

Show your spirit and brag on the number of AMATYC Conferences you've attended. Stop by the AMATYC Foundation table in the Conference registration area in Jacksonville to get your sticker by donating a dollar for each conference you've attended! These contributions also count toward region pride awards. There will also be an additional drawing from all contributors for four night lodging during the 2013 AMATYC Conference at the Marriott in Anaheim. We raised over \$24,000 last year - let's see how well we can do this year.

