

NEWS

Opening Doors
Through Mathematics



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AMATYC TO ROLL OUT BEYOND CROSSROADS IN CINCINNATI

by Wanda Garner

AMATYC's signature standards document has been revised and updated based on several years of research, review, and participation involving hundreds of members of the mathematics education community. The result, *Beyond Crossroads*, will be unveiled during Thursday's Opening Session kicking off the 2006 AMATYC Annual Conference in Cincinnati, November 2-5, 2006.

Specifics of this new, exciting document will be featured in several special events throughout the conference, beginning with Thursday morning's "Department Chair Colloquium" (Q1). Recognizing that department and division chairs play a key role in implementing the recommendations contained in *Beyond Crossroads*, this year's colloquium includes a panel discussion that will examine options from the perspectives of department chairs, faculty, and administrators.

Friday's program features the Standards Symposium. The symposium begins with a plenary session, open to all, "Standards-Based Mathematics Education-What's It All About?" (S47) followed by a two-hour ticketed workshop, "Moving From Vision to Reality: Implementing Standards" (Y1). During the symposium plenary address, leaders from AMATYC will be joined by the presidents of the Mathematical Association of America and the National Council of Teachers of Mathematics to address the role of standards in mathematics education. They will provide an historical perspective as well as commentary on the importance of embracing change. The symposium workshop, for which reservations are required, will focus on implementing the standards of *Beyond Crossroads*. Implementation will be discussed from the multiple viewpoints of the AMATYC, MAA, and NCTM standards. Participants will be provided with standards-based materials.

On Friday evening join your colleagues at the National Underground Railroad Freedom Center for a celebration of the unveiling of *Beyond Crossroads*. Project directors and others who developed the document will be recognized. Take advantage of this unique opportunity to learn about routes that enslaved Black Americans took to gain their freedom. Socialize with colleagues while discussing plans to implement key recommendations found in *Beyond Crossroads*.

Drop in on the *Beyond Crossroads* themed session, "Focus on Teaching and Learning" (T5), on Saturday, where talks range from the use of hand-held technology and tablet PCs to using multiple perspectives in teaching algebra, and addressing math anxiety. Learn how to use classroom research techniques to uncover students' misconceptions, investigate their logical thinking processes, and determine what students actually understand.

Saturday concludes with "*Beyond Crossroads* (BC) Electronic Resources—Where the Rubber Meets the Road" (W22). BC Electronic Resources are items in various formats and media that extend, enhance, and align with the written document, and are designed to support implementation. The first four products, which will be presented in the workshop, are a *Beyond Crossroads* Outreach Kit, Assessment, Quantitative Literacy and Mathematics Across the Curriculum, and *Beyond Crossroads Live*, a web-enhanced version of the document.



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KATHY MOWERS OWENSBORO COMMUNITY & TECHNICAL COLLEGE OWENSBORO, KY

OPEN DOORS (NOT REVOLVING DOORS)

We can define basic skills as those skills that are typically taught in high school or even grade school. Considered below-college-level courses, these courses include arithmetic, prealgebra, and basic algebra and are taught in colleges under different titles including developmental, remedial, or adult education. According to Platt (21-23), five reasons may be given for teaching basic skills in college. They include student needs, victims of reform, returning adult students' needs, student outcomes, and moral issues. As reported in CBMS 2000, "enrollment in remedial classes accounted for over half (55%) of the mathematics program enrollment in two-year colleges" (Lutzer et al. 125).

Since their beginning, community colleges have proudly had an open door policy that allows the admission of any adult who desires an education. The open door policy has encouraged the enrollment of a diverse background of students. This policy has allowed the admission of underprepared students without any testing and often allowed the same students to enroll in any course with or without appropriate skill level or background.

Open access has been defined as the student's "right to fail" and often allowing poorly or underprepared students in the classroom has forced some faculty to compromise standards of instruction and lower expectations. Without appropriate testing and placement, mathematics instructors are often expected to deal with students at the level of lowest common denominator. Mathematics instructors are expected to meet students at their level, which may be as low as fifth-grade. The time spent developing entry level skills may deprive the prepared student of the time needed to understand material needed for the next course.

Unfortunately the promise of open doors will not include a promise of opportunity unless the skills of all students are maximized. An open door can easily become a revolving door if a student enrolls and withdraws or fails and returns to try again during the next term. To maximize skills of all students, teaching must be improved, the curriculum reshaped and the diverse student population be encouraged to enroll in the class that best meets their current needs and their needs for the future. In addition, "in a sense, this becomes a moral issue; the school that accepts a student for admission is morally obligated to develop instructional methods that will offer the student those skills he or she will need to be successful academically" (Platt 3).

In the late 1980s, many state legislators began to resent the money spent teaching basic skills in college. A common response was that "...the resources of higher education... should be devoted to college-level teaching and research," as expressed by Wyoming State Representative Peg Shreve in *The Chronicle of Higher Education* (Jaschik 20). Indiana State Senator Thompson said, "Remedial programs at colleges should be eliminated because they are more expensive than they would be at high schools..." (qtd. in Mickler & Chapel 3).

Some legislators proposed that basic skills programs be restricted to adult education programs. Other legislators insisted that there was a need for the teaching of basic skills in college to preserve the access to higher education (Jaschik 21). Since then the most common response has been for legislatures to step in and demand some form of mandatory placement. This placement is often based solely on the results of one placement test or a combination of an ACT score and a placement test score rather than the comprehensive plan for placement advocated by AMATYC.

Access to higher education is essential at this time in the history of America, and algebra has become the doorman. Algebra is essential to mathematical and scientific

literacy and achievement as well as to the careers in STEM that will be critical to the economic future of the U.S. In addition, if post-secondary remedial programs are eliminated, adults who have been out of school for a number of years will not have the opportunity to acquire the basic skills needed for successful achievement in college level courses. It is shortsighted to think that the unmotivated high school failure never becomes the motivated 25 year-old who sees the value in education.

Ultimately, a societal decision will determine whether basic skills should be taught in college. Can we afford to maintain the premise that all citizens deserve the right to an education including college? Can society afford to continue to teach and reteach students? On the other hand, can the United States compete in the global market place if all of our citizens are not adequately proficient in the basic skills wherever they may be taught?

I strongly believe that basic skills including algebra must be taught to students wherever they are. We need to assist students in enrolling in the appropriate course and to teach students using approaches that allow the instructor to maintain high standards in that course and subsequent courses and that promote success through student effort. As mathematics faculty, we need to open the door to the future for all of our students through mathematics.

Jaschik, S. "States Questioning Role of Colleges in Remedial Study." *The Chronicle of Higher Education*. 31.2 (1985): 20-21.

Lutzer, D., J. Maxwell, and S. Rodi. *Statistical Abstract of Undergraduate Programs in the Mathematical Sciences in the United States: Fall 2000 CBMS Survey*. American Mathematical Society, 2002.

Mickler, M. L., and A. C. Chapel. "Basic Skills in College: Academic Dilution or Solution?" *Journal of Developmental Education*. 13.1 (1989): 2-4, 16.

Platt, G.M. "Should colleges teach below-college-level courses?" *Community College Review*. 14.2 (1986): 19-25.

AMATYC 101, 201, AND 299

by Wanda Garner

Learn more about AMATYC at the 2006 AMATYC Annual Conference in Cincinnati, including how to get the most from your conference experience and how to get more involved in the organization. Join your AMATYC colleagues at one or more of the new, three-course sequence of sessions designed to provide answers to your questions and to assist you in making the most of the professional development opportunities that are available to you through AMATYC.

The sequence begins on Thursday at 10:00 a.m. with "AMATYC 101-Enhancing Your First Conference Experience" (S17). This session is designed to assist first-time attendees in identifying aspects of the conference that would be most helpful to newer AMATYC members but is open to everyone. The second course is "AMATYC 201-Professional Opportunities Through AMATYC" (S69), scheduled for Friday at 11:45 a.m. This session focuses on professional development as well as the work of AMATYC's committees and delegates.

Finish the series by attending "AMATYC 299-Leadership and Getting Involved" (S110) on Saturday at 10:45 a.m. This session will include information about the organization's structure and leadership opportunities as well as explore individual leadership styles of attendees. Bring your questions and join the fun organized for you by several current officers and chairpersons. Learn about your organization and the benefits provided to you by your membership in AMATYC.

FACULTY COMPETE AT CONFERENCE

Participate in the "Third Annual Faculty Mathematics League Competition" (S56) Friday morning during the 2006 AMATYC Annual Conference in Cincinnati. In only two years, the Faculty Mathematics League has already become a tradition! Come and compete for pride and prizes on this test modeled after AMATYC's Student Mathematics League test. Don't forget your calculator.

WHY AMATYC?

by Rob Kimball

Attendees at the national conference in San Diego were asked why they came to the conference and why they are members of AMATYC.

- Ruth Feigenbaum (Bergen CC, NJ) said "I come for ideas about teaching. I get new ideas and suggestions that help me in the classroom."
- Dorothy Giglietta (Bergen CC, NJ) said "The networking, through informal meetings and discussions, gives me insight into what others are doing." She added, "This conference counteracts 'burnout!'"
- Lenore Lerer (Bergen CC, NJ) said "I want to help AMATYC put together position statements and publications that help teachers in our state get things done."



Ruth Feigenbaum, Dorothy Giglietta, Lenore Lerer

Future AMATYC Conferences

2006	Cincinnati	November 2-5
2007	New Orleans	November 15-18
2008	Washington, D.C.	November 20-23
2009	Las Vegas	November 12-15

Kathy Mowers
Owensboro Community & Technical
College
President

Richelle (Rikki) Blair
Lakeland CC
President-Elect

Judy Ackerman
Montgomery College
Past President

Irene Doo
Joliet Junior College
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Nancy Sattler
Terra CC
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Maryann Justinger
Erie CC-South Campus
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Ruth Collins
Delaware Technical & CC
Mid-Atlantic VP

Rob Kimball
Wake Technical CC
Southeast VP

Jim Roznowski
Delta College
Midwest VP

Peter Wildman
Casper College
Central VP

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Southwest VP

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For additional information or
to join AMATYC, visit www.amatyc.org

THE BEYOND CROSSROADS COUNTDOWN HAS BEGUN!

by Susan S. Wood

By the time you receive this newsletter, there will be only three months until the 2006 AMATYC Annual Conference in Cincinnati and the unveiling of *Beyond Crossroads*, AMATYC's second standards document. The document involved hundreds of professionals over the last five years and has resulted in a product of which we can all be proud. Many thanks to everyone who contributed to the development of this great document and was involved in the writing process. Each conference attendee will receive a copy of the final document at the conference in Cincinnati. In addition, AMATYC members will receive a copy in the mail and each two-year college president will receive the Executive Summary. Accompanying the document are electronic resources that will also be unveiled in November: a web-enhanced version of the document, an Outreach Kit for presentations, and resources on Quantitative Literacy and Assessment.

Celebrating *Beyond Crossroads* will be an important AMATYC activity in 2007. Implementation workshops will take place including discussions at AMATYC affiliate meetings. The spring 2007 issue of *The AMATYC Review* will be filled with articles about implementation strategies and the AMATYC website will continue to post important resources. Don't miss the unveiling, the Standards Symposium, and other special *Beyond Crossroads* sessions in Cincinnati! Then join in the fun of incorporating a new strategy from *Beyond Crossroads* in your classroom next year.



BEYOND CROSSROADS FEATURED AT NATIONAL CONFERENCES

During the five years of development of *Beyond Crossroads*, presentations have regularly been made at a variety of national conferences. These sessions had a two-fold purpose: to increase awareness about *Beyond Crossroads* and AMATYC, and to gather feedback from stakeholders on various drafts of the document. Outreach opportunities have included the annual conferences of the American Association of Community Colleges, the Mathematical Association of America, the National Association of Community College Teacher Education Programs, and the National Council of Teachers of Mathematics. A *Beyond Crossroads* presentation was also made to the Conference Board of the Mathematical Sciences. The document has benefited from input from these national audiences.



Interested conference attendee (left) visits with Susan Wood and Rikki Blair after the *Beyond Crossroads* session at the 2006 NCTM conference

SEEKING THE FIRST BEYOND CROSSROADS IMPLEMENTATION COORDINATOR

AMATYC is seeking the involvement of a member who is interested in breaking new ground for this organization in a challenging, rewarding volunteer position.

General Description: The *Beyond Crossroads* Implementation Coordinator coordinates the planning, creation, and implementation of *Beyond Crossroads* activities, including grants, workshops, training, conference activities, and other related initiatives.

Job Description: This individual attends the annual conference; coordinates and/or conducts sessions at the AMATYC annual conference and other professional organizations related to *Beyond Crossroads*; creates, coordinates and/or conducts conference training events, workshops, and other appropriate events; and writes or oversees writing of grants to support *Beyond Crossroads* implementation activities.

- Works with the AMATYC Committee Chairpersons, Coordinators, Institute Directors, and the Traveling Workshop Coordinator to create and maintain *Beyond Crossroads*-related offerings, and to assist in incorporating *Beyond Crossroads*-related concepts into existing meetings, sessions, and workshops as appropriate.
- Coordinates public relations and write articles on *Beyond Crossroads*, for members and non-members, working with the Publicity Director.
- Identifies topics for which digital products or supplementary activities are needed. Works with the Digital Products Coordinator to suggest future appropriate resources and plan activities.
- Works with the Foundation to identify ways in which the Foundation can target *Beyond Crossroads* programs.
- Creates and implements a plan to assess the effectiveness of above activities.
- Provides reports to the AMATYC Executive Board on *Beyond Crossroads* activities and needs.

This position reports to the President, and works collaboratively with the AMATYC Executive Board and the *Beyond Crossroads* Digital Products Coordinator.

Some reimbursement for travel to the annual AMATYC conference and a budget for expenses such as supplies is provided. The term of the appointment is through November 2008.

Qualifications: AMATYC member; familiar with the *Beyond Crossroads* document, supporting its spirit and philosophy; support from the individual's institution for necessary travel and other time commitments; work collaboratively with other individuals; E-skilled (word processing, spreadsheets, email, simple graphics, electronic presentations); knowledge of and success in grant writing desirable; able to monitor and work within a budget; have initiative and work well without close supervision.

Application: Interested persons with questions should contact AMATYC President-Elect Rikki Blair, richelle.blair@sbcglobal.net. To apply, submit a letter of interest to President Kathy Mowers, kathy.mowers@kctcs.edu, that specifically ad-

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AMATYC's MISSION STRENGTHENED BY ITS NEW VISION AND CORE VALUES

by Jan Ford

At the Spring Board Meeting in May, the members of the AMATYC Board adopted a vision statement and core values for the organization to strengthen its already existing mission statement and strategic plan. The uniqueness of the mission of community and two-year colleges to open their doors to all, coupled with the idea that mathematics has changed the lives of both students and teachers led to adoption of the following vision statement: **AMATYC—Opening Doors through Mathematics.**

With broad based input from the AMATYC membership on identifying core values for the organization, the Board adopted the following core values to guide the organization's internal and external interactions with each other and with the mathematics community at large. The core values of

- Academic Excellence
- Access
- Collegiality
- Innovation
- Integrity
- Professional Development
- Teaching Excellence

(listed in alphabetical order with no ranking given) are currently being translated into operational definitions to guide AMATYC in carrying out its mission and implementing its strategic plan. Look for the new vision and core values to appear on future AMATYC publications and its website.

NEW CONFERENCE ZONES

Beginning with the 2013 AMATYC conference, the conference city will be selected according to one of three new zones. These zones from west to east will be Pacific, Heartland, and Atlantic. For many years conference cities were chosen by region. However, AMATYC reached a size where in some regions few cities had facilities that could host a conference of our size and needs. In 1997, AMATYC drew lines that resulted in four conference districts with the promise to review the structure for the 2012 conference and beyond. It is anticipated that the three-zone structure will support our needs for years to come, but a review of the rotation pattern is recommended for 2015. Beginning with the 2013 conference, the states and provinces in the zones will be as follows:

- **Atlantic Zone:** Connecticut, Delaware, District of Columbia, Florida, Georgia, Maine, Maryland, Massachusetts, New Hampshire, New Jersey, New York, North Carolina, Pennsylvania, Rhode Island, South Carolina, Vermont, Virginia, West Virginia, Caribbean Isles, Puerto Rico, Virgin Islands, New Brunswick, Newfoundland, Nova Scotia, Ontario, Prince Edward Island, and Quebec.
- **Heartland Zone:** Alabama, Arkansas, Illinois, Indiana, Iowa, Kansas, Kentucky, Louisiana, Michigan, Minnesota, Mississippi, Missouri, N. Dakota, Nebraska, Ohio, Oklahoma, S. Dakota, Tennessee, Texas, Wisconsin, and Manitoba.
- **Pacific Zone:** Alaska, Arizona, California, Colorado, Hawai'i, Idaho, Montana, Nevada, New Mexico, Oregon, Utah, Washington, Wyoming, Mexico, Alberta, British Columbia, Saskatchewan, and all Canadian territories.

The zone rotation is Pacific, Heartland, and Atlantic, beginning with Pacific zone for the 2007 (2013 conference) site visit.

CONSTITUTIONAL CHANGE PROPOSED

The Registered Parliamentarian for the San Diego Delegate Assembly submitted his opinion that the dues resolution as adopted at the Delegate Assembly in 2005 amends the constitution and Article 11 of the bylaws requires that the regular members ratify the dues resolution via a mail ballot. However, the motion approved by the 2005 Delegate Assembly was not advertised as a constitutional amendment, and the AMATYC Board determined it would be best to return to the Delegate Assembly in 2006 with the wording that would appear in the constitution. If approved by the Delegate Assembly, the amendment will be sent to the membership for ratification.

Constitution - Article 4 (Dues)

Current wording:

Annual dues are paid by all members at the designated rate set by the executive Board and approved by the delegate assembly.

Proposed new wording:

Annual dues are paid by all members. Annual regular AMATYC membership dues are set every two years by applying the Consumer Price Index—Urban Consumers (CPI-U) for the last two years to the current dues and rounding up to the nearest whole dollar. This adjusted rate is set at the Fall Board Meeting in odd-numbered years with the increase taking place on July 1 of the following even-numbered year. In the event that there is a need for an increase other than the calculated rate, the new rate must be brought to the Delegate Assembly for approval.

The Registered Parliamentarian confirmed that the By-Laws would not need to be amended.

Nancy Sattler, AMATYC Treasurer, will be available at a Forum on Thursday evening in Cincinnati to allow members and delegates the opportunity to learn more about this proposed amendment.



Seeking. Continued from page 4

dresses your interest in the job and the above qualifications, along with a resume and a letter of support from your supervisor. Review of materials will begin immediately and the position will remain open until filled.

PROFESSIONAL DEVELOPMENT FOR BEGINNING/INTERMEDIATE ALGEBRA INSTRUCTORS

TEACHING ALGEBRA THROUGH A FUNCTION APPROACH by Ed Laughbaum

The Teachers Teaching with Technology College Short Course Program (T3 CSC) based at The Ohio State University is offering a short course on developmental algebra curriculum and pedagogy (DEV). The Program's DEV short course is available free for 1 to 3 days on your campus (15 participant minimum). The DEV short course is a beginning/intermediate algebra curriculum that uses a function approach and develops mathematical ideas in the context of real-world situations. We will use the Texas Instruments CBL 2™, several apps, and the TI-84 Plus™ SE. Course instructors include Debbie Crocker, Joe Fiedler, Peg Greene, Ed Laughbaum, Charles Hofmann, Roseanne Hofmann, Wade Ellis, and John LaMaster.

A Function Approach: In defining what a function approach is, sometimes we have to define what it is not. Teaching function notation early is not teaching from a function approach! Nor is it moving a chapter of functions to the first or second topic of the year. To teach from a function approach means using functions, function representations, and function behaviors to enhance the teaching of algebraic concepts/skills such as adding and subtracting polynomials, factoring, equation solving, systems of equations, modeling, solving inequalities, laws of exponents, properties of inequalities, definitions, etc. This requires that you start with a "function implementation module" that begins with numeric representations of functions and leads to students learning to move freely through representations. This is followed by an analysis of the geometric behaviors of functions integrated with studying parameter-behavior connections. After this, one is then ready to start teaching more traditional algebra, but not with a traditional pedagogy. This is teaching from a function approach!

The implementation module facilitates teaching of a slightly revised and re-ordered developmental algebra curriculum, and allows us to capitalize on the cognitive learning concepts of associations, pattern recognition, attention, visualizations, priming, meaning, and an enriched teaching environment. A graphing calculator is required for all students at all times—both in the implementation module and throughout the algebra course. These ideas play an extremely important role in teaching and learning of algebra, and are naturally and seamlessly integrated into the mathematics and pedagogy through using a function approach implemented with a graphing calculator.

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SUBMIT AN ARTICLE FOR THE AMATYC REVIEW THAT FOCUSES ON IMPLEMENTING THE STANDARDS

Are you involved in an innovative project, course, or instructional activity that exemplifies the standards in the *Crossroads in Mathematics* (1995) or *Beyond Crossroads* (to be released in November 2006)? If so, you are invited to write an article for an upcoming issue of *The AMATYC Review*. AMATYC plans to highlight vignettes, case studies, classroom activities, research, model programs and courses, and other standards-based strategies in *The AMATYC Review* next year. The deadline for the 2007 Spring issue of *The AMATYC Review* is September 1, 2006. Don't let this deadline pass without sending an article to Barbara Rives, *The AMATYC Review* Editor, barbara.rives@acu.edu. Visit amatyc.org for Author Guidelines.

MAC³ GOES TO MIAMI IN JANUARY

by Deann Leoni

Find a colleague outside of the mathematics department and come to sunny Florida in January to create some innovative materials to integrate mathematics into other disciplines! The Mathematics Across the Community College Curriculum (MAC³) project will be holding its first Winter Institute January 12-15, 2007, in Miami, FL. The institute runs from Friday to Monday over Martin Luther King, Jr. weekend to reduce the number of missed-class days.

This Winter Institute will be modeled after the successful summer institutes that have been held in Washington state in past summers. Participants are strongly encouraged to attend in interdisciplinary teams from their schools to create curriculum that integrates mathematics or quantitative reasoning (QR) into any discipline. Projects from previous participants have incorporated mathematics or QR into many disciplines such as art, art history, biology, business, chemistry, English, environmental science, and theater. Samples of past projects can be seen at www.mac3.amatyc.org. Teams should be comprised of a mathematics instructor who serves as a mathematics mentor for at least one non-mathematics instructor seeking to enrich their curriculum or courses with mathematical or QR components. The institute will provide participants with consultants and speakers on bringing math/QR into other courses, a computer lab with Internet access, and time to work. Registration for the institute is \$100 per person and includes food and lodging for 4 days and 3 nights. A \$60/day stipend will be paid to participants for creating curriculum.

The Winter Institute will be held at the Miami Beach Resort and Spa. The resort has a white sand beach and all the amenities you would expect of a world-class resort. It is only blocks from the famous South Beach and is only 20 minutes from Miami International Airport. For more information on the site, visit www.miamibeachresortandspa.com/.

The MAC³ project is supported by a NSF grant (DUE Award No. 0442349). For more information about the MAC³ project, visit www.mac3.amatyc.org or email mac3@amatyc.org. Online registration is available now; applications are due by October 15th for first consideration.

HONOR A COLLEAGUE OR YOURSELF—SUBMIT A TEACHING EXCELLENCE AWARD NOMINATION!

by Rikki Blair

Don't let the **December 8, 2006**, deadline sneak up on you. You don't need to wait until the last minute to identify a colleague who is an outstanding teacher for the 2007 AMATYC Teaching Excellence (TE) Award and help that person complete the Nomination Packet or submit a packet for yourself! Up to eight AMATYC members will be honored at the 2007 Annual Conference in New Orleans. Awardees receive a medallion from AMATYC as well as a \$500 check from Houghton Mifflin.

In March, all AMATYC members should have received information in the mail about the TE Award, outlining the criteria of the award: good teaching, support of students, professional development activities, interaction with colleagues, and service to the profession. Nominees must be AMATYC members whose primary assigned duties must be delivering instruction in an associate degree-granting program and institution.

The Nomination Form and a FAQ page are also available at www.amatyc.org. Visit the website today, complete the Nomination Packet, and send nine (9) copies to President-Elect Rikki Blair, 7461 Winding Trail Place, Concord, OH 44077. If you have any questions, contact Rikki at richelle.blair@sbcglobal.net or your AMATYC regional vice president.

OPEN SEASON FOR NOMINATIONS FOR THE NEXT AMATYC BOARD

by Judy E. Ackerman

It's not too late to recommend someone for consideration for nomination for the AMATYC 2007-2009 Board. That someone can even be yourself! It's also not too early to submit your nomination packet. Serving on the AMATYC Board as either a national officer or a regional vice president will be an incredible professional development experience for you and will provide the opportunity for you to contribute to your profession and to AMATYC. Nominations are being accepted for vice president for each region, president-elect, secretary, and treasurer. Information about the responsibilities of each officer as well as the contents of the nomination packet (letter of intent, vita and letter from the prospective nominee's supervisor) can be found at www.amatyc.org/Get-Involved/nomination-board.htm.

Professional Development, Continued from page 6

For more information and an application, please contact Ed Laughbaum, elaughba@math.ohio-state.edu, or visit www.math.ohio-state.edu/shortcourse/. The presenter's expenses and honorarium are paid by a grant from Texas Instruments to The Ohio State University. The Ohio State University program is endorsed by the American Mathematical Association of Two-Year Colleges, www.amatyc.org/Events/Other-org/T3CSC.htm. Organizers receive an honorarium of \$500, and participants may trade a TI-83 VS model for the TI-84 Plus SE VS model!

HIGHLIGHTS OF THE 2006 AMATYC SPRING BOARD MEETING

by Irene Doo

The AMATYC Executive Board met at Southwest Tennessee CC in Memphis on May 5-8, 2006. During the meeting, the Board took the following actions:

- ❖ Adopted core values and approved a vision statement for the organization. (See article on page 5.)
- ❖ Approved a new conference zone rotation pattern beginning with the 2013 conference. (See article on page 5.)
- ❖ Eliminated reservations for workshops, effective with the 2007 conference in New Orleans.
- ❖ By unanimous consent, the Board thanked the *Beyond Crossroads* Project Directors, Planning Team, Writing Team Chairs, Section Writers, and Contributing Writers for all their efforts on *Beyond Crossroads*.
- ❖ Approved the recommendations of the Task Force on Committees to adopt a new academic committee structure, effective after the 2007 conference in New Orleans.
- ❖ Reappointed the following individuals:
 - ♦ Jean Woody, Tulsa CC, Newsletter Editor
 - ♦ Shay Cardell, Central Arizona College, Affiliate Website Director
 - ♦ Mary Kay Abbey, Montgomery College, Grants Coordinator
 - ♦ Steve Blasberg, West Valley College, Student Mathematics League Test Developer
 - ♦ Margie Hobbs, Univ of Mississippi, Conference Coordinator
- ❖ Appointed Chris Allgyer, Mountain Empire CC, Program Committee
- ❖ Appointed the following individuals to the Student Mathematics League Test Development Team: Steve Kilner, Monroe CC (NY); James Magliano, Union County College (NJ); Mary Pearce, Wake TCC (NC); David Stott, Sinclair CC (OH); Marilyn Treder, Rochester CTC (MN); Peg Crider, Tomball College (TX); and Steve Yramategui, South Seattle CC (WA).
- ❖ Approved the creation of an "In Memoriam" page on the AMATYC website.
- ❖ Approved the addition of lapel pins featuring the Student Mathematics League logo to the list of items available for sale at the AMATYC online store.
- ❖ Approved in concept the position statement "The Use of Technology in Mathematics Education" to be brought to an input hearing at the 2006 Conference in Cincinnati.
- ❖ Commissioned a registered professional parliamentarian to combine AMATYC's Constitution and By-Laws.
- ❖ Approved a climate survey of the AMATYC membership by fall 2008.

ASA/AMATYC JOINT COMMITTEE

by Robert delMas and Brian Smith

The committee is pleased to report that it unanimously endorsed *Beyond Crossroads*, and congratulates AMATYC on producing an impressive standards document. The educational recommendations in *Beyond Crossroads* are consistent with the mission of the Joint Committee and with the educational goals presented in the ASA endorsed Guidelines for Assessment and Instruction in Statistics Education (GAISE). The ASA/AMATYC Joint Committee will hold a business meeting at the annual Joint Statistical Meetings of the ASA in Seattle, WA, this August, and will organize a meeting for members of the AMATYC statistics education community at the AMATYC Annual Conference in November.

Committee chair Robert delMas and past-chair Brian Smith will present a workshop on teaching introductory statistics using the GAISE guidelines (W9) at the 2006 AMATYC Annual Conference in Cincinnati.

Discussions are ongoing with Consortium for the Advancement of Undergraduate Statistics Education (CAUSE) regarding additional workshops at AMATYC venues, such as summer institutes and regional conferences. Members of CAUSE (Deb Rumsey, Dennis Pearl, and Roger Woodard) will make a presentation (S132) at the Annual AMATYC Conference in Cincinnati on the latest CAUSE initiatives to support statistics education through instructional resources, professional development opportunities, and research.

Statistics instructors at two-year colleges are encouraged to visit the CAUSE website, which has a variety of resources available such as lesson modules, projects, datasets, online video, and online analysis tools. The CAUSE website can be found at www.causeweb.org/.

DEVELOPMENTAL MATHEMATICS COMMITTEE

by Jack Rotman

What's in a name? Well, a good name communicates a basic identity. In the case of our committee, the word "Foundation" has been used for about the last 10 years. (Originally, this was related to the first

Crossroads document.) Since our initial mathematics courses are seldom labeled "Foundation," the AMATYC Executive Board supported our committee motion to remove that word from our name. As a result, we are now known officially as the "Developmental Mathematics Committee" (DMC) again.

We have launched a project to collect and share sample syllabi for developmental mathematics courses. The intent is to provide broad access to detailed information on textbooks, content, and instructional methodology. To submit yours, follow the directions on the committee webpage (<http://devmath.amatyc.org>). Once submitted, all syllabi will be posted on the website in Acrobat PDF format; we will indicate who submitted it, and what type of course it represents (pre-algebra, beginning algebra, etc). Many thanks go to Geoffrey Akst, who has volunteered to help with this project! If you have already submitted your syllabus and notice that it is not on the website yet, don't worry-this process can take a few weeks.

We will need help at the 2006 AMATYC Conference in Cincinnati in November ... YOUR HELP, if you are able to attend. The DMC will be organizing, sharing, and planning during our two committee meetings (and in the 'hallway sharing times!'). If you are not able to make this year's conference, you won't be left out. We will make sure that you get the essential information and have opportunities to contribute.

Our webpage (<http://devmath.amatyc.org>) provides access to our committee newsletters, current projects (like the syllabus project), and a web "DMC membership" form (you can join online). If you have any suggestions for improvement, just pass them along.

DISTANCE LEARNING COMMITTEE

by Mary Beth Orrange

As the summer comes to an end and September approaches, our thoughts turn to another new school year. Many of us are preparing materials for students we will not meet in a traditional setting. In some cases, we prepare for students we will never see, those in distance learning classes. In other cases, we prepare for students in hybrid classes-classes that combine elements of traditional classes

with those of distance learning classes. Finally, some prepare to use the Internet as a supplement to traditional classes.

Whether one or more of the above applies to you, I'm sure you probably have a few questions to ask or a few decisions to make about the presentation of your material. Perhaps you have technology issues to resolve; maybe your questions are more philosophical in nature. Whatever your questions about teaching and learning mathematics at a distance might be, the AMATYC Distance Learning Committee is ready to respond. This energetic group of AMATYC members is always willing to discuss an issue or answer queries about our teaching. Topics that the committee discussed this past year include: the value and success of online developmental mathematics courses, useful mathematics software for online courses, the proctoring of tests for online courses, and a discussion about best practices for disabled students at a distance.

To post to the AMATYC Distance Learning Committee mailing list, send your question or comments to MathVia-Distance@lists.ecc.edu. To subscribe to the mailing list, send an email to Mary Beth Orrange at orrangle@ecc.edu. To find out more about the Distance Learning Committee, visit the website <http://distlearn.amatyc.org/>.

PLACEMENT AND ASSESSMENT COMMITTEE

by Ed Gallo

The Placement and Assessment Committee (PAC) sent out its latest Newsletter this summer. If you wish to get a copy of the newsletter, please contact Jim Ham, jaham@delta.edu, our secretary/website coordinator and newsletter editor.

We are always looking for articles for our PAC Newsletter. Please send any short articles or other items that you think would be of interest to all of the PAC membership to me, ed.gallo@sinclair.edu, or to Jim Ham.

When you visit our PAC Webpage at <http://placement.amatyc.org>, you will notice that we have a section on "History of PAC." Please send me an email with any additional information that you may have on the Placement and Assessment Committee so that we can update our history.

If you are interested in becoming a member of the Placement and Assessment Committee, just send an email to Jim Ham and he will add you to our membership list.

You can find out more about the PAC and its three subcommittees (Assessment of Student Performance, Assessment of Mathematical Programs, and Placement) by going directly to <http://placement.amatyc.org>. One of the links on the PAC webpage is to our latest PAC Newsletter.

PROGRAM/CURRICULUM ISSUES COMMITTEE

by Darlene Winnington

The Program/Curriculum Committee is presently reviewing past position statements to make recommendations for changes, minor revisions, or retirement, and will discuss the review at the AMATYC Annual Conference in Cincinnati. Additionally, we are compiling a repertoire of useful websites that support Teacher Prep and illustrates models of technology integration in the mathematics classroom. These websites will be sorted and linked on the committee website. We also plan to further support the efforts of Teacher Prep by creating a community discussion board (or listserv) for strategies, issues, and best practices of Teacher Prep.

Lastly, the committee invites new members to join by emailing Darlene Winnington at dwinning@dtcc.edu. We invite new issues of program and curriculum to be brought to the committee's attention.

TECHNICAL MATHEMATICS/ AAS PROGRAMS COMMITTEE

by Jesse Williford

The Technical Mathematics committee will present one of the themed sessions in Cincinnati, "Many Good Application Problems" (T1). Six of our committee members will each discuss one of their best application problems. The problems range from labs and projects to demonstrations and problems to be solved. Real world application problems play a big role in letting students see mathematics in action.

Come to the AMATYC Annual Conference in Cincinnati and attend the themed session, "Many Good Application

Problems." In addition to six application problems, you will be provided with student handouts, teacher notes, and grading rubrics.

TECHNOLOGY IN MATHEMATICS EDUCATION COMMITTEE

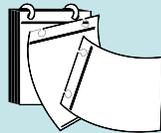
by David J. Graser

David Graser of Yavapai College recently resigned as chairman of the TiME Committee to take a new position within AMATYC. David will be coordinating the *Beyond Crossroads* electronic resources for the next several years. He will also continue to participate on the TiME Committee by editing the website and working toward a new position statement on technology.

At the Spring Board meeting, the AMATYC Board appointed Frank Wilson

of Chandler-Gilbert CC to lead the TiME Committee. Frank has actively participated in the TiME Committee and is a passionate advocate for the effective use of technology in the teaching of mathematics. Many AMATYC members have attended his presentations on real life applications of mathematics at AMATYC regional and national conferences.

When asked about his vision for the committee, Frank said, "I look forward to working with the members of the committee in promoting effective uses of technology in our teaching. My goal is to help increase awareness of and access to outstanding technological resources."



AMATYC CALENDAR OF EVENTS

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

September 15, 2006 WYMATYC Fall Conference, Central Wyoming College, Riverton, WY. Contact: Val Harris, vharris@cwcc.edu

September 23, 2006 OKMATYC Fall Meeting, Eastern Oklahoma State College-McAlester Campus, McAlester, OK. Contact: Brena Bellovich, bbellovi@tulsacc.edu

September 30, 2006 WisMATYC Annual Fall Conference, UW Marshfield/Wood County, Marshfield, WI. Contact: George Alexander, galexander@matcmadison.edu or 608.246.6187

October 6-7, 2006 NDMATYC Fall Conference, Carrington, ND. Contact: Donald Bigwood, donald.bigwood@bsc.nodak.edu or Linda Tonolli, Linda.tonolli@bsc.nodak.edu

October 13, 2006 Joint SOCAMATYC/SCCTM Conference, Myrtle Beach Convention Center, Myrtle Beach, SC. Contact: Jerry Marshall, 864.646.1368, gmarshal@tctc.edu. Website: www.soca.matyc.org

October 13-14, 2006 FTYCMA Fall Retreat, Central Florida CC, Ocala, FL. Contact: Martha Goshaw, goshawm@scc-fl.edu

October 13-14, 2006 MichMATYC Conference, Kalamazoo Valley CC, Kalamazoo, MI. Contact: Phobe Lutz, pglutz@delta.edu

November 2-5, 2006 32nd Annual AMATYC Conference, Cincinnati, OH. Contact: AMATYC Office, 901.333.4643, amatyc@amatyc.org

March 8-9, 2007 Joint SOCAMATYC/NC-MATYC Meeting, Central Piedmont CC, Charlotte, NC. Contact: Suzanne Williams, 704.330.6073, suzanne.williams@cpcc.edu, or Jerry Marshall, 864.646.1368, gmarshal@tctc.edu

June 15-16, 2007 Southwest Regional Conference, San Antonio, TX. Contact: Linda Zientek, lzientek@blinn.edu

November 15-18, 2007 33rd Annual AMATYC Conference, New Orleans, LA. Contact: AMATYC Office, 901.333.4643, amatyc@amatyc.org

November 20-23, 2008 34th Annual AMATYC Conference, Washington, D.C. Contact: AMATYC Office, 901.333.4643, amatyc@amatyc.org

November 12-15, 2009 35th Annual AMATYC Conference, Las Vegas, NV. Contact: AMATYC Office, 901.333.4643, amatyc@amatyc.org

November 11-14, 2010 36th Annual AMATYC Conference, Boston, MA. Contact: AMATYC Office, 901.333.4643, amatyc@amatyc.org

November 10-13, 2011 37th Annual AMATYC Conference, Austin, TX. Contact: AMATYC Office, 901.333.4643, amatyc@amatyc.org

ALASKA/BRITISH COLUMBIA

AMATYC's Alaska affiliate, AKMATYC, which has been inactive for several years, recently held elections, and is pleased to announce that **Jane Weber** is the new president. Jane is an Associate Professor of Mathematics at the Univ of Alaska Fairbanks and is chair of the Department of Developmental Education. She teaches mathematics in regular semester-based face-to-face classes in Fairbanks, by audioconference to Alaska's rural areas, and in weeklong "intensive" short courses around the state. Jane has spearheaded efforts over the last several years to revitalize AKMATYC and we look forward to her continuing efforts now as president. Recent AKMATYC activities have included seminars to assist education students in passing the PRAXIS I Mathematics Exam and sponsoring a T³ College Short Course Program "Developmental Algebra Using a Function Approach" by **Ed Laughbaum** with **Debbie Moses** in May 2006. If you would like more information on AKMATYC, please contact Jane at ffjw@uaf.edu.

DELAWARE

Ann Carter of the Stanton campus of Delaware Technical and CC (DTCC) was awarded the Paragon Award at the spring conference of Phi Theta Kappa held in Seattle. The award is given to new advisors who have made significant improvements in the productivity and quality of their community college chapter.

DTCC has created a third course for preservice teachers in mathematics. Students majoring in elementary education now take 12 semester credits of mathematics theory at the college level. Students from the pilot class of this course, which is a data collection and function based graphing course, presented their projects and the course at the spring DelMATYC meeting on May 31 in Dover.

Darlene Winnington of the Stanton campus of DTCC was chosen as the recipient of the Excellence in Teaching Award. This award is given to two-year college faculty who excel in their role as teacher, mentor and adviser.

MINNESOTA

Congratulations to **Marilyn Treder**, Rochester CTC, who was awarded the 2006 MinnMATYC Teaching Excellence Award at the MinnMATYC Conference in Duluth.

NEBRASKA

The new officers for NEBMATYC are president, **John Miller**, Northeast CC; president-elect, **Dale Johanson**, Northeast CC; secretary, **Michael Flesch**, Metro CC; treasurer, **Debi Martin**, North Platte CC; and the 2007 conference chair, **Sharan Ostdiek**, Hastings CC. The 2007 Conference will be held at Hastings College in Hastings, NE. Congratulations to **Frank Weidenfeller**, Metropolitan CC, who was awarded the NEBMATYC Excellence in Teaching Award for 2006.

NEVADA

NevMATYC held its annual meeting on April 28, 2006. In August 2006 NevMATYC will begin using Moodle for its communication and discussion purposes. They have two fora, the President's Forum (to post news and information to the membership) and the Public Forum (for members to post news, information, and exchange ideas and have discussions) set up on Moodle at Truckee Meadows CC in Reno, NV.

NEW JERSEY

Arlene Graper is retiring from Raritan Valley CC and was chosen by the faculty to give the spring graduation speech. Arlene won the International Distinguished Advisor Award for Phi Theta Kappa.

Jaki Fesq completed her Princeton MidCareer Fellowship in spring 2006.

NORTH CAROLINA

The 2006 NCMATYC Spring Conference was held at Wake Tech CC in Raleigh. The number in attendance was one of the largest ever. New officers are president, **Jan Mays**, Elon College; past president, **Chuckie Hairston**, Halifax CC; president-elect, **Phyllis Patterson**, Wayne CC; secretary, **Mitzi Logan**, Pitt CC; treasurer, **Raymond Griffith**, South Piedmont CC; western vice president, **Mary Bradley**, Southwestern CC; central vice president, **Lee Ann Spahr**, Durham TCC; and eastern vice president, **Deborah Benton**, Wake TCC.

NORTH DAKOTA

At the fall 2006 meeting of NDMATYC, **Pete Wildman** and **Kendall Jacobs** of Casper College will be the featured speakers. The three sessions of the conference will focus on developmental

mathematics, liberal arts mathematics, and distance education.

PACIFIC ISLANDS

Kaua'i CC was the sight of the spring conference of π MATYC on April 1, 2006, organized by **Gigi Drent**. The morning included **John Hornsby** who spoke on "Math Goes to Hollywood" and "The Fibonacci Sequence and the Golden Ratio," and **Jan Ford** who provided an overview of AMATYC's *Beyond Crossroads*. Afternoon sessions included an emphasis on technology provided by **Emily Omlor** and **Jessica Elbern**. π MATYC's fall conference will be held at Kapiolani CC on September 30, 2006. The featured speaker will be **Pat McKeague**. The topic of his presentation will be "Five Minutes to a More Satisfying Course." The afternoon session will include a hands-on technology workshop featuring Web Access. For more information contact **Eric Matsuoka** at emat-souk@hawaii.edu.



IT'S NEVER TOO

LATE...

to be an AMATYC Consulting Professor. If you have a sabbatical coming up or would like to work on an AMATYC project, contact Cheryl Cleaves, ccleaves@amatyc.org, to make your plans.



CALL FOR AMATYC NEWS ARTICLES

AMATYC News readers enjoy reading short articles on teaching topics or other professional ideas. Do you have an activity that you believe other members would find interesting, the results of a grant, book review, or hints to help other members spend their professional time more productively? If so, please consider writing a brief article and sending it to Jean Woody, AMATYC News Editor. More information about length and submission requirements are available at the AMATYC News page at www.amatyc.org.

GUIDELINES FOR STATISTICS EDUCATION

by
Christine Franklin, Univ of Georgia,
and
Joan Garfield, Univ of Minnesota

Improving and supporting statistical education is central to the ASA's vision and mission statements. Recent presidents of the ASA have written about the importance of improving statistics education and establishing clear goals and guidelines that could be endorsed by the ASA. Building on the recommendations of these presidents, the ASA funded a strategic initiative grant (GAISE) to develop ASA-endorsed guidelines for assessment and instruction in statistics for the pre-K-12 curriculum and introductory college courses. In August 2005, the ASA Board of Directors endorsed two sets of recommendations regarding statistics education.

Pre-K-12 Curriculum Framework

The foundation for this framework is the National Council of Teachers of Mathematics' (NCTM) *Principles and Standards for School Mathematics* (2000). This framework is intended to support and complement the objectives of the NCTM principles and standards—not to supplant them—by providing a conceptual and developmental structure for statistics education that presents a coherent model for the overall curriculum. It is designed to provide stakeholders—such as writers of state standards and assessment items, educators with teacher preparation programs, curriculum directors, and pre-K-12 teachers—with guidance in developing standards in statistics and data analysis as part of the pre-K-12 mathematics curriculum. The framework already has made a positive impact in Georgia with revisions to the Georgia mathematical standards.

The framework presents statistical problem solving as an investigative process that involves four components: question formulation, data collection, data analysis, and interpretation. An

STUDENT MATHEMATICS LEAGUE

by Chuck Wessel

The balance of power in AMATYC's Student Mathematics League returned to southern California for the 2005-06 academic year. Pasadena City College held off a hard-charging Los Angeles City College team by one point to capture the team championship. East Los Angeles College finished third. Green River CC (WA) finished fourth and in the process defeated arch-rival Bellevue CC (WA) for the Washington state title for the first time ever. The City College of San Francisco (CA) finished fifth.

Green River CC was not the only community college to defeat a perennial state or regional rival. In the Midwest, College of DuPage (IL) used a strong round two showing to pass last year's national champion William Rainey Harper College (IL). Durham TCC (NC) captured their first Southeast Region title by tying Georgia Perimeter College (GA). Each year Sue Jensen of Pima CC (AZ) has some of the highest participation numbers in the country. This year Pima also won the Southwest region championship.

Charley Conley of Fullerton College (CA) and Jeong Min Seong of Los Angeles City College (CA) tied for the top individual placing, each scoring 71 out of a possible 80 points on the two tests.

A total of 10,072 students from 175 colleges participated in at least one round of the 2005-06 Student Mathematics League. Summary of the top performances for the year:

Top Ten Teams

Pasadena City College (CA)	280.0
Los Angeles City College (CA)	279.0
East Los Angeles College (CA)	253.0
Green River CC (WA)	230.5
City College of San Francisco (CA)	229.0
College of DuPage (IL)	226.5
Bellevue CC (WA)	223.5
Mt. San Antonio College (CA)	216.5
De Anza College (CA)	215.0
William Rainey Harper College (IL)	212.0

Top Ten Individuals

Charley Conley	Fullerton College (CA)	71.0
Jeong Min Seong	Los Angeles City College (CA)	71.0
Trung Tran	Pasadena City College (CA)	66.5
Xue Cong Li	City College of San Francisco (CA)	66.5
Wen Shi	Laney College (CA)	63.0
Pun Lap Lam	College of DuPage (IL)	60.0
Siddhartha Kanugo	Mission College (CA)	59.5
Sze Hon Tsang	East Los Angeles College (CA)	59.5
David Zimmerman	Ohlone College (CA)	57.0
Cheng Zhou	East Los Angeles College (CA)	55.0

Regional Leaders

Northeast	Monroe CC (NY)	147.0
Mid-Atlantic	Brookdale CC (NJ)	189.5
Southeast	Georgia Perimeter College (GA)	149.0
	Durham TCC (NC)	149.0
Midwest	College of DuPage (IL)	226.5
Central	Century College (MN)	152.5
Southwest	Pima CC (AZ)	154.5
Northwest	Green River CC (WA)	230.5
West	Pasadena City College (CA)	280.0

If you are interested in getting your school involved in the Student Math League for the 2006-07 school year, visit www.amatyc.org for more information. The dates for the fall test will be Friday, October 20 through Saturday, November 4, 2006. The dates for the spring test will be Friday, February 16 through Saturday, March 10, 2007.

—Continued on page 15

USAMO WINNERS HONORED IN WASHINGTON, DC

Carl C. Cowen, President of the Mathematical Association of America, and Steven Dunbar, Director of the American Mathematics Competitions, presented the awards to the twelve winners of the 2006 United States of America Mathematics Olympiad (USAMO) on May 22, 2006. The USAMO is part of a worldwide system of national mathematics competitions, a movement in which both educators and research mathematicians are engaged in recognizing and celebrating the imagination and resourcefulness of America's youth. Approximately 250 of the top scoring participants of another test, the American Mathematics Contest, are invited to compete in the USAMO, a six-question, two-day, nine-hour essay/proof examination, where all the problems can be solved with pre-calculus methods. Six of the twelve USAMO winners will



2006 USAMO winners in one of the U.S. Department of State Diplomatic Reception Rooms



Rikki Blair, Peng Shi, and Kathy Mowers

comprise the United States team that will compete in the International Mathematical Olympiad (IMO) in Slovenia, July 2006.

AMATYC is a proud sponsor of the USAMO competition and President Kathy Mowers and President-Elect Rikki Blair had the pleasure of attending the activities in Washington. One of the highlights of the weekend was a formal dinner at the Department of State, where Kathy and Rikki dined with Peng Shi, USAMO winner from Sir John A. MacDonald Collegiate Institute, Toronto, Canada. Peng plans to attend Duke University this fall to pursue a degree in mathematics and physics, after participating in the IMO in July. More information, including the test questions and solutions, can be found at www.unl.edu/amc/.

A CALL TO ARMS

by Rick Pal, AMATYC Publicity Director

Increasing membership is every organization's goal. If you are reading this in the current *AMATYC News* then you are already a member and therefore I would be just preaching to the choir. So what does AMATYC need from you? AMATYC needs you to provide a copy of this article to at least one member in your department who is not an AMATYC member and let them see the five reasons why they should join AMATYC. Your encouragement and persuasion will go a long way in supporting AMATYC's goals and missions of which you are a part. All good organizations need a thriving membership—it is the foundation upon which our house is built.

Welcome, prospective member and colleague. Why should you join AMATYC? Well, here are five reasons. But, if you are not convinced, ask the person who handed you this article why they are a member and they will give good reasons why you should join.

1. AMATYC's goals, mission, vision, core values, and objectives are to promote excellence in mathematics education, curriculum, and research.
2. It is your organization, the one that solely represents the two-year college mathematics faculty, your goals, hopes, and aspirations.
3. It is an organization with national and regional affiliates that contributes to the teaching and learning of mathematics at two-year colleges.
4. It is a place where members are valued for their input and opportunities are provided for their professional development.
5. AMATYC is an excellent organization for networking and is also an excellent clearinghouse for job opportunities through those networks.

GRANTS CORNER...

by Mary Kay Abbey

It is time to start thinking about submitting a proposal for the Course Curriculum and Laboratory Improvement program at the National Science Foundation. Talk with colleagues at neighboring schools and transfer institutions—a consortium strengthens your proposal. Perhaps there is a good program at another school that could be expanded statewide. Statistical evidence of your results is something of interest to both NSF and all of the AMATYC members. Due date is January 10, 2007.

ATE proposals are due October 12, 2006. The deadline for review of preliminary proposals has passed but do not hesitate to contact program officers for assistance.

Check the AMATYC website for a Grant's link which contains current due dates and other pertinent information.

Visit the AMATYC Online Store by following the link on the AMATYC webpage.

WINDOW ON WASHINGTON

ANALYSIS AFFIRMS LINK BETWEEN HIGH-QUALITY PROFESSIONAL DEVELOPMENT AND IMPROVED STUDENT ACHIEVEMENT

by Kathy Mowers

The Mid-continent Research for Education and Learning (McREL) recently released the result of its research about the influence of standards on K-12 teaching and student learning. McREL is a nonprofit organization created to help educators in the nation's heartland bridge the gap between research and practice. The researchers analyzed 54 articles reviewing 37 major studies that addressed the question, "What is the influence of standards-based professional development on teacher instruction and student achievement?"

The reader is encouraged to read the entire report, "Professional Development Analysis," which is available at www.mcrel.org/topics/productDetail.asp?topicsID=10&productID=234. To briefly summarize, the analysis found that professional development for teachers can have a positive impact on student achievement when the professional development is:

- "Of considerable duration
- Focused on specific content and/or instructional strategies rather than general
- Characterized by collective participation of educators (in the form of grade-level or school-level teams)
- Coherent
- Infused with active learning, rather than a 'stand-and-deliver model'." (Snow-Renner 2005)

McREL researchers also concluded that in general, K-12 teacher professional development does not reflect these characteristics. As a result, it has had mixed results in improving student achievement. The authors recommended that professional development for teacher training focus on particular areas of teacher and student needs. The researchers also commented on the lack of evidence, recommended that all professional development activities include a rigorous evaluation design, and suggested that funding agencies require comprehensive program evaluation.

McREL. (2005). *McREL Insights - Professional Development Analysis*. Aurora, CO: Ravay Snow-Renner & Patricia A. Lauer.



AMATYC AT AACC

To support our membership, AMATYC sponsored a booth at the American Association of Community Colleges Conference in Long Beach, CA. Cheryl Cleaves, Margie Hobbs, and Kathy Mowers staffed the booth. In addition to the many two-year college administrators, several AMATYC members stopped by the booth including Sadie Bragg, Sue Parsons, and Susan S. Wood. The booth offered AMATYC the opportunity to encourage college presidents and deans to support their mathematics faculty in professional development through conference attendance, summer institutes, and traveling workshops. The door prize of the audio version of *The World is Flat* was awarded in a random drawing to Shirley Thompson, North Lake CC, Texas.



Kentucky C&TC System President Michael B. McCall, Chair of American Association of Community Colleges Convention, and Kathy Mowers in the AMATYC Booth



TRYING TO COME UP WITH PROFESSIONAL DEVELOPMENT FOR FALL 2006 OR SPRING 2007?

Look no further! An AMATYC Traveling Workshop is just what you need. Topics include Technology, *Beyond Crossroads*, and Teacher Preparation. Visit our website www.amatyc.org/Events/traveling-workshops.htm today or contact Chuckie Hairston, hairstonc@halifaxcc.edu.

JOIN AMATYC

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THE WORLD IS FLAT

Review by Ruth Collins

Perhaps someone has already told you about Thomas Friedman's latest book—*The World is Flat*. Maybe they suggested that you should read it—well, you should.

This book, billed as a brief history of the 21st century, is more than a guide to new terms (outsourcing, home-sourcing, insourcing, supply-chaining, offshoring, and in-forming). The book paints a comprehensive portrait of the current crises the U.S. faces on economic fronts and the adaptations individuals, businesses, corporations, and colleges must make to keep our nation competitive. The role education must play in all of this is woven throughout the book.

The erosion of our engineering, science, mathematics, and technology base, cuts in NSF funding, and some marvelous analogies, such as the one comparing the emergence of railroads in the U.S. to the emergence of China and India into our economy, will vie for your attention throughout the book. You are guaranteed to see topics through a new perspective and you will be amazed at what you read chapter after chapter as you discover things you did not know about companies you do business with everyday. UPS does not just deliver packages anymore; they repair computers, schedule pizza deliveries, and pack up your Nikes, all to remain competitive in their niche.

Friedman cites Shirley Ann Jackson who likens the current crisis in our scientific and technological capacity to the coming together of a Perfect Storm. "The forces at work are multiple and complex. They are demographic, political, economic, cultural, and even social" but she feels they are devastating the U.S. and its ability to lead scientific discovery and innovation." (p. 255)

Review by Otis Taylor

In April, this book was "updated and expanded." In the new "updated" edition Friedman zeroes in on the challenges currently facing our country, especially in science & math education. Although the book points out some very serious concerns regarding our future, it is not a "doomsday" book by any means, and in fact I thought it was fairly optimistic about the world our children will soon be joining.

In addition to providing some insights into topics and issues which didn't even exist five years ago, the book is filled with dozens of interesting anecdotes and lots of tidbits of knowledge that might surprise you.

Here are a few that caught my attention:

- 1) In his explanation of "Insourcing" Friedman provides a very clear explanation of why Jefferson CC had to create a brand new two-year program to meet the specific needs of the UPS hub that was located in Louisville, KY.
- 2) As an example of a college that is rethinking their admission policies and redesigning their curriculum in order to better prepare their graduates to compete in the new global market, he discusses Georgia Tech's radical new approach to earning a degree in Computer Science. The end result is some CS majors will have to take a required course in *Hamlet* and the Georgia Tech marching band currently has 24 tuba players.
- 3) In answering the question "**What can you do with a degree in Mathematics?**" as a part of his theory on what kinds of new jobs are currently being created, his answer is "become a SEO". What does a SEO do? Here's a clue. They are all algorithm buffs who are currently working at Microsoft, Yahoo!, and Google, and out in the hi-tech world they are sometimes called "*alcoholics*."
- 4) In 1999 only 41% of our eighth-grade students received instruction from a mathematics teacher who specialized in mathematics; considerably lower than the international average of 71%.

Friedman, T. L. (2005). *The World is Flat A Brief History of the Twenty-first Century*. New York: Farrar, Strauss and Giroux.

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

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"A mathematician is a device for turning coffee into theorems."

- Paul Erdős (1913-1996)

"When I am working on a problem I never think about beauty. I only think about how to solve the problem. But when I have finished, if the solution is not beautiful, I know it is wrong."

- Buckminster Fuller (1895-1983)

THANKS FOR SUPPORTING AMATYC THROUGH THE AMATYC FOUNDATION

The AMATYC Foundation supports important AMATYC projects and meets special needs of AMATYC and its members through its **General Development Fund**. The **Project ACCESS Fund** provides professional development for new faculty and helps to develop the future two-year college mathematics leaders.



This is a special thank you for contributions that were made between July 1, 2005, and June 30, 2006.

President's Club

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understanding of variability, which requires maturation in statistical thinking, is crucial for practicing this process. Statistical education should be viewed as a developmental process, and this report provides a framework for statistical education over three developmental levels: A, B, and C. Although these levels may parallel grade levels, they are based on development in statistical thinking—not age. For example, if a student has not had Level A and B experiences prior to high school, it is not appropriate to jump into Level C expectations.

Introductory College Course Guidelines

According to the college working group, and endorsed by the ASA Board of Directors, introductory statistics courses should strive to:

- Emphasize statistical literacy and develop statistical thinking
- Use real data
- Stress conceptual understanding, rather than just knowledge of procedures

- Foster active learning
- Use technology for developing conceptual understanding and analyzing data
- Integrate assessments aligned with course goals to improve and evaluate student learning

For a copy of the full report and appendices with examples, visit www.amstat.org/education/gaise.

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Dates To Remember!

The AMATYC Review
Spring 2007 Issue Deadline:
September 1, 2006

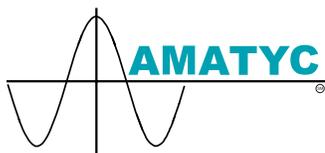
2006 AMATYC Conference
in Cincinnati
Discount Registration Deadline:
September 30, 2006

2006 AMATYC Conference
in Cincinnati
Hotels—Conference Rate Expires:
October 11, 2006

MAC³ Winter Institute
Registration Deadline:
October 15, 2006

Teaching Excellence Award
Nominations Deadline:
December 8, 2006

For more information visit
www.amatyc.org



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