

NEWS

Serving the professional
needs of two-year
college mathematics educators

Volume 20, Number 4
August 2005
ISSN 0889-3845

Conference Highlights for 2005

by Wanda Garner, Program Coordinator

Have you made your reservations for San Diego? If not, please don't delay. AMATYC's Annual Conference, scheduled for November 10-13, 2005, provides the best professional development available for two-year college mathematics educators.

The program is exceptionally strong. Some of the highlights include:

- ❖ Seven themed sessions, four on Thursday and three on Saturday
- ❖ The return of the popular Department/Division Chairs' Colloquium
- ❖ A special plenary session featuring Keith Devlin at 1:00 p.m. on Friday
- ❖ Four sessions featuring *Beyond Crossroads*, including facilitating department chair involvement in implementing its recommendations and the new digital products being developed
- ❖ Two sessions designed to address the needs of affiliates
- ❖ Forums on *Beyond Crossroads*, digital products, AMATYC committee reorganization, a possible formula to establish future dues increases, and a position paper on dual enrollment policies.

Specific topics range from guidelines to improve statistics education, addressing the needs of new faculty, inspiring students to enter our profession, successful programs in mathematics for women, using technology effectively, standards for College Algebra, math on the web, strategies for at-risk students, issues for department chairs, student learning outcomes, teacher preparation, effective assessment, and many more. Also included are several unusual presentations likely to intrigue you. Watch for interesting connections between mathematics and nature, music, art, color, juggling, geography, poker, the ancient Mayan people, and even the development of children's thinking styles.

The conference schedule combines the best of AMATYC's traditional schedule with your favorite parts of last year's resort schedule. Expect to enjoy:

- ❖ Early bird sessions and workshops Thursday morning at 7:30 a.m.
- ❖ Breakfast with your region colleagues Friday morning
- ❖ Three dedicated "visit the exhibits" times, including the grand opening Thursday evening and dedicated times following breakfast on both Friday and Saturday
- ❖ A committee meeting time at 4:30 p.m. on Friday that does not conflict with sessions and workshops
- ❖ Encore presentations on Sunday morning of several of the most popular sessions
- ❖ An unscheduled Friday evening so that you may enjoy the San Diego venue of your choice.

After the sessions end Friday, relax by the pool or take advantage of a unique opportunity to learn how to juggle from the master himself, Ron Graham. Then, join Pat McKeague to enjoy several math activities and network before adjourning with new friends and colleagues to the restaurant of your choice, Dutch treat, of course. See you in warm, sunny, friendly San Diego!!!



Inside This Issue

2	President's Corner
3	AMATYC Foundation
4	Strategic Plan
5	MAC ³ NSF Grant
6	Window on Washington
6	Calendar
7	AMATYC Elections
8	Committee Reports
9	News from Coast to Coast
13	AMATYC Board Report
15	Keystone Method
16	Dates to Remember

See page 6 for more conference information.



Judy E. Ackerman
Montgomery College
Rockville, MD

One of the ways that organizations such as AMATYC are able to support special projects is through grant funding. Two AMATYC multi-year National Science Foundation (NSF) Advanced Technical Education (ATE) grants came to an end this year. Congratulations to all of the principal investigators for a job well done on these two projects.

The Teacher Preparation grant, led by Principal Investigators Ruth Collins, Sue Parsons, and Phil DeMarois, provided regional conferences and summer institutes on several topics for mathematics teacher preparation courses for prospective K-8 teachers. The grant also supported the development of an AMATYC traveling workshop strand on teacher preparation with five traveling workshops presented at affiliate meetings. Since this was an ATE project, activities included an emphasis on technology in elementary school mathematics.

Mary Ann Hovis, Rob Kimball, and John Peterson were the Principal Investigators for the Technical Mathematics for Tomorrow grant. This project identified issues, developed a vision, and made recommendations concerning the mathematics needed for technology programs. Ten exemplary programs were identified that were improving the mathematics preparation of students in biotechnology and environmental science, electronics, telecommunications and semiconductors, information technology, and manufacturing and mechanical engineering technology. An "invitation only" national conference was held which provided the information for the document *A Vision: Mathematics for the Emerging Technologies*. Finally a set of problems from the bio-tech field were developed as a resource to mathematics faculty that illustrated different levels of Bloom's Taxonomy.

The current AMATYC grants portfolio includes a NSF Planning grant for the development of digital products to accompany *Beyond Crossroads*, the update of the AMATYC standards document that will be released in 2006. The principal investigators for this project are Phil Mahler and Susan S. Wood. AMATYC is working together with the MAA on a professional development project for new faculty, Project ACCCESS. Sadie Bragg and Alice Kaseberg are the AMATYC project directors who are joined by MAA Project Directors Janet Ray and Sharon Ross. This project is funded by the ExxonMobil Foundation. Finally, AMATYC recently learned that its most recent NSF proposal, "Mathematics Across the Community College Curriculum - MAC³" was funded. This project, described elsewhere in this newsletter is under the direction of Christie Gilliland, Deann Leoni, Patrick Bibby, Rebecca Hartzler, and Ruth Collins. At least one more proposal is still pending.

Notice that there is a theme of professional development for two-year college mathematics faculty in all of our grants with, in most cases, an emphasis on curricular improvement. Grants that are submitted by a professional organization by nature are broader in scope than those submitted by individuals. We have been fortunate to have knowledgeable AMATYC members step forward to provide leadership for each of these projects.

It is no accident that AMATYC's current grant projects fit in with AMATYC's Strategic Plan. In fact the AMATYC Board recently approved a Grants Policy that provides direction about the characteristics of proposals that AMATYC will support from individuals or other organizations as well as the ones that AMATYC submits. External grant projects should support the AMATYC Mission, provide benefits to AMATYC members, and not compete with an AMATYC proposal or activity. Additionally, as appropriate, AMATYC should be represented on the advisory board or steering committee. An example of this is the American Association of Community Colleges (AACC) project "Teaching by Choice." AMATYC board members and leaders have been

on the steering committee and coordinating committee for the two conferences put on by the AACC. When AMATYC submits a proposal it should reflect an objective of the strategic plan and meet a clear objective of AMATYC and its members. Additionally the effort and commitment of AMATYC personnel, time, and resources should provide a benefit to AMATYC and its members. The complete AMATYC Grants Policy is posted on the AMATYC webpage. What do you think AMATYC's future grants projects will be?



Judy Ackerman
President

Kathy Mowers
President-Elect

Phil Mahler
Past President

Irene Doo
Secretary

Tom Adamson
Treasurer

Jack Keating
Northeast VP

Rob Farinelli
Mid-Atlantic VP

Rob Kimball
Southeast VP

Jim Roznowski
Midwest VP

Wanda Long
Central VP

Mary Robinson
Southwest VP

Christie Gilliland
Northwest VP

Jan Ford
West VP

AMATYC Office
Southwest Tennessee CC
5983 Macon Cove
Memphis, TN
901.333.4643
901.333.4651 (fax)
amatyc@amatyc.org

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

The AMATYC Foundation Says Thank You!

The AMATYC Foundation raises funds to support the mission and goals of AMATYC. It asks for support for its **General Development Fund**, its **Project ACCESS Fund**, its **Crossroads Revisited Fund**, and for the **Crossroads Revisited Digital Products**.

The Foundation has as a goal to increase the percentage of AMATYC members who contribute, as well as to carry out special solicitations to members, publishers, and others. We hope that we can list your name in August 2006.

As noted in the May issue, the Foundation is using this special page to thank those who have contributed to the AMATYC Foundation in the last 18 months. This is the first time the Foundation has done this and plans to make it an annual event.

President's Club - Gold Member

Wanda J. Long

President's Club

Geoffrey Akst
Sadie C. Bragg
Cheryl Cleaves*
David Ellenbogen
R. David Gustafson
Margie Hobbs*
Barbara L. Johnson
Joanne S. Lockwood
Pat McKeague
Karl J. Smith
Alan Tussy
Allyn J. Washington

Patron

Judy E. Ackerman
Dale Ewen
Jim Hall
Marilyn E. Mays
Pearson Education
Susan S. Wood

Sponsor

Allen Angel
Jan Ford*
Wanda L. Garner*
Kathy Mowers

Friend

Kathleen J. Bavelas
Paul Calter
Irene Doo*
David Ellenbogen
Shanna S. Goff
Alice M. Kaseberg
Jack Keating
Edward C. Nichols
Jim A. Roznowski
William N. Thomas, Jr.
Linda M. Tonolli
Peter R. Wildman
Jean Woody

Supporter

Ignacio Alarcon
Steven Blasberg
Edward A. Gallo
Peter U. Georgakis
Lawrence G. Gilligan
Laurie K. McManus
Sue Parsons
Elizabeth A. Ryan
Deanna K. Schaff
Thomas F. Seremet
Mary V. Sloan
William G. Steenken
Tingxiu Wang
Paula A. Wilhite

Contributor

Tom Adamson
Khadija Ahmed
Julia Arnold
Florence H. Ashby
Eric Aurand
Robert Bohac
Chris M. Burditt
Gail A. Burgess
Mike E. Cahill
Rotraut C. Cahill
Janette H. Campbell
Catherine Cant
Chokri Cherif
Ann E. Commito
Douglas B. Cook
John R. Crooks
Hilary Davies
Ann S. DeBoever
Marina Dedlovskaya
Philip A. DeMarois
Gordon A. Despain
Suzanne I. Doree
Jason M. Edington
Benjamin M. Etgen
Robert A. Farinelli
Kathryn W. Fenimore
Joan M. Finucci
Clark Fleming
Susan C. Fleming
Karyn L. Frazee

Heather A. Gamber
Miguel A. Garcia-Negron
Elayn Martin Gay
Judy Giffin
Christie Gilliland
Stephen G. Gladfelter
Rita Gonzalez
Brian K. Hagelstrom
Joyce G. Hallaway
Jim Ham
Mark Harbison
Ruth Anne Hartman
Christie Heinrich
Judy Holcomb
Stephanie Holcombe
Susan S. Hollar
Jean M. Horn
Rebecca S. Hubiak
Don Hutchison
Jane Y. Iida
Kelly Jahns
Michael W. Jamieson
Roger L. Jay
Bob Johnke
Jeffrey C. Jones
Walter A. Kehowski
Robert L. Kimball, Jr.
Roxanne King
Angela Klones
Linda Laine
Larry R. Lance
Patricia R. Lanz
Carol Lerch
Joan F. Lipsmeyer
Martha O. Lisle
Kelly M. Locke
Russell J. Lundgren
Philip Mahler
Leonard Malinowski
Donna M. Martin
Susan McClintock
Shelia McNicholas
James R. Metz
Mary Mogan-Vallon
Jim Moore
Karen J. Morris
Martine Levy Nelson

Charlotte Newsom
Paul D. Nolting
Maureen O'Grady
Jenny M. Olive
Rebecca J. Plassmann
Debra A. Poese
Vicki P. Rainey
Anand Ramaswami
Donald L. Ransford
Barbara S. Rives
Mary R. Robinson
Harold Rowell
Linda Schott
Erik M. Scott
Don St. Jean
Amber Steinmetz
Sue Strickland
Jane D. Tanner
Pei W. Tavermer
Cindie Wade
Dennis Walker
Tracy Watson
Sharon F. Welker
David M. Wells
Cora S. West
Sara E. Williams
Lisa Winch
Mary Woestman
Irene Wong

* Sustaining Donor

A special thanks goes out to Phil Cheifetz for doing the Magic Show each year at the annual conference. This is a fun activity with all proceeds going to the AMATYC Foundation, for which the Foundation is grateful.

For information about making a donation to the AMATYC Foundation, see page 12.

Strategic Plan for 2006-2011 Approved

The following strategic priorities were approved at the 2005 Spring Board Meeting in Memphis. Input was gathered from focus groups in Orlando at the annual conference, a forum in Orlando, and Strength-Weaknesses-Opportunities-Challenges sessions at the 2003 spring board meeting and the annual conference in Salt Lake City. Individual members also offered their input as a result of the article in the *AMATYC News*.

Your input continues to be important to AMATYC's success. If you have ideas to help us accomplish the priorities and goals we've set for 2006-2011, please email Kathy Mowers or your regional vice president.



American Mathematical Association of Two-Year Colleges Strategic Priorities and Goals for 2006–2011

I—Promote effective learning opportunities to increase success in mathematics for all college students.

- A. Promote implementation of the *Beyond Crossroads* principles and standards.
- B. Facilitate the successful, seamless transition from high school to two-year college mathematics and from two-year to four-year college or to the workplace.
- C. Support classroom research in two-year colleges to enhance student learning.
- D. Encourage the use of assessment in courses and programs to enhance student learning.
- E. Provide opportunities for student participation in mathematical activities outside the classroom.

II—Provide professional development to enhance and maintain the quality of two-year college mathematics educators.

- A. Expand AMATYC's role in providing and promoting professional development.
- B. Maintain the high quality of the annual conference.
- C. Advocate for the importance of continuous professional development for two-year college mathematics faculty.
- D. Encourage mentoring of new faculty in the current philosophies reflected in the *AMATYC Standards*.

III—Promote the identity and awareness of AMATYC.

- A. Increase membership.
- B. Increase members' involvement and satisfaction.
- C. Develop external relations with professional organizations.
- D. Improve marketing directed at increasing and retaining both individual and institutional members.

IV—Establish, promote and participate in national initiatives that will benefit lower division collegiate mathematics education.

- A. Serve as a strong voice for two-year college mathematics, and advocate for the needs of two-year college mathematics within all of higher education.
- B. Continue to seek support from professional organizations, federal agencies, foundations, and businesses to implement the AMATYC mission and goals.
- C. Establish relationships with businesses to accomplish the mission of AMATYC.
- D. Develop and mentor two-year college mathematics faculty to take leadership roles in addressing national issues of mathematics education.
- E. Increase involvement of AMATYC with key national and international committees and policy making boards.
- F. Institutionalize representation in Washington, DC, to inform national leaders in government and education of the issues regarding two-year college mathematics.

V—Enhance AMATYC's organizational structure to best achieve its mission.

- A. Examine AMATYC's current committee structure to support the AMATYC mission.
- B. Analyze the roles and responsibilities of the positions of the Executive Board and selected leadership positions to improve organizational effectiveness.
- C. Study the role and composition of the AMATYC Delegate Assembly.
- D. Review the organizational structure of the AMATYC Office to optimize resources.
- E. Develop a process for responding to current trends and challenges within mathematics education in two-year colleges.

AMATYC Awarded NSF Grant for Mathematics Across the Community College Curriculum

by Christie Gilliland

In May, AMATYC received notice from the National Science Foundation that the Mathematics Across the Community College Curriculum (MAC³) project had been funded in the amount of \$699,893 over four years. This national dissemination project supports faculty of all disciplines to integrate mathematics and quantitative reasoning into their courses. MAC³ builds upon the successful four-year NSF funded Mathematics Across the Curriculum Project from Edmonds CC in Washington State led by Deann Leoni and Rebecca Hartzler. AMATYC is a partner on this grant with Edmonds CC, Seattle Central CC, and Miami Dade College.

The central activities of the MAC³ project will be curriculum planning institutes to be held in both summer and winter. Interdisciplinary teams of faculty will attend these four-day institutes with the purpose of creating assignments or projects that include or enhance the mathematics to support topics in their non-math disciplines. Edmonds' MAC project supported a wide variety of disciplines including art, anthropology, biology, business, chemistry, English composition, ESL, gerontology, physics, sociology, and Spanish. MAC³ supports both transfer and professional/technical faculty. The institutes will feature a networked computer lab, experienced consultants, and workshops in assessment, utilizing technology, and cross-disciplinary teaching. Most important, the institutes will provide time for the teams to work so that participants will leave with classroom ready materials.

The first MAC³ summer institute will be held August 9-12, 2005, in Leavenworth, WA. There will be future summer institutes in Washington in 2006 and 2007, and winter institutes in Florida in 2007 and 2008. Dates for these conferences and more information will be posted on the AMATYC webpage and on the MAC website, <http://mac.edcc.edu>. By the conclusion of the four-year grant, AMATYC will sustain the Mathematics Across the Community College Curriculum Project through the existing Traveling Workshops and Summer Institutes.

'Catch the Wave' about the MAC³ project in November at a presentation given by the project directors at the 31st Annual AMATYC Conference in San Diego. The session is scheduled for 3:30 p.m. on Friday, November 11, 2005.

For ideas and examples of implemented curriculum, see <http://mac.edcc.edu>. For more information, contact the project PI, Christie Gilliland at cgillila@greenriver.edu or project Co-PIs, Deann Leoni at dleoni@edcc.edu or Rebecca Hartzler at rhartzler@sccd.ctc.edu.

AMATYC at AACCC

To promote AMATYC and its benefits to two-year college mathematics faculty and institutions, AMATYC sponsored a booth at the American Association of Community Colleges conference in Boston. This conference attracted administrators of two-year colleges across the country, and AMATYC took this opportunity to encourage them to support you in your professional development through conference attendance, summer institutes, and traveling workshops.

Pictured left to right: Phil Mahler, Past President; Jack Keating, Northeast Vice President; Judy Ackerman, President; Sadie Bragg, Co-PI for Project ACCCESS; Cheryl Cleaves, Executive Director of Office Operations; "Colonial American"; and Margie Hobbs, Conference Coordinator

Crossroads Corner . . .

Beyond Crossroads Addresses Change

When AMATYC members were asked to provide feedback about the 1995 *Crossroads in Mathematics* document, they indicated that **implementation** should be a



primary focus of the new *Crossroads* document. In addition to a new set of Implementation Standards that builds on the standards for intellectual development, content, and pedagogy from the 1995 *Crossroads*, an Implementation Cycle applicable to many situations will be included in *Beyond Crossroads*. Throughout the broad-based review, response, and revision cycles of the various drafts of *Beyond Crossroads*, the theme of **embracing change** in faculty teaching practices, departments, and institutions has emerged.

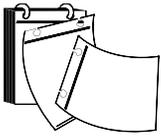
The Implementation Standards of *Beyond Crossroads* address:

- Student learning and the learning environment
- Assessment of student learning
- Curriculum and program development
- Instructional strategies
- Professionalism

These standards are intertwined in the document with the notion of embracing change in a systematic way through a multi-step process that engages stakeholders and allows for continuous improvement.

Attend the various *Crossroads* events at the 2005 AMATYC Annual Conference in San Diego to hear more about embracing change, *Beyond Crossroads*, the Implementation Cycle, and digital products to accompany the written document. Come to forums concerning *Beyond Crossroads* and the digital products on Thursday night as well as conference sessions on Friday and Saturday. For more information, contact Project Directors Susan S. Wood (swood@vccs.edu), Phil Mahler (mahlerp@middlesex.mass.edu), or Sadie Bragg (sbragg@bmcc.cuny.edu), or Project Editor Richelle Blair (richelle.blair@sbcglobal.net).





AMATYC Calendar of Events

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

September 9-10, 2005 FTYCMA Fall Retreat, Central Florida CC, Gainesville, FL. Contact: Norma Agras, nagras@mdc.edu

September 23-24, 2005 MichMATYC Annual Meeting, Kirtland CC. Contact: Doug Mace, maced@kirtland.edu

September 24, 2005 LaMsMATYC Annual Meeting, Hinds CC, Raymond, MS. Contact: Kathleen Lopez, kdl4321@louisiana.edu

September 24, 2005 OKMATYC Fall Meeting, Redlands CC, El Reno, OK. Contact: Brena Bellovich, bbellovi@tulsacc.edu

September 24, 2005 12th Annual WisMATYC Fall Conference, Milwaukee Area Technical College, Milwaukee, WI. Contact: Mary Rampson, rampsonm@matc.edu

October 7, 2005 ArizMATYC Meeting, Pima CC, Tucson, AZ. Contact: Dan Russow, daniel.russow@azwestern.edu

October 7, 2005 KAMATYC Fall Meeting/ Kansas City Tech EXPO, Rockhurst Univ, Kansas City, MO. Contact: Judy Stubblefield, judy.stubblefield@gcccks.edu

November 10-13, 2005 31st Annual AMATYC Conference, San Diego, CA. Contact: AMATYC Office, 901.333.4643, amatyc@amatyc.org

February 18-19, 2006 FTYCMA Spring Meeting/MAA Sectional Meeting, Florida Atlantic Univ, Jupiter, FL. Contact: Martha Goshaw, goshawm@scf.edu

March 3, 2006 COLOMATYC Meeting, Aims CC, Greeley, CO.

April 7, 2006 NEBMATYC Annual Meeting, North Platte, NE. Contact: Debi Martin, martindc@mpcc.edu

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

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

Why San Diego?

by Kathy Mowers

Top ten reasons to attend the 2005 Annual AMATYC Conference in San Diego:

10. Eighteen major and commuter airlines service the San Diego International Airport, www.san.org, including American (AMATYC's preferred carrier), Southwest, Independence, and JetBlue.
9. San Diego is California's second largest city and the United States' seventh largest, so there are activities for everyone.
8. You can enjoy beautiful coastal, mountain and desert environments all in the space of one day. For details, visit www.sandiego.org.
7. The Balboa Park Pass, which includes one admission to each of twelve renowned museums and a Japanese Garden.
6. The World-Famous San Diego Zoo.
5. The weather is wonderful. Typically you'll experience a high of 70 and a low of 54 with a lot of sunny days.
4. Easy navigation to all the attractions via public transportation.
3. An outstanding room rate!
2. Long-time friends and new friends!
1. Another Great AMATYC Conference!

Statistics Workshop NSF Poster Session in San Diego

The ASA/AMATYC Joint Committee is pleased to announce that it has received a grant in the amount of \$11,500 from the ASA's Strategic Initiatives 2005 program to offer a workshop entitled **Preparation of Two-Year College Mathematics Instructors to Teach Statistics with GAISE** (Guidelines for Assessment and Instruction in Statistics Education). The workshop will be offered at the Town and Country Resort & Convention Center, AMATYC's conference hotel, on November 8-9, prior to the AMATYC conference. Food and lodging will be provided for the two days of the workshop. Further details can be obtained at the ASA/AMATYC Joint Committee's link on the AMATYC website, or by sending email to committee chair Brian Smith at brian.smith@mcgill.ca.

AMATYC has received funding from the National Science Foundation to offer Poster Sessions at the annual conferences in San Diego and Cincinnati. Do you have a current NSF grant project you would like to showcase in San Diego? This venue features creative projects AMATYC members are doing and inspires others to enter the grant arena. Contact Mary Kay Abbey, marykay.abbey@montgomerycollege.edu, or Margie Hobbs, mjhobbs@olemiss.edu, if you would like your project to be included in the Poster Session in San Diego or Cincinnati.

Top Ten Places to Visit in San Diego

- Old Town State Park
- San Diego Zoo and Wild Animal Park
- Balboa Park and Museums
- Seaport Village
- Gaslamp District
- SeaWorld
- Beaches
- USS Midway Museum
- San Diego Harbor Cruise
- Hotel Del Coronado

Window on Washington

by Judy Ackerman

The National Science Foundation's (NSF) annual Community College Day was held on April 25, 2005, at the NSF headquarters. Those of us at community colleges in the Washington, D.C. area were invited to bring students to a talk by the Surgeon General of the United States, Dr. Richard Carmona. His story typifies the story of many of our students. He was a high school dropout who, after earning a GED and serving in the Army, attended a community college and then continued on to a four year college followed by medical school. Just think of the unknown potential of some of the students who are in each of our classrooms!

Advocacy for science, technology, engineering, and mathematics (STEM) education and research funding is a huge issue among STEM professional organizations, particularly with regard to funding through federal agencies. Of particular concern to the two-year college community is the NSF budget in the Directorate for Education and Human Resources. The percentage of NSF money in the NSF budget in the Education and Human Resources area is declining.

Some of the larger STEM organizations are able to support someone to lead advocacy efforts and to provide information to their members and others through their websites. You can stay informed about federal funding issues in STEM areas through the NCTM website at capwiz.com/nctm/html/home and the AMS website at www.ams.org/government.

Advocacy for STEM education is not just something that professional organizations do. You and your colleagues need to be in touch with your national legislators when there are issues that concern you related to mathematics education. This can take the form of letters, emails, or visits when they are back in their district. Stay informed so that you too can be an advocate for quality STEM education.



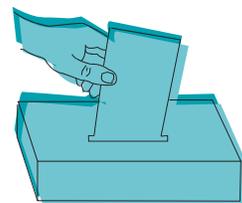
Your Vote Counts

Elections for the next AMATYC Executive Board, 2005-2007, occur this fall. Watch for your ballot in the mail in early September. Your vote counts, so please take time to vote for those who will lead AMATYC for the next two years!

Ballots for each AMATYC region will ask you to vote for one of the candidates for President-Elect, Secretary, Treasurer, and the Vice President for your region. Winners will be announced during the 2005 AMATYC Annual Conference in San Diego, and take office at the close of that conference for two year terms. Ballots must be returned in the envelope provided and must be postmarked by Friday, September 30, 2005, and received by Wednesday, October 5.

You are eligible to vote if you are an active, regular member, or lifetime member, on May 31, 2005. Please take note that the following membership categories do not carry voting privileges: retired, adjunct, student, and institutional. If you are the contact person for your college's institutional membership, you must also hold a regular, individual membership to be eligible to vote. Questions regarding your membership status should be directed to the AMATYC Office by email to amatyc@amatyc.org or by phone to 901.333.4643. If you are eligible to vote and do not receive a ballot by Monday, September 19, 2005, please contact the office as indicated above.

Thank you in advance for taking the time to vote in the election of AMATYC officers for the 2005-2007 term, and for your active participation in AMATYC!



2005-2007 AMATYC Board Election Slate

The slate of candidates follows, with candidates in alphabetic order by last name. Write-ins are permitted for each office.

President-Elect

Rikki Blair, Lakeland CC
Rob Farinelli, CC of Allegheny County

Secretary

Irene Doo, Joliet Junior College
Peg Hovde, Grossmont College

Treasurer

Chuckie Hairston, Halifax CC
Nancy Sattler, Terra CC

Northeast Vice President

Maryann Justinger, Erie CC
Steve Krevisky, Middlesex CC

Mid-Atlantic Vice President

Chris Allgyer, Mountain Empire CC
Ruth Collins, Delaware Tech & CC

Southeast Vice President

Rob Kimball, Wake Technical CC
Donna Saye, Georgia Southern Univ

Midwest Vice President

Mary Ann Hovis, Rhodes State College
Jim Roznowski, Delta College

Central Vice President

Joe Gallegos, Salt Lake CC
Peter Wildman, Casper College

Southwest Vice President

Mary Robinson, UNM-Valencia Campus

Northwest Vice President

Christie Gilliland, Green River CC

West Vice President

Jan Ford, Cuyamaca College

The AMATYC Review

The AMATYC Review invites manuscripts and reviewers. Author Guidelines and Reviewer Surveys may be obtained from the editor, Barbara Rives, Lamar State College-Orange, 410 Front St., Orange, TX 77630. Author Guidelines may also be found at www.amatyc.org/Publications/Review.

ASA/AMATYC Joint Committee

by Brian Smith

The ASA/AMATYC Joint Committee met at the USCOTS conference at the Ohio State University, May 19-21, 2005. The USCOTS conference (United States Conference on Teaching Statistics) was a great success, with an attendance of approximately 300 statistics educators from the United States and Canada. A main topic of discussion at the ASA/AMATYC Joint Committee meeting was the ASA Strategic Initiatives 2005 grant the committee received to offer a workshop on preparing statistics educators to teach statistics based on the GAISE report. The ASA Board recently endorsed the six recommendations from the GAISE (Guidelines for Assessment and Instruction in Statistics Education) report as a standard for teaching undergraduate statistics. The GAISE report has been endorsed by NCTM, MAA, and AMATYC.

Distance Learning Committee

by Nancy J. Sattler

Ever wonder how to increase engagement in an online discussion into one of your classes? Studies have shown that online discussion can improve student retention and student success (ANTA, 2000, Jones & Harmons, 2002). When “googling” on the web, anyone can find many articles about this topic. One of the better “hits” is the monograph entitled *Increasing Engagement for Online and Face-to-Face Learners Through Online Discussion Practices*. In this document, author Alice Bedard-Voorhess discusses incorporating online discussion practices into courses.

In order to incorporate online discussion into your class, you will need to have the technology in place, have prepared some type of message for your students explaining the rules, giving the students directions on how to use the technology, and allowing the students time to log-in and experiment with the technology with technological assistance available to students who need it. Bedard-Voorhess suggests using an online icebreaker for face-to-face classes to provide social introductions that don't necessarily occur for students seated in rows for lecture

formats. She advises that each teacher set up a rubric to let the students know how their participation in the online discussion relates to their final grade. A sample rubric along with sample discussion questions that can be used to engage the students is given in the monograph.

Another useful resource for learning more about the use of online discussions is the Teaching, Learning, and Technology page of the Suny system (<http://tlt.suny.edu/discussion.htm>) where the following tips for increasing student interaction in online discussions are given: require participation; include a grade for participation; provide an overview of what is due for each week; make the discussion interesting; participate wisely; require a product that is based on or the result of discussion; keep your tone clear, concise, and conversational; structure the discussion; have students lead the discussion; include ideas, and information generated in discussion on exams; form small groups or learning teams; make sure discussions are of a long enough duration to allow full and thoughtful participation; deal with unacceptable behavior via private email; and be encouraging, supportive, timely, and constructive.

Many teachers find the use of an online journal a helpful tool in engaging their students. This journaling can take place using Blackboard, WebCT, a WebBoard, or using new tools such as blogs or wikis. Blogs or weblogs allow users to post links and write commentaries that add reading and response capacities because of their linking and viewing capacities (Downes, 2004). A wiki contains similar features but allows writers to edit other entries. (For a further explanation of wikis, see <http://wiki.org/wiki.cgi?WhatIsWiki>.)

Once your students have participated in an online discussion, determine how they value the discussion by asking questions such as suggested by Brookfield & Preskill (1999): (1) What new knowledge did you gain from the discussion? (2) What can you now do as a result of the discussion that you couldn't do before? And, (3) What could you teach someone else because of your participation in this discussion? Student responses to these questions will give you an insight into the value students place on your class discussion.

If you have been successful in engaging your students in online discussions,

why not share your experiences with the AMATYC membership? Send an email to MathViaDistance@terra.edu!

References

- Australian National Training Authority. (2000). *Teaching and learning styles that facilitate online learning documentation and research and development projects*. Retrieved March 23, 2001, from <http://www.tafe.sa.edu.au/lrsrc/one/natproj/tal/survey>
- Bedard-Voorhess, A. (2005). *Increasing Engagement for Online and Face-to-Face Learners Through Online Discussion Practices*. The Cross Papers Number 8. Phoenix: League for Innovation in the Community College.
- Brookfield, S., & Preskill, S. (1999). *Discussion as a Way of Teaching: Tools and Techniques for Democratic Classrooms*. San Francisco: Jossey-Bass.
- Downes, C. (2004, September-October) Blogging. *Educause*, pp. 14-16.
- Jones, M. G., & Harmon, S. W. (2002). In R. S. Anderson, J. F. Bauer, & W. Speck (Eds.), *New directions for teaching and learning: No. 9. Assessment strategies for the on-line class: From theory to practice* (pp. 19-30). San Francisco: Jossey-Bass.

Placement and Assessment Committee

by Ed Gallo

The Placement and Assessment Committee (PAC) plans to have the next PAC Newsletter ready by October 1, 2005. So, if you have a short article or other item on math placement or assessment that you think would be of interest to all of the PAC membership, please send it to me, ed.gallo@sinclair.edu, and I will make sure that it gets into our next PAC Newsletter. If you wish to get a copy of the Newsletter, please contact Jim Ham, jaham@delta.edu, our website coordinator and newsletter editor.

And, 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) at www.amatyc.org or www.placementamatyc.org

Program/Curriculum Issues Committee

by Ruth Collins

Committee website: amatyc.dtcc.edu

It is not too early to start thinking about the conference in San Diego. Many interesting proposals have been submitted, and it looks to be another wonderful conference. The speakers for the general sessions and the presenters are especially strong, and we hope you can all attend. There is much to learn at this conference, there are friendships to renew and refresh, and the beautiful weather of southern California will be a plus.

At the committee meeting for Programs and Curriculum Issues we will be discussing several issues. The first is the appropriate use of technology in Teacher Preparation courses in mathematics. If you have an interest in teaching preservice teachers or have been teaching courses for this group, you are most welcome at our meeting. We have presentations scheduled during the conference on this topic and hope to generate a lively discussion during the committee meeting.

Under the subcommittee heading of faculty issues, we will also take one last look at the Dual Enrollment position paper. This statement is available for viewing in its present draft form at the committee website. You can get to the committee website one of two ways, either from the amatyc website, www.amatyc.org, or by going directly to the committee site, amatyc.dtcc.edu. You can join the discussion group on dual enrollment by sending me an email. We are discussing changes and improvements to the position statement prior to the San Diego conference online. Email me at lv2fly@comcast.net and I will add you to the list and email you past postings. We hope to have this position statement adopted during the Delegate Assembly in San Diego.

For information on the meeting date and time, to become part of the sharing email network, or just to keep in touch with committee activities, email Ruth Collins at lv2fly@comcast.net.

The Statistics subcommittee will meet separately in San Diego. For more information, contact Brian Smith at brian.smith@mcgill.ca.

Student Mathematics League

by Chuck Wessell

When looking for the Student Mathematics League team champion, AMATYC members are accustomed to casting their gaze westward to California. This year, however, perennial Midwest region power William Rainey Harper College (IL) won the team championship, and there was not a California college among the top three teams. Bellevue CC (WA) and Georgia Perimeter College (GA) finished second and third, respectively, but neither was a threat to Harper College's first place score of 342 points. City College of San Francisco (CA) and Pasadena City College (CA) finished fourth and fifth.

Three students—Tom Kern of Brookdale CC (NJ), David Buchs of Rochester CTC (MN), and Chenyu Feng of William Rainey Harper—earned a perfect score of 40 on the spring test. This was Chenyu Feng's second perfect paper of the year, and earned him the top score in the individual competition by a 6.5-point margin.

A total of 10,214 students from 174 colleges participated in at least one round on the 2004-2005 Student Mathematics League. A summary of the top performances for the year follows this article.

If you are interested in getting your school involved in the Student Math League for the 2005-06 school year, visit www.amatyc.org for more information, or contact the Student Math League Coordinator at wessellc@durhamtech.edu. The dates for the fall test will be Friday, October 21 through Saturday, November 5, 2005. The dates for the spring test will be Friday, February 17 through Saturday, March 11, 2006.

Top Ten Teams

William Rainey Harper College (IL)	342.0
Bellevue CC (WA)	302.5
Georgia Perimeter College (GA)	296.5
City College of San Francisco (CA)	293.5
Pasadena City College (CA)	279.5
Brookdale CC (NJ)	274.5
Green River CC (WA)	269.0
De Anza College (CA)	267.5
Mt. San Antonio College (CA)	261.0
Ohlone College (CA)	252.5

Top Twelve Individuals

Chenyu Feng	William Rainey Harper College (IL)	80.0
David Buchs	Rochester CTC (MN)	73.5
Lawrence Chan	William Rainey Harper College (IL)	73.0
Bruce Haupt	Century College (MN)	73.0
Daniel Bles	Century College (MN)	71.0
Pete Martini	Middlesex County College (NJ)	67.5
Mitcham Costley	Georgia Perimeter College (GA)	67.0
Tom Kern	Brookdale CC (NJ)	67.0
Charley Conley	Fullerton College (CA)	65.5
George Lin	Bellevue CC (WA)	65.0
Patrick Eibl	William Rainey Harper College (IL)	65.0
Tigran Alikhanyan	Los Angeles City College (CA)	64.5

Regional Leaders

Northeast	Massasoit CC (MA)	193.0
Mid-Atlantic	Brookdale CC (NJ)	274.5
Southeast	Georgia Perimeter College (GA)	296.5
Midwest	William Rainey Harper College (IL)	342.0
Central	Century College (MN)	246.0
Southwest	Tarrant County College (TX)	202.5
Northwest	Bellevue CC (WA)	302.5
West	City College of San Francisco (CA)	293.5

Continued on page 12

Arizona

The spring ArizMATYC conference, held at Chandler-Gilbert CC, was a huge success. A special raffle was held at the conference to recognize the success of our membership drive. Three USB jump drives were awarded in different categories. Since the drive started, our membership has nearly doubled.

California

CMC³-South

This past spring, CMC³-South celebrated its 20th anniversary conference: "Score One for Math," in Anaheim, CA. Over 300 participants enjoyed the Friday evening event led by **Lew Lefton**, "The PhD of Comedy," and the luncheon keynote speech, "Some Thoughts on What to Teach and How Not to Teach It," given by **Ed Burger**. The buzz among those who attended seemed to center on Student Learning Outcomes and their role in the new accreditation standards for the Western Accrediting Commission for Community and Junior Colleges. The other news of note was the vote by the statewide Academic Senate to recommend raising the math requirement for an associate degree from elementary to intermediate algebra or the equivalent.

The board's annual retreat in San Diego, June 8-10, focused on coordination with the AMATYC conference site team. Everyone on the board is beginning to "catch the wave."

CMC³

CMC³ hosted its ninth annual recreational mathematics conference in April at Stateline, NV. The conference highlights began Friday evening and included casino gaming demonstrations as well as a talk given by **Will Murray**, California State Univ, Long Beach, on the topic of "The Mathematics of Juggling." Saturday's program featured **Helen Moore**, Associate Director of the American Institute of Mathematics Research, who spoke on "Calculus for Medical Treatment." For more information about this unique event contact **Michael Eurgubian**, meurgubian@santarosa.edu, or **Larry Green**, GreenL@ltcc.com.

Colorado

COLOMATYC held a very successful conference, March 4, at Red Rocks CC with over 50 people in attendance. **Carol Kuper** from Fort Morgan CC is the new

president and **Art Terrazas** from Aims CC in Greeley is the new president-elect.

Delaware

DelMATYC held its annual conference on Thursday, June 9, at the Terry Campus of Delaware T&CC. The main topic of discussion was articulation to area colleges and universities.

Florida

FTYCMA awarded its 2005 Distinguished Service Award to **Cliff Morris** of Valencia CC at the February meeting at Manatee CC. Cliff is a past president of FTYCMA and most recently served as Local Arrangements Chair for the Orlando AMATYC 2004 Conference. The Distinguished Service Award is given in odd-numbered years to a FTYCMA member who has provided outstanding service to the organization.

Georgia

The 16th Annual Meeting of GMATYC was held at the Lawrenceville Campus of Georgia Perimeter College on February 18, 2005. The meeting was held in conjunction with the Georgia Perimeter Mathematics Conference. **Jessica Craig** from the Mathematics Department of the Dunwoody Campus of Georgia Perimeter was introduced as our newly elected President-Elect.

Gainesville College held its annual Mathematics Tournament on April 2, 2005, and many GMATYC members' schools participated in the event.

Louisiana

Mary Lawrence, a member of AMATYC, has retired after 22 years at Delgado CC, first as the director of the Math Lab and then as an Assistant Professor of Developmental Mathematics. **Susan Santolucito** will be presenting at NISOD and was selected as a Mathematics Teacher of Distinction by the Greater New Orleans Teachers of Mathematics. **Jeanne Gagliano** has been selected to attend NISOD as one of the Science and Math Division nominees for the Delgado Excellence in Teaching Award.

Pat Roux has been appointed one of three Activity Directors for the \$1.5 million Title III Grant awarded to Delgado CC. The Project Title is "Focusing on Learning to Increase Student Success."

Betty Vix Weinberger, assistant professor of developmental

mathematics, was one of sixteen educators chosen from around the country to attend the first Addison-Wesley Developmental Mathematics Forum held in Boston, MA, on February 26. The forum included round table discussions on the changing Developmental Math environment, the impact of adjunct faculty on the community college, and faculty and student resources. Twelve states were represented at the forum and ideas flowed freely between the participants. Weinberger presented information about Delgado's Mathematics Flexible Learning Center, the Fast Track Program, the Math Lab, and the By-Pass options.

Nebraska

NEBMATYC now boasts members from Wyoming and Missouri, thanks to a marvelous interactive AMATYC Traveling Workshop on statistics funded through a grant from AMATYC, held during the 2005 spring meeting held in Kearney, NE (hosted by Scottsbluff CC). The presenters demonstrated hands-on activities designed to help the students learn probability and statistics in a meaningful, yet fundamentally sound, way. NEBMATYC members have used their ideas when teaching Discrete Mathematics and Elementary Algebra.

A special visitor to NEBMATYC was **Wanda Long**, Central Region Vice President of AMATYC.

Current NEBMATYC Officers are president, **Connie Buller**, Metropolitan CC; president-elect, **John Miller**, Northeast CC; secretary, **Debi Martin**, North Platte CC; and treasurer, **Connie Ranard-Chandler**, Metropolitan CC.

Metropolitan CC and the Univ of Nebraska at Omaha are collaborating on a \$4 million grant awarded by the National Science Foundation. The purpose of this STEP (STEM Talent Expansion Program) is to increase Science, Technology, Engineering, and Mathematics majors. We received final approval for our Associate of Science in Pre-Mathematics degree program from the Nebraska Coordinating Commission in December. There are already MCC students who have received STEP scholarships worth about \$1500 each.

Congratulations to **John Block**, of North Platte CC, winner of the NEBMATYC Teacher Excellence award.

Mike Flesch received the Learning is Our Purpose Award from Metropolitan CC, based on colleague and student nomina-

tions accenting professionalism and commitment to learning.

Nevada

The NEVMATYC spring meeting was held at Western Nevada CC in Carson City in conjunction with the Nevada Community College Conference. The group discussed the fate of the statewide course, Fundamentals of College Mathematics. The following officers were elected: president, **Michael Greenwich**, CC of Southern Nevada; Southern vice-president, **Jim Matovina**, CC of Southern Nevada; and Northern vice-president, **Jeff Downs**, Western Nevada CC.

New Jersey

Charles Miller is retiring after 36 years at Camden County College. He has been a state delegate for many years as well as a frequent presenter and presider at AMATYC and other conferences.

New Mexico

The 16th Annual NMMATYC Conference, Exploring the Mathematical Galaxy, was held May 19-21 at NMSU-Alamogordo. **Pat McKeague** gave a pre-conference workshop on Patterns and Connections in Developmental Algebra, and also gave the keynote address at the banquet. Both were excellent.

Several awards were presented at the conference. **Tara Salisbury** of NMSU-Grants received the Michelle Jimenez Memorial Scholarship and **Roberta Himebrook** of NMSU-Alamogordo was inducted into our Mathematics Hall of Fame for Teaching Excellence. Albuquerque-TVI won first place in the team competition for the Student Math League contest. Overall, the conference was a huge success.

North Carolina

NCMATYC held its 15th annual conference March 10-11 at Durham Technical CC. **Martin Lancaster**, President of the North Carolina Community College System, was the keynote

speaker. One of the focuses of the conference was the review of course descriptions and the development of course competencies for four courses in the North Carolina Common Course Library-College Algebra, Pre-Calculus Algebra, Technical Math I, and Mathematical Models. The latest drafts of these documents can be found at ncmatyc.com.

Ohio

Nancy Sattler became chair of the Ohio Mathematics and Science Coalition (OMSC) at their May meeting.

Pacific Islands

The members of π MATYC have elected the following new officers: president, **Weiling Landers**, Windward CC; president-elect, **Eric Matsuoka**, Leeward CC; secretary, **Mary Beard**, Kapi'olani CC; and treasurer, **Jennie Thompson**, Leeward CC. **Eric Matsuoka** is also the conference coordinator and newsletter editor and **Mary Beard** is the webmaster. Check the website at www.pimatyc.org for more information on the fall 2005 conference.

Pennsylvania

After 36 years at Bucks County CC, **Lou Hoelzle** is retiring. He is a past-president of PSMATYC as well as a long-time active AMATYC member.

Texas

During the spring semester, TexMATYC began the first of a series of online professional development workshops. The first workshop was designed to learn how to use and incorporate Maple™ in the classroom and was administered by **Don Allen** of Texas A&M Univ. Planning is underway for the next workshop in the fall. The hope is to continue offering online workshops each fall and spring. **Mel Griffin**, **Paula Wilhite**, and **Linda Zientek** of TexMATYC, **Don Allen** of Texas A&M, and **Gloria White** of the UT Dana Center met to determine how to facilitate communication between P-12, community college, and 4-year mathematics educators. From this meeting, the

“TexMATYC Working Group” was established whose membership also includes **Uri Treisman**, Executive Director of the UT Dana Center. The first

project of the working group is to develop and administer a college algebra survey to determine the scope of college algebra equivalents across the spectra of colleges and universities within Texas. To facilitate communication between all levels of mathematics educators, plans are underway to begin an annual meeting of leadership members from various organizations of interest in mathematics.

Washington

The majority of students entering Green River CC place into developmental math courses. As a group, these students are less likely to earn a degree than their college-ready peers. In an effort to increase student success, the college will introduce the Critical Transitions Program in 2005-06. At-risk students in the program will receive supplementary instruction in reading, writing, mathematics, and study skills. Through the use of learning cohorts and proactive follow-up, the college hopes to help an increasing number of students to achieve their educational goals. For more information, contact **Frank Wilson** at fwilson@greenriver.edu.

See Calendar on page 6 for specific conference information. Due to space limitations, not all news submitted may have been printed.



Coming to a Location Near You!

Traveling Workshops allow you and your colleagues, full- and part-time, to participate in professional development activities that are:

- ❖ custom-designed,
- ❖ cost-effective, and
- ❖ close to home.

Visit www.amatyc.org for more information.

Future AMATYC Conferences

2005	San Diego	November 10-13
2006	Cincinnati	November 2-5
2007	New Orleans	November 15-18
2008	Washington, D.C.	November 20-23

Technical Mathematics/ AAS Programs Committee

by Mary Ann Hovis

The Technical Mathematics/AAS Programs Committee usually meets twice during any AMATYC Annual Conference. These meetings are designed to provide a forum for the sharing of ideas about issues regarding AAS programs. These meetings provide participants with an opportunity to meet and talk with others who may have similar concerns; or even answers! Apart from the meetings during the conference, members of the committee may be asked to help collect information, attend workshops, and provide input on a number of matters. The meetings during the conference are a time when the direction for committee work is established.

At this time, the committee is collecting information on the mathematics requirements for students in the nursing and allied health areas. If your college has such programs, please send me information about them.

- Please list the programs by name.
- For each program, or cluster of programs, list the mathematics course or courses required in the program and the prerequisite for that course.
- If the program does not require a math course, then is a math competency expected and how is that measured?
- List the URL for the website that defines your mathematics courses, if one exists.

The Chair plans to share the data collected. Many health programs do not have a mathematics requirement within their two years of course work. We would like data from both those that do and do not require mathematics within the programs.

The mathematics problems developed for the biotechnology may be found at www.waketech.edu/~rlkimbal/CRAFTY/CD/index.html. Make use of the problems! Let the committee know how the problems you used worked for you. Two of our themed short session presenters from last fall, nationally renowned biotechnology faculty, Lisa Seidman from Madison Area Technical College and Linnea Fletcher

from Austin CC, will present a workshop on mathematics for biotechnology in San Diego. Please attend! Both presenters are wonderful instructors; we can learn a great deal from them as they look at mathematics from an application perspective.

Anyone interested in working on the committee or providing information on their college's mathematics requirement for the nursing and allied health area, please email me at hovis.ma@RhodesState.edu.

Time Committee

by David Graser

Since last November, the TIME Committee has been consolidating and revising the position statements on the instructional use of technology and the use of Internet resources. The Committee intended to make minor revisions in the statements to avoid taking the statements before the Delegate Assembly. The combined position statements were presented to the Board at its spring meeting. The Board determined that the position statement was more than a minor revision. This means that the statement will need to go through the more complex process and be adopted by the Delegate Assembly.

Since the new position statement needs to go before the Delegate Assembly, the TIME Committee is considering a major revision of these statements. We would like your help in upgrading these statements. You can view the progress by visiting the TIME webpage at <http://time.amatyc.org>. Check under Position Statements on this page. To become involved in this process, subscribe to our listserv by sending a message to time-request@amatyc.org with "subscribe" in the subject line. We will discuss the statements face to face at the conference in San Diego so look for the TIME Committee meeting times in your conference program.

Making a Donation to the AMATYC Foundation

You may donate to the Foundation in several ways.

1. When renewing your membership
2. When registering for the conference
3. Download and print a contribution form from the AMATYC website at www.amatyc.org/Foundation/. If paying by check, mail the completed form and check to the AMATYC Office, 5983 Macon Cove, Memphis, TN, 38134. If paying by credit card, fax the completed form to 901.333.4651 or mail to the address above.

If you have questions, call the AMATYC Office at 901.333.4643.



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.

Address changes should be sent to:

AMATYC Office
Southwest Tennessee Community College
5983 Macon Cove
Memphis, TN 38134
Phone 901.333.4643 Fax 901.333.4651
amatyc@amatyc.org

All other correspondence should be directed to:

Jean Woody
AMATYC News Editor
Tulsa CC
10300 E. 81st St.
Tulsa, OK 74133
Phone 918.595.7690 Fax 918.595.7621
jeanmwoody@cox.net

The 2006 Mathematics Excellence Award Call for Nominations

You honor your colleague when you nominate them for the AMATYC Mathematics Excellence Award. The award recognizes educators who have made outstanding contributions to mathematics or mathematics education at the two-year college and is presented every two years, with the next award being in 2006.

Award criteria are national reputation, leadership and activities in professional organizations, professional talks and presentations, awards and grants received, publications, professional activities on a regional, state, and national scale, teaching expertise, and other contributions to mathematics and/or mathematics education.

A nomination consists of a resume, not to exceed three pages (excess pages are not considered), and three letters in support of the nomination, including the letter of nomination. No other materials will be considered. Submittals are sent to the Mathematical Excellence Award Committee Chair.

The letters should address the nominee's accomplishments within each of the criteria. Nominees are rated based on the criteria, by the ME Award Committee, which consists of a representative from each of the eight AMATYC regions.

Nominations must be received by the committee chair by November 1, 2005.

For more information, visit www.amatyc.org/awards/, or contact:

Philip Mahler, Chair
ME Award Committee
Middlesex Community College
591 Springs Road
Bedford, MA 01730-1197
781.280.3861
mahlerp@middlesex.mass.edu

Highlights of the 2005 AMATYC Spring Board Meeting

by Irene Doo

The AMATYC Executive Board met at Southwest Tennessee CC in Memphis on April 15-18, 2005. During the meeting, the Board took the following actions:

- ❖ Adopted revised goals for the Technology in Mathematics Education committee and Distance Learning committee.
- ❖ Reaffirmed the Equal Opportunity in Mathematics position statement, and the Academic Assessment of Mathematical Programs position statement.
- ❖ Approved a Grants policy.
- ❖ Conveyed the Board's congratulations to the Principal Investigators of the Technical Mathematics for Tomorrow grant (Mary Ann Hovis, Rob Kimball, and John Peterson)
- ❖ Conveyed the Board's congratulations to the Principal Investigators of the Teacher Preparation grant (Ruth Collins, Sue Parsons, and Phil DeMarois)
- ❖ Adopted a marketing plan designed to increase national and regional visibility, and the membership base.
- ❖ Adopted the Strategic Plan for 2006-2011.
- ❖ Approved a process for the use of vouchers with Affiliate grant (or membership) activity funds.
- ❖ Appointed the following academic committee chairs (term beginning at the close of the 2005 annual conference):
 - ◆ Distance Learning, Mary Beth Orrange, Erie CC South, NY
 - ◆ Equal Opportunity in Mathematics, Ignacio Alarcon, Santa Barbara City College, CA
 - ◆ Faculty Development, Ernie Danforth, Corning CC, NY
 - ◆ Foundation/Developmental Mathematics, Jack Rotman, Lansing CC, MI
 - ◆ Placement and Assessment, Ed Gallo, Sinclair CC, OH
 - ◆ Program/Curriculum Issues, Darlene Winnington, Delaware County TCC, DE
 - ◆ Technical Mathematics/AAS Programs, Jesse Williford, Wake Technical CC, NC
 - ◆ Technology in Mathematics Education, David Graser, Yavapai College
- ❖ Made the following appointments (term beginning at the close of the 2005 annual conference)
 - ◆ Editing Director: Kate Danforth, Corning CC
 - ◆ Online Resource Director: Lance Hemlow, Raritan Valley CC, NJ
 - ◆ Legal Advisor: Peter Georgakis, Santa Barbara City College, CA
 - ◆ MATHEDCC List Manager: Wayne Mackey, Univ of Arkansas, AR
 - ◆ Advertising Chair: Gwen Turbeville, J. Sargeant Reynolds CC, VA
 - ◆ Exhibits Chair: James (Jay) Martin, Wake Technical CC, NC
 - ◆ Roommate Network Director: Linda Kodama, Kapi'olani CC, HI
 - ◆ Website Coordinator: Tingxiu Wang, Oakton CC, IL
 - ◆ Affiliate Website Director: Shay Cardell, Central Arizona College, AZ (effective immediately)
 - ◆ Student Mathematics League Coordinator: Chuck Wessell, Durham Technical CC, NC
- ❖ Appointed the following individuals to the Student Mathematics League Test Development Team: David Stott, Sinclair CC (OH), and Vladimir Logvinenko (CA).
- ❖ Appointed Susan Santolucito, Delgado CC (LA) to the Conference Program Committee.
- ❖ Adopted a resolution in support of AMATYC Campus Contacts.
- ❖ Formed a committee to review conference registration fees.
- ❖ Endorsed the creation of an associate level for two-year college student membership to Mu Alpha Theta.
- ❖ Created an ad hoc committee to review the AMATYC professional development opportunities and structure.
- ❖ Passed a motion to recommend to the Delegate Assembly that the regular annual dues be set by applying the Consumer Price Index–Unadjusted (CPI-U) to the current dues.
- ❖ Created an ad hoc committee to review the procedures associated with the Teaching Excellence Award.

Back to School – Elementary School!

by Steve Kinholt

Steve Kinholt is the 2003 Teaching Excellence Awardee from the Northwest Region.

Recently I had the opportunity to return to school, elementary school that is! After twenty-two years of teaching, the last twelve years at Green River CC near Seattle, I decided it was time to apply for a sabbatical. After considering various alternatives for a sabbatical that would be both renewing and professionally rewarding, I decided that a return to the public schools was a perfect match.

Many years ago, I was a middle school mathematics teacher on the Flathead Indian Reservation in St. Ignatius, MT. I also taught high school computer programming courses. This is where my interest in K-12 teaching began. Since then, I've always had an interest in public school teaching and in teacher education. The main reason that I decided to teach at a community college was because of their lack of programs for future teachers and my desire to help build them.

For the past few years I've been working with others at Green River to build our *Project TEACH* program. One day in my Introduction to Education course, we started talking about the fact that some professors who teach future teachers have been out of the K-12 classroom for many years. I'm not sure how it happened, but I realized that I was now one of those professors! I made the decision that I would spend my sabbatical back in the public schools.

Because I lacked experience in an inner-city school and had no formal teaching experience in grades K6, I decided that I would target elementary schools in the Seattle area. A friend who works for the Seattle School District helped me secure a volunteer position at two local elementary schools in the 3rd and 4th grades. The teachers and their kids welcomed me with open arms and put me right to work.

Because my area of expertise is mathematics, I spent most of my time working with the kids during their mathematics lessons. I was so pleased to learn that many of the things that we are teaching our future teachers in our mathematics courses are right on target with what is being taught in the schools. The days of rote memorization and pages and pages of drill and practice problems are gone from the current textbooks. In their place are problem-solving, real-world examples, and group projects. I was inspired by how these teachers are making mathematics fun and useful for these kids.

While most of my time was spent working with the kids during mathematics lessons, I also wanted to experience as much of the elementary school as I could. I played kickball during recess, sang with the kids during choir, helped them during their computer classes, and assisted them with their skates and pads in P.E. During lunch, my math magic tricks became very popular. The only problem was that the kids expected a new trick every day and I had a hard time finding new ones. I also chaperoned the kids during trips to the Pacific Science Center and to a science camp on the Olympic Peninsula. I am happy to report that I didn't lose any of my kids!

From this experience I learned that elementary school teaching is both a rewarding and challenging profession. Some of the children that I saw at school had very profound needs that required so much of their teacher's attention. The challenges that these teachers deal with on a day-to-day basis seem much more significant than they were when I was teaching in the public schools. My goals of renewal and professional rewards were truly realized with this sabbatical. When I returned to Green River I felt energized and ready to share what I learned with our *Project TEACH* students.

Over the past few years, AMATYC has taken on a leadership role in helping community colleges play a role in teacher preparation. I very much support this role and encourage all of us to search for better connections with our K12 schools. For those of you who are teaching specific mathematics classes for future teachers or for those who just want to learn more about the K12 mathematics curriculum, perhaps one of the best connections that you can make is to spend your sabbatical working at a local public school.



Steve eating lunch with kids at the Pacific Science Center

Looking for Professional Development Ideas?

by Rob Kimball

New faculty often need to consider different methods of teaching. For many, sitting through lectures in college courses have not provided them with examples of best practices for teaching undergraduate courses. They, and we, need to continually assess what we do and consider using a variety of methods. To promote that thought and encourage discussion, I often ask faculty to read part of a report or article and make a presentation to other faculty during a department meeting. They are asked to discuss what the article meant to them and how they might use what they read to improve what they do.

Here are some examples of resources that might lead to good discussion.

1. Read one chapter from *Beyond Crossroads*, www.amatyc.org
2. Read *The Vision*, www.waktech.edu/~rlkimbal/CRAFTY
3. Read a section from the CUPM Curriculum Guide, www.maa.org/cupm/welcome.html
4. Read a section from the CUPM Curriculum Foundations Project, www.maa.org/cupm/crafty/
5. Read a chapter from the MAA Notes #49 on Assessment, www.maa.org/saum/

Keystone Method: A Synergistic Model for Teaching and Learning

by M. Vali Siadat, Ph.D., D.A.

Chair of the Department of Mathematics at Richard J. Daley College
Director of Keystone Project and Proyecto Access/Chicago PREP

Have you noticed how people with a talent for calculation are naturally quick at learning almost any other subject; and how training in it makes a slow mind quicker? (Plato, *The Republic*).

The Keystone method is a synergistic approach to teaching and learning of mathematics at the college. Drawing upon the research literature on learning educational psychology and causes of student failure in mathematics, this method focuses on the links between students' difficulties in mathematics and specific behaviors, attitudes, and habits that inhibit learning. These include short attention spans, limited time horizons, poor attendance patterns, passivity, failure to learn from errors, inattention to homework assignments, inattention to teacher's statements, and—underlying all—a lack of confidence and self-esteem.

How does the Keystone method address these difficulties? The key element is the continuous monitoring of the students' progress, paralleled with a set of teaching/learning strategies targeted to identified weaknesses. Carefully designed daily quizzes become an invaluable tool of communication between students and teacher. The instructor's preparation for each class session is informed by quiz results. That quizzes are administered at each class meeting improves class attendance and punctuality. That the quizzes are based on homework encourages the students to do their homework assignments for each class. This regimen eliminates the disconnected study spurts and cramming for the tests, encouraging regular study from the very beginning of the term—which soon becomes a "study habit."

Timed pressured quizzes focus students' attention and improves their concentration skills. Finally, the fact that quizzes are cumulative consolidates students' learning and enables them to integrate their knowledge of the topics covered in the course at all times. Computer scoring of quizzes provides statistical data such as the mean and standard deviation for the entire quiz as well as the item analysis of each question. The teacher not only receives a global view of the class performance overall, but also obtains the valuable information on students' performance on each question. The teacher provides immediate feedback, reviews the troublesome questions, and repeats them on the next quiz to encourage attainment of the mastery and learning from mistakes. By achieving a higher level of success each time, the student gets motivated to do better and becomes more self-reliant. Success of students improves their self-esteem.

Students in the Keystone classes are graded on an absolute rather than relative scale. There is no grading on curves and there is no quota for the number of A's and B's given. Each student is expected to attain a level of mastery, irrespective of other students' standing in the course. This is academically sound, as well as providing an additional incentive. In the absence of the curve, achievement of one student is not to the detriment of others. Thus, cooperation and collegiality are encouraged, reinforcing the fact that the mathematics class is a

shared learning community. This community aspect is critical when, as often happens, students in a class span a wide range of math aptitudes.

The Keystone method is a student-centered and versatile teaching approach. When the standard deviation of the quiz scores is high (more than 25%)—indicating a serious split in skill levels—the teacher moves from lecture to cooperative learning and peer tutoring. In such circumstances, weaker students are tutored by stronger students. The stronger students benefit in turn by reinforcing their own knowledge. Such peer learning experiences are especially effective at addressing student passivity.

The Keystone approach encourages attentiveness to the instructor's messages. For example, to encourage the study of particular topics often ignored by the students (word problems, for example), the instructor administers dedicated quizzes, e.g., consisting entirely of word problems. Students learn quickly, via a concrete and strong message, that even the topics cannot be placed in the forgetting bin. In short the Keystone approach creates a synergy among various pedagogical techniques parlaying these into a highly effective teaching program for improving student learning.

Highlights of the Past Results

The research we have compiled over the past ten years on the Keystone method has shown significantly improved outcomes in elementary, intermediate, and college algebra courses. The results were achieved with no losses to the retention rates. A surprising concomitant result of the Keystone method has been an improvement in students' reading comprehension scores as demonstrated in standardized norm-referenced tests. Beyond this, in studies comparing hundreds of students in Keystone classes vs. control classes, students in the Keystone classes have shown better persistence in mathematics classes, as well as at the college. We attribute these improvements not only to the above techniques, but to mathematics itself.

Learning mathematics necessarily hones students' thinking and concentration skills. As such, our experience confirms Plato's observation that training in mathematics sharpens the mind, broadly strengthening student performance, even in an unrelated subject such as reading.

Applicability to Other Disciplines

Even so, the principles of the Keystone program are not exclusive to the mathematics discipline. They can be applied to any other discipline whose students exhibit the behavior characteristics as described above. On our campus, for example, we have had positive results in regard to knowledge gain and pass rates of students in geography classes. The Keystone method may, therefore, also be regarded as a best practice model to improve teaching effectiveness and student learning across the entire curriculum.

Faculty Mathematics League

If $a + b = 6$ and $ab = 4$, find the value of $a^3 + b^3$
A. 128 B. 132 C. 144 D. 150 E. 156

That was a question on last year's Faculty Math League contest, held at the annual conference in Orlando. Sharpen your wits for this year's competition in San Diego. There will be awards for the top individual performers and the top region. Remember to bring your calculator and your brain to this session at the conference. (By the way, the answer is C.)

Coming Soon,
the AMATYC Online Store!

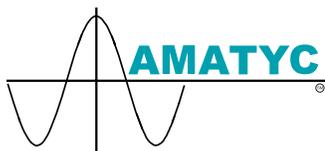
Dates To Remember!

Election of the
2005-2007 Officers
Ballot Postmark Deadline:
September 30, 2005

2005 Annual Conference
in San Diego
Discount Registration Deadline:
September 30, 2005

Call for Nominations for
Mathematics Excellence Award
Deadline: November 1, 2005

For more information visit
www.amatyc.org



Jean Woody, Editor
AMATYC News
Tulsa CC
10300 E. 81st St.
Tulsa, OK 74133