



TexMATYC News

Texas Mathematical Association of Two-Year Colleges

Fall 2011

President's Message



Greetings Colleagues,

Another academic year has begun, with many changes that affected Mathematics in Texas community colleges. Some of these changes were related to the actions of the 82nd Texas

Legislature session

(www.tacc.org/documents/071211_82nd.pdf).

Many Texas community colleges were strapped with financial shortfalls that affected our health and retirement insurances as well as other aspects of our professional lives.

This 82nd Texas Legislature session reduced the entire state budget to \$172.3 billion, a decrease of \$15.2 billion (8.1%) below the 2010-2011 biennium and funded 46 of the 50 community college districts. The annual appropriation per contact hour for 2012-2013 is \$2.78 compared to a \$3.56 ratio in 2010-2011; a 21.8 percent decrease. Also, no funds were provided for the unprecedented enrollment growth in community colleges. Our health insurance is now funded at approximately 50 percent of the total Employee Retirement System costs and our retirement is funded at 6 percent of unrestricted general revenue. I hope your community college

districts recovered the difference in the cost of health and retirement insurances instead of passing the cost along to you, the employee.

On the other hand, professors at Texas community colleges are finding themselves teaching fewer topics in their classes because of many recent changes in Lower-Division Academic Course Guide manual (www.theccb.state.tx.us/aar/undergraduateed/workforceed/acgm.htm).

Moreover, course coordinators are encouraged to investigate the proposed changes to the student learning outcomes. The Texas Higher Education Coordinating Board invites all faculty members to review and comment upon these drafts' descriptions and student learning outcomes posted at www.theccb.state.tx.us/index.cfm?objectid=DE96F52A-D583-AE1B-C7265EA2CD5E90B3.

I agree with John Burghduff of Lone Star College regarding some of the proposed course descriptions and the student learning outcomes, especially those for Pre-Calculus: the proposed description and outcomes miss a prime opportunity to provide students with robust mathematical content bridging the gap between Trigonometry and Calculus I. Students need the traditional Pre-Calculus' level of mathematical maturity that may not otherwise be available to future students whose prospective mathematical experience will end with the Calculus sequence.

This past June Texas Community College department chairs attended the Developmental Mathematics course redesign lead by Uri Treisman of University of

Contents:

PAGE 2: Student Math League Results – PAGE 3: AMATYC Community Service Project at Austin Conference
AMATYC Conference, 2011 Financial Report– PAGE 4: TexMATYC Membership, Inverted Classroom Model
6: Faculty Excellence Nomination Form – PAGE 8: Contact Information



(President's Message, continued)

Texas at Austin. Treisman effectively endorses the Carnegie Foundation proposal, posted at www.carnegiefoundation.org/statway/reconsider-and-redesign-developmental-mathematics, to redesign the Developmental Mathematics course sequence by replacing the three-to-five developmental Math courses that teach algebra in preparation for calculus.

This approach, referred to as the pathways movement, is currently divided into Statway for Liberal Arts students and Quantway for Science, Engineering, Technology, and Mathematics (STEM) students. This year several Texas colleges are piloting this approach - many other colleges may implement this pathways movement depending its success.

On a happy note, the American Mathematical Association of Two-Year Colleges' annual conference, (www.amatyc.org/Events/conferences/2011Austin), is just weeks away and it will be in our Lone Star State this year in Austin on November 10-13 at the Downtown Hilton Hotel. This is an important time for us to meet, network, and enrich our professional development with new concepts and ideas to share with our students to overcome difficult concepts of Mathematics.

Additionally, I invite you to attend your annual TCCTA/TexMATYC conference on March 1-3, 2012, posted at www.texmatyc.org, in Frisco at the Embassy Suites Hotel. The TexMATYC executive board members are putting together an interesting program for you to benefit from your colleagues' professional experience and to connect with other professionals from the Mathematical community.

Thank you for being a valued member of your Texas Mathematical Association of Two-Year Colleges.

Raja Khoury, Collin College
TexMATYC President

Student Math League Results

For more information on the Student Math League, visit: amatyc.org/SML/index.htm

Southwest Region Individual Standings			
Rank	Member on Team	Team	Score
1	Joshua Dombrowsky	Tarrant County College	51.0
2	Mark Lindberg	Austin CC	50.5
3	Mark Haferkamp	Pima CC	50.0
4	Den Marino	Austin CC	43.5
5	Nguyen Cao	Tarrant County College	42.0

Southwest Region Team Standings		
Rank	Team	Score
1	Austin CC	196.0
1 (tie)	Tarrant County College	196.0
3	Austin CC	179.0
4	Arizona Western College	150.0
5	North Lake College	147.5



TexMATYC president, Raja Khoury congratulates top student Joshua Dombrowsky.

AMATYC Community Service Project at Austin Conference

What is the probability you have an old t-shirt lying around? How about a drawer full of old t-shirts? The AMATYC Conference in Austin will provide you with an opportunity to get rid of some of those old t-shirts and help change the world for someone. The conference committee and local Austin committee have chosen to hold a t-shirt drive to benefit Open Arms, a company in Austin which employs refugee women.



At Open Arms, women make items such as scarves, rugs, dog toys, purses, etc. from old t-shirts while earning a living wage. Additionally the women can participate in ESL, job-skills training and other enrichment classes on an as-needed basis while working family-friendly hours. The goal of Open Arms is to break the cycle of poverty typically experienced by refugee women in our country.

So grab one of those old t-shirts your children leave lying round. Empty that drawer full of t-shirts from those road races or bike rides. Pack that Grateful Dead t-shirt your spouse says you should never wear again! Or, wear a t-shirt from your college one day at the conference and donate it the next! Look for the collection box just inside the exhibit hall at the Hilton Austin. Please contact Keven Dockter, Conference Coordinator, if you have questions. For more information about Open Arms, go to www.theopenarmsshop.com.

Not attending the conference? Send your t-shirts with a colleague who is driving to Austin.

AMATYC Conference

The 37th annual AMATYC conference will be held in Austin, Texas on November 10-13.

Register now at www.amatyc.org.



2011 Financial Report

TexMATYC Mid-Year Financial Report

Description	Expenses	Income
Previous Balance		\$9,125.04
Membership		\$1,765.00
Membership(Paypal)		\$90.72
Interest		\$4.30
Secretary of State of TX	\$50.00	
Trophy (C. Odion)	\$55.00	
Balance		\$10,880.06



TexMATYC Membership Counts - 2011

College	Members
Northeast Texas Community College	26
Lone Star College-Montgomery	20
Lone Star College-CyFair	16
Lone Star College-Tomball	13
Lone Star College-Kingwood	12
Tarrant County College - Southeast	12
Lamar Institute of Technology	10
Collin College	9
Cisco Junior College	8
Austin Community College	6
San Jacinto College	6
Central Texas College	4
Houston Community College - Southwest	4
San Antonio College	4
Trinity Valley Community College	4
Laredo Community College	3
Victoria College	3
Angelina College	2
Blinn College	2
Blinn College - Bryan	2
College of the Mainland	2
Houston Community College - Central	2
Houston Community College - Northwest	2
Houston Community College - Southeast	2
Howard College	2
Lee College	2
Navarro College	2
North Lake College	2
Northeast Lakeview College	2
Palo Alto College	2

TexMATYC Membership



Congratulations to Northeast Texas Community College,

this year's leader in number of TexMATYC members! Encourage your colleagues to join TexMATYC. (See chart at left for membership counts for more campuses).

Joining is easier than ever with an online payment option. Go to www.TexMATYC.org and click on "Become a Member!" to renew or start your membership. At only \$10 per year, this is the best bargain in town.

Inverted Classroom Model

By Dr. Scott McDaniel of Middle Tennessee State University

One of the latest trends in higher education that attempts to make the professor-student time together more valuable is the notion of the "inverted classroom." In the inverted classroom, activities that were once done in the classroom (e.g. the lecture) are done at home prior to class and the activities typically done outside of the classroom (e.g. homework problems) are done inside the classroom (Lage, Platt, & Treglia, 2000). Technology allows for relatively easy deployment of video lectures, which are viewed on the Internet prior to coming to class.

This allots a greater proportion of class time can be spent doing the critical thinking and actively analyzing and synthesizing problems that are based on the assigned videos. Bowen (2006), among others, notes that math faculty are no longer bound by the "tyranny of the content." Because in-class direct instructional activities are removed, time is available for student teams to actively analyze and synthesize



homework problems, to examine the process of learning math, and to increase the amount of student-to-student and students to-professor dialogue. Moreover, students watching video lecture prior to class frees up class time for doing group work, activities, and graded board work. The inverted classroom allows instructors to be in control of the more difficult aspects of the course content: having students actively engaged in solving some of the more difficult problems that require them to more deeply analyze and synthesize the content.

Research from Walvoord and Anderson (1998) suggests that class time should be used for the process part of the learning. Using this inverted paradigm also makes it easier for instructors to identify struggling students and give immediate feedback, which has been cited by many as essential for student success (Chickering & Gamson, 1987).

The following is an outline of an inverted classroom model that has been used in developmental and college-level math classes. Because students are unfamiliar with the inverted classroom concept, they are also given the outline. (Note: For space considerations, the outline has been slightly shortened).

1. Before coming to class, students will log into the course site and watch the video lecture. Students are encouraged to actively take notes while watching just as they would in a "live" class.
2. There will be a password embedded in the video lecture that will enable them to take the video lecture quiz, which should be done before class.
3. There will be a very short 3-6 question homework assignment that will cover the very basics of what the video lecture covered. This must be done before they come to class. If students are completely lost, they are directed to come see the instructor before coming to class.
4. When students come to class, immediate questions will be addressed. The majority of

the class time will be spent doing class work, activities, and board work, usually in groups.

5. Occasionally there will be a quick 1-3 question quiz over the material done in class. This will encourage everyone in the group to try to understand the material, rather than just trying to get the answer. The quizzes will be given either at the end of class or at the beginning of the next class.
6. Once class time is over, students will hopefully have gained understanding of the section objective; they are then finished with that section. Their next homework will be to watch the video lecture for the next section.

To begin to develop an inverted classroom, one should do the following in order:

1. Identify learning outcomes for the course.
2. Develop the in-class material that aligns with the learning outcomes. These could include worksheets, activities, group work.
3. Develop the out-of-class material (e.g video lecture) that provides enough background for students to succeed with the in-class work. In general, this will be students' first exposure to the topic.

References

- Bowen, J. (2006). *Teaching naked: Why removing technology from your classroom will improve student learning. The National Teaching & Learning Forum*, 16(1).
- Chickering, A. W., & Gamson, Z. F. (1987). *Seven principles for good practice in undergraduate education. AAHE Bulletin*, 39(7), 3-7.
- Lage, M. J., Platt, G. J., & Treglia, M. (2000). *Inverting the classroom: A gateway to creating an inclusive learning environment. Journal of Economic Education*, 31(1), 30-43.
- Walvoord, B. & Anderson, V.J. *Effective Grading: A Tool for Learning and Assessment. San Francisco, CA: Jossey-Bass. 1998. 250 pp.*



Texas Mathematical Association of Two-Year Colleges

2012 TexMATYC Award for Teaching Excellence Submission Deadline: December 1, 2011

Nominees must have a minimum of five years teaching experience with the last two years in Texas. The nominee's primary assigned duties must be delivering developmental or credit instruction in an associate degree program. Teaching excellence is the main focus of this award. Individuals can win the award only once. Nominees may not be on the AMATYC or TexMATYC Board or nominated by an AMATYC or TexMATYC Board member. The award will be \$40 plus an \$80 individual membership in AMATYC for the year award winner's nomination will be sent to AMATYC. All TexMATYC awardees will be nominated for AMATYC Teaching Excellence Award, which is given in odd-numbered years. The award winner will be announced at TexMATYC official meeting held in conjunction with TCCTA.

Criteria for selection will be weighted as follows:

1. Classroom Expertise 25 points
2. Professional Involvement 10 points
3. Interaction with Colleagues 5 points
4. Service to Departments/Division/College 5 points
5. Professional Development/Renewal Activities 5 points

Information that **must** be provided:

1. Completed information form.
2. Current curriculum vitae of nominee (maximum of 5 pages).
3. A single one(1)-page letter of recommendation from a student, a colleague, or a supervisor.
4. Nominator's letter of support (maximum of 3 pages).

In fairness to all candidates, no additional materials will be reviewed in the selection process. Materials not in the checklist and pages exceeding limits will be excluded from consideration.



Texas Mathematical Association of Two-Year Colleges

2012 TexMATYC Award for Teaching Excellence Nomination Form

Name of Nominee: _____

College: _____

Job Position: _____

Address: _____

Phone Number: _____ Fax Number: _____

E-mail Address: _____

Number of Years of Teaching Experience: _____

Number of Years Presently Teaching in Texas: _____

Nominator: _____

College: _____

Job Position: _____

Address: _____

Phone Number: _____ Fax Number: _____

E-mail Address: _____

Email, fax, or mail all required documents to;

Raja Khoury, Ph.D.

Collin College, Department of Mathematics

2800 E. Spring Creek Pkwy

Plano, TX 75074-3300

Office: J-217

Phone: (972) 881-5909

Fax: (972) 881-5619

Email: RKhoury@texmatyc.org or RKhoury@collin.edu

TexMATYC Executive Board

Raja Khoury

President
Collin College
rkhoury@texmatyc.org

Sharon Sledge

President Elect
Northeast Texas CC
Sharon.Sledge@sjcd.edu

Paula Wilhite

Immediate Past President
Northeast Texas CC
pwilhite@ntcc.edu

Heather Gamber

Secretary, Newsletter
Editor
LSC-CyFair
heather.a.gamber@lonestar.edu

Habib Far

Treasurer
LSC-Montgomery
habib.y.far@lonestar.edu

Honey Kirk

AMATYC Delegate
Palo Alto College
hkirk@alamo.edu

Jean Woody

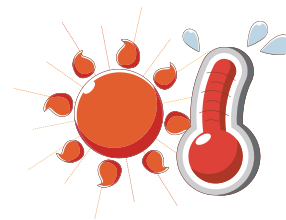
AMATYC Southwest VP
Tulsa Community College
jwoody@tulsacc.edu

Ed Bock

Webmaster
Collin College
Ebock@texmatyc.org

Q: Why did the obtuse angle go to the beach?

A: Because it was over 90 degrees!



Got News?

If you know of any exciting news in mathematics, have it published in your TexMATYC newsletter. Submit articles to Heather Gamber at heather.a.gamber@lonestar.edu.

Visit us at www.texmatyc.org