TexMATYC News

Spring 2009

www.texmatyc.org

President's Message

Let's Do the Math!

In the March 2009 *AMATYC News*, President Rikki Blair called for two-year colleges "to attack the developmental mathematics issues with gusto!" She challenged members "to review the content of developmental algebra and redesign course(s) that develop the necessary quantitative and reasoning skills needed by all students." Citing overwhelming national statistics of failure, she convincingly argued that quantitative literacy should be the goal of these courses, not preparation for calculus.[i]

It is probably not a surprise that Texas is also challenged with changing the dismal numbers that portray the lack of success of students who are not college-ready. In a report submitted to the Coordinating Board in 2005, it was noted that 80 percent of new students who are under-prepared for college-level math attend two-year colleges in Texas. Furthermore, less than one out of 10 of these students will earn a degree or certificate within four years.[ii] A recent progress report of Closing the Gaps stated that "At current levels of success, an African American or Hispanic seventh-grade public-school student has a less than 10-percent probability of earning a bachelor's degree. In contrast, a White student has a 30-percent probability.[iii] The negative economic impact of an unskilled workforce cannot be overstated.

Paula Wilhite

I applaud your efforts for all that you do to improve student success in achieving their educational goals. Because teaching excellence is the bread-and-butter of two-year colleges, you have the expertise to find the solution that will change the lives of thousands of students. We must elevate the priority level of developmental mathematics in response to the urgent need to remain competitive in a global economy.

Join the ranks of mathematics educators who lead Texas and thus lead the nation in promoting mathematics education. Let's do the math to develop and implement the courses needed for widespread quantitative literacy.

Together we will make a difference for all students! •

Paula A. Wilhite
Northeast Texas Community College

i *AMATYC News*, Volume 24, Number 2, *www.amatyc.org/publications/AMATYC-News/index.htm*
ii *2005 THECB Report*, "Developmental Mathematics, Performance Assessment Part II,. *www.thecb.state.tx/TSI/Reports/Math*
iii *2008 THECB Report,* "Closing the Gap by 2015: Texas' Strategies for Improving Student Participation and Success," *www.agb.org/user-assets/Documents/center/LUMINA.pdf*

In This Issue

Texas Mathematical Association of Two-Year Colleges. Affiliate to the American Mathematical Association of Two-Year Colleges.

All Students to their Maximum Potential

by Dr. Phil Cheifetz

Dear Colleagues,

I have been teaching in the mathematics department at Nassau Community College (NCC) in New York for 42 years. It appears to me that over the past several years, issues regarding student responsibilities have cropped up that seem to be common across all mathematics courses at NCC and, I dare say, throughout all colleges across the country. Among these issues are:

•Students truly believe, and indeed expect, that if they come to class, they will receive a passing grade and, more likely than not, the grade will be a C or better.

•Students believe that coming to class is their sum responsibility as a student.

•The vast majority of students do no homework, ever.

•Students have come to expect long review sessions before an exam and that the exam will contain only the problems covered in the review, with altered constants.

Dr. Phil Cheifetz

In large measure, these behaviors have been reinforced throughout students' high-school careers, due to parental pressures on teachers, social promotions and an educational system that mandates that "no child should be left behind," rather than "each child to his or her maximum potential." With the expectation that all high-school students pass certain statewide mathematics tests to graduate, standards have been so lowered that on the most recent New York State Regents exam in ninth grade algebra, (a standardized exam given across the state to all ninth grade algebra students) answering 34 percent of the questions correctly resulted in a passing grade. What kind of message is sent when not knowing 66 percent of the material is acceptable? If a foreign government foisted this sort of mediocrity upon us, we would consider it an act of war.

The problem is not confined to high schools. It is systemic. I have heard students remark: "Everyone gets an A in Professor X's course," "Don't worry if it's not handed in on time," "I copied it from the Internet," Professor Y is easier than Professor Z because we can use cheat sheets" and "Professor W never fails anyone." Surely, we all feel that there are a basic set of skills and behaviors that we want all our students to have when they leave a particular course. However, faced with the student attitudes and behaviors cited above, many of our faculty members have become frustrated, have begun to lower expectations even further, and continue to assign grades that are not indicative of what their students truly know. Some faculty members have even stopped teaching. Perhaps if students took more responsibility for their education, there would be significantly fewer remedial courses.

I don't recall who gave two-year colleges the responsibility for being the new fourth grade (okay, maybe the new eighth grade), and I surely don't recall accepting that responsibility. But please don't misunderstand me. I support the notion that students with deficiencies should receive all the help they need when they enter college. However, let's be sure that when students exit any class, they have learned the requisite material. I constantly encounter students who cannot read for meaning, cannot write a coherent paragraph and are innumerate. I, for one, don't want to teach elementary algebra in a second semester calculus class.

The results of student weaknesses in English, reading, and surely in mathematics, just to name a few areas, manifest themselves in the inability to perform at a college level in many of their other courses, the lack of any assumed responsibility in the classroom and in their personal lives, a lack of pride, a general attitude of "it's not my job," the loss of jobs to outsourcing and a weakening of society in general.

Two-year colleges provide an opportunity for higher education that, for many students, would not normally be available to them. But, in my opinion, the opportunity is not a degree entitlement. The opportunity carries with it an associated responsibility for our students and it is a responsibility they must learn to accept. It seems to me that spoon-feeding students only teaches them the

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Maximum Potential *(continued from previous page)*

shape of the spoon. To help our students succeed in college, as well as in life, we should prepare for each class, try to teach the material in the clearest possible way, and construct test questions that accurately reflect the curriculum we teach. However, the road to academic success must be a two-way street. We should encourage our students to rise to the challenge and assist them in every way possible. But, we should expect and demand that students do their part.

Personally, I will expect students to do homework, I will hold to standards on examinations, I will not award inflated grades, and I will not assign "extra credit" projects to replace poor results on exams. It is incumbent all faculty to be part of the cure rather than part of this insidious disease.

Respectfully,

Dr. Cheifetz has been in the mathematics department at Nassau Community College for the past 42 years. He was the founding father of The American Mathematical Association of Two-Year Colleges (AMATYC) and has served as its fourth president and its first executive director.•

2009 TexMATYC Teaching Excellence Award Winner

Elise Price

Congratulations go to Elise Price, the 2009 recipient of TexMATYC's Teaching Excellence Award.

Elise has been teaching at Tarrant County College, Southeast Campus, Arlington since its opening in 1996. Prior to that, she taught at the South Campus in Fort Worth and in public high schools.

Elise has been described as a "hero" by a colleague. She has been instrumental in pioneering new approaches to mathematics, from introducing computers and calculators to the classroom when they were new tools, to developing a modular approach to developmental algebra.

She continually reaches out to new instructors by mentoring, collaborating and offering what assistance she can to help them be better instructors. She served as leader advisor for Phi Theta Kappa, growing it to the second largest chapter in Texas. Under her guidance, her chapter was often named a top Texas chapter.•

In Memory of Dr. Derek Mpinga

by David Price

Dr. Derek A. Mpinga, a past president of TexMATYC (1996-1998), died on May 23, 2008 at the age of 64. He is survived by his two children, a daughter, Denise, and a son, Daniel. His wife, Miriam, passed away in 2005.

After coming to the United States from his native Zimbabwe, Derek earned a bachelor's degree in mathematics and physics from Carson-Newman College in Jefferson City, Tennessee, a master's from Texas Christian University, and another master's and a doctorate from Southwestern Baptist Theological Seminary. He taught mathematics at Tarrant County College and North Lake College before becoming Dean of the Mathematics Division at Lane Community College in Eugene, Oregon. Subsequently, he held positions as Vice President of Academic and Student Affairs at Waycross College in Waycross, Georgia and Vice President of Instruction at Brookhaven College. At the time of his death, he was Vice President of Academic Affairs at Phoenix College in Phoenix, Arizona.

In addition to his work in TexMATYC, Derek regularly attended AMATYC's annual conference, where he renewed acquaintances with his many friends and colleagues. They remember his professionalism, his enthusiasm, his dedication to work and family, and his ready smile.•

Dr. Derek Mpinga

Upcoming Conferences

The Mathematical Association of America
"Arithmetic in College: Revitalizing the Basic Mathematics Course"

June 15-19, 2009

The workshop will be held in Washington, D.C. at the MAA's new Carriage House Conference Center a couple blocks from DuPont Circle. Housing and two meals a day are provided by the MAA, after the usual registration fee. Please visit *www.maa.org/prep* and *www.teachmathapplications.com* for more information. Teams from the same institution (including administrators) are especially encouraged to attend.

***Beyond Crossroads* Summer Workshop: The BC Way: Embracing Change for Continuous Improvement**
Cape Cod, Massachusetts
June 11-12, 2009

GAISE

GAISEing Beyond the Crossroads: Improving Instruction in Introductory Statistics - a CAUSEway Workshop
Boulder, CO
July 6-10, 2009

MATHEMATICS ACROSS THE COMMUNITY COLLEGE CURRICULUM (MAC3)
LANDER, WY
JULY 11-14, 2009

35th AMATYC Annual Conference

Nov. 12-15, 2009
Las Vegas, Nevada

AMATYC Student Math League at Collin College

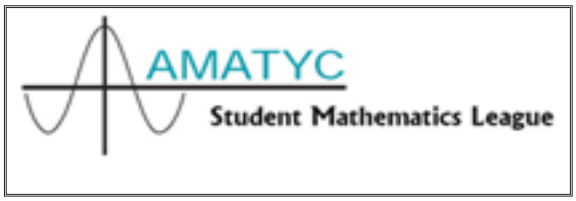
by Ed Bock

The AMATYC Student Math League competition began in 1970 and has grown to 165 colleges and over 8,000 students nationwide. It consists of two pre-calculus exam rounds given once each fall and spring semester of a normal college year. Collin College has been participating for the past 15 years. Each participating college has a moderator who organizes the local events, submits problems annually to the SML board, grades the exams and submits the results. I have been the moderator at Collin for the past nine years and have enjoyed the experience very much.

The exam itself consists of 20 multiple-choice questions with five options per question and a one-hour time limit. Each correct answer is worth two points while the incorrect ones are half-point deductions. Thus, the range of potential scores is between -10 and 40. Although the problems are intended to be at the pre-calculus level, they are remarkably challenging, especially given the time constraint. They are by no means standard homework problems. Therefore, it is necessary for the students to attempt as many tests from previous years as possible – the key to a high score is practice, practice, practice!

The philosophical goal of the SML is to bring forth the mathematical prodigies present in America's two-year colleges, and our goal at Collin College is the same. To this end, we strongly encourage all Collin mathematics and science professors to inform their students and keep them apprised of the dates of upcoming exams. Also, as greater incentive, a fund was set up four years ago for the college winner to be awarded a $500 scholarship transferable to the Texas university of his or her choice. The winner however, must meet certain qualifications: have no prior degree, take both tests and score over 30 points total and attend a Texas university within one year. The second-place winner is awarded a TI-84 calculator or the equivalent bookstore value. For all other students, the Collin professors give bonus points to participating students depending on their scores – the higher the score, the greater the bonus.

Collin College had two very proud moments in the past several years. In 2004, the college had the highest recognized female scorer in the country. Since then, we have noticed a much larger proportion of female participants and high-scorers overall throughout the country. We do not claim to have spurred this feminine activity, but privately we would like to think so! Also in 2006, we were excited to have a student win the Southwest Region for the first time in our college's history.



The AMATYC Student Math League at Collin College culminates at the annual Emerging Scholars awards reception, held every April. There, the winner is presented with a framed certificate along with many other students who have excelled in their respective disciplines. All of the effort and time involved in the administration of the program is justified upon witnessing the SML winner revel in such a moment.

All two-year colleges are eligible to join this organization; for a small annual college-paid fee and a few hours of time, hopefully a new moderator will volunteer and witness more math and science students realize their potentials. I, for one, will continue to do so.•

TexMATYC Conference Report

Maple Workshop

The Maple workshop was fantastic this spring. It was great to have such a well-prepared speaker; as we came in the room and got our laptop computers plugged in, everything we needed, Dr. Lopez had ready for us on a portable drive to quickly download into our laptop computer so we could easily follow along. As we went through his examples, I was amazed at the depth of his knowledge of Maple, and, importantly, *how* it can be used in the classroom for student understanding. That is, the focus was on the *use* of this tool as well as its new syntax. I learned an incredible amount and fully intend to use this in my teaching. We were fortunate enough to have just the right number of participants so Dr. Lopez could come by our computers and help us push the right keys, et cetera. This was great! Workshops of this high quality definitely need to be supported and continued.

Sincerely,
Dr. W. M. Dunn
Professor of Mathematics
Lone Star College - Montgomery

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TexMATYC Conference Report *(continued from previous page)*

The Right Stuff

On February 19, 2009, TexMATYC held a pre-Conference workshop at the TCCTA conference in Austin, Texas. Rob Kimball of Wake Technical Community College presented "The Right Stuff" *www.therightstuff.amatyc.org/*, and author Frank Wilson presented "The Make It Real Learning" *www.makeitreallearning.com/*.

Rob asked each participant to consider supporting the 2009 AMATYC Conference in Las Vegas by presenting their experience with "The Right Stuff", while Frank granted each participant complimentary access to "The Make It Real Learning" worksheet library (a $39.99 value) that contains more than 100 worksheets (mostly for College Algebra through Pre-Calculus), which focus on answering the question, "When am I ever going to use this?"

Many key concepts were presented, and the ones I remember the most were: motivate students to communicate with each other as well as with the instructor, solve problems on the board by giving them the opportunity to take leadership of their group, use real life examples to identify and interpret new concepts through lab activities to quiz and prepare students before taking chapter exams.

Raja Khoury
Collin College

Job Openings

Faculty, Mathematics
80610
Lone Star College-CyFair

Position Summary:

Provides learning activities and support that lead to the achievement of course objectives and contribute to the educational environment of the Lone Star College System and the community. Responsibilities include learning facilitation, personal and professional development, and institutional and community service. Primary functions are to plan, develop and teach courses within the curriculum in a manner that facilitates student learning.

Required Qualifications/Education Campus Specific:

Master's degree in mathematics or a master's degree and 18 graduate hours in mathematics. Experience using innovative strategies and technology in the classroom. LSC-Online certification or a commitment to obtain certification through LSCS (or equivalent) within 12 months of employment. Demonstrated interest and/or experience with interdisciplinary teaching, service learning, learning technologies, course development and adult learning methodologies including collaborative learning, learning communities and online learning.

Dean, Instruction (Education, English, Mathematics)
30629
Lone Star College-Tomball

Position Summary:

Administrative position responsible for leadership of assigned instructional areas. Ensures the effectiveness of his/her division including planning and evaluation of student and faculty success.

Provides instructional leadership through research/evaluation of educational trends, mentoring of full-time faculty and direct teaching experience. Oversees administrative effectiveness of division.

Required Qualifications/Education Campus Specific:

Master's degree or higher. At least three years teaching experience at post-secondary level.

Application Process for both positions:

For the complete job descriptions, submission requirements, and access to our on-line application, please visit our Web site at *www.lonestar.edu* click on Employment@, Search & Apply Now and then Search Postings. All positions are subject to a criminal background check. AA/EEO. APPLY ONLINE ONLY. Please do not fax, mail or e-mail any documents.

Lone Star College System is a great place to work!

Full-time employees enjoy medical, dental coverage, life insurance short and long term disability, TRS/ERS, Vacation up to 19 paid holidays, sick leave, tuition reimbursement and more. There is a 90-day waiting period on medical coverage only. Details at: *www.lonestar.edu/60465/*.•

Conference Photos

TCCTA/TexMATYC Conference
February 19-21, 2009
Austin, Texas

Joanne Peeples:
The Square Root of WHAT?

Sherri Messersmith: Reviewing the Basics While Teaching Beginning and Intermediate Algebra

The Right Stuff Workshop
Robert Kimbell, Frank Wilson

Maple Workshop

Wade Ellis: Learning Objects as a Gateway to Student Inquiry and Understanding

John Coburn:
Trigonometric Curiosities

Robert Lopez:
Maple Workshop

Don Allen: What is the National Math Panel and How Does it Affect the Colleges?

Presenter Jamie Blair with Raja Khoury: Dynamic Models: Integrating Support Services and Classroom

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Visit us at www.TexMATYC.org

When his son came home at 3 in the morning, the father asked,
"Why are you late? I told you to be home by a quarter of 12."
The son replied, "But a quarter of 12 is 3!"

Got News?

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