Math SPIN News

Newsletter of the NADE Math SPIN

http://www.nademathspin.org November, 2006

Contents

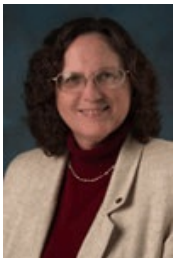
From the Chair — Daryl Stephens

We have a jam-packed newsletter for you this time! The October 2006 issue of the *Mathematics Teacher* had an opinion column about the relationship between what's taught in high school math and what is on college mathematics placement tests (home-grown ones, COMPASS, Accuplacer, etc.). We asked for responses, and got quite a few. They are printed in this issue. We also have information about the new AMATYC *Crossroads* document, some great class tips from Ed Gallo, and information on how the brain learns from Roberta Lacefield. Selina Vasquez-Mireles and David Morales start a conversation on defining developmental mathematics which I'm sure we will want to continue. (This has been a topic on our email list for several years.)

At our annual meeting in March, it will be time to elect our officers. I am planning to step down as chair at that time. I've been chair for three or four years and vice chair for a while before that. I think I'm getting close to term limits, and it's time for new leadership. Plus I'll have new duties at school which require some additional attention, chair a committee at church, finish a term as president of our local NCTM affiliate, and next school year be president of our local civic chorale. I will still be willing to host the website and send out the newsletter if no one else wants that duty. It's been a lot of fun working with the NADE leadership, and I hope I'll be able to continue attending NADE conferences (as with everyone else, it depends on funding). I think I have more fun at them than at any other meetings I go to.

Daryl Stephens
Math SPIN chair
stephen@etsu.edu; (423) 439-4676

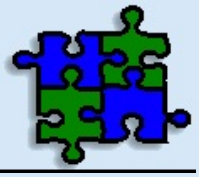
From the Co-Chair — Susan McClory



I want to take this opportunity to thank Daryl for his many years of commitment to the Math SPIN. Our group is one of the largest and most active SPINs within NADE and much of it is due to Daryl's hard work. Please join me in thanking him both collectively and individually for all he has done to keep us going.

With that said, I would be happy to follow in his rather large footsteps if the membership sees fit. If elected, I'll need your help, especially with the Newsletter. Daryl has set a much higher standard than my limited computer skills could ever meet.

I look forward to seeing many of you in Nashville.



NADE 2007 Conference

"Developmental Education: Piecing It Together"

March 21-24, 2007, Nashville, TN

Gaylord Opryland Resort & Convention Center

http://www.nade2007.net

(We hope to have a list of at least some math sessions in the next newsletter.)

Call for Poster Sessions at NADE 2007

Did you miss the proposal deadline to present at NADE 2007? You can still be a part of the program by presenting a poster session.

Poster sessions will be in the Ryman Exhibit Hall during several of the concurrent session blocks, and Saturday morning in Tennessee Ballroom C.

Submit a Poster Session Proposal form if interested. The form is found at http://www.nade2007.net/call_to_conference/postersession.htm. You can submit it electronically, or print it out as a PDF or DOC file and mail it in.

Submission Deadline: January 10, 2007

Web Site

Check out your Math SPIN web site at http://www.nademathspin.org. There you will find archived versions of old newsletters dating back to the early 1990s, links to many places on the web related to teaching developmental math, and more. Some dead links were removed in September.

Reminder

Due to the high cost of postage, the Math SPIN newsletter is not printed and mailed out. It is posted on the Math SPIN web page. An e-mail is sent out to let folks know when a new newsletter is posted. If you want to continue to receive notifications about the newsletter, you need to keep your contact information current with the NADE office. Send changes of contact information to the NADE office, e-mail office@nade.net, phone 877-233-9455 , fax 567-202-4385 , or write to 2447 Tiffin Avenue #207, Findlay, OH 45840. (Note the new phone and fax numbers!)

Yahoo! Group

Remember that we have an e-mail discussion group through Yahoo that is available to all developmental math faculty. To view the archives of all messages posted from the beginning, first get a free Yahoo account at http://www.yahoo.com if you don't already have one. Then sign in and visit this page: http://groups.yahoo.com/group/mathspin/.

To subscribe, send an otherwise blank e-mail to mathspin-subscribe@yahoogroups.com

To unsubscribe, send an e-mail to mathspin-unsubscribe@yahoogroups.com

To post a message, send an e-mail to mathspin@yahoogroups.com.

The Yahoo group site also allows us to post pictures, files, links, and surveys. Maybe we should take advantage of these. There is also an electronic calendar which we can use to post events of interest to the membership, such as conferences and workshops.

If you aren't on the list, please join us. It's free and will help you get more out of the experience of being a Math SPIN member.

Net Goodies

In this column we spotlight some web sites of interest to developmental math faculty. Feel free to pass along your suggestions for future issues.

Math Help for Students from Pellissippi State

Pellissippi State Technical Community College (Knoxville, TN and other locations) has a page with a number of links for many topics in developmental and introductory math.
http://www.pstcc.edu/departments/mathematics/resource/resource.htm

Earliest Known Uses of Some of the Words of Mathematics

Most of the content of this web site is way above the level of developmental math, but it has many interesting citations of math words, a brief definition, and a reference of when the words were first used.
http://members.aol.com/jeff570/mathword.html

Feature Articles

American Mathematical Association of Two-Year Colleges (AMATYC) Releases Beyond Crossroads: Implementing Mathematics Standards in the First Two Years of College

by Bruce Yoshiwara

In the midst of a national focus on quality math and science education in the United States, the American Mathematical Association of Two-Year Colleges (AMATYC) released *Beyond Crossroads: Implementing Mathematics Standards in the First Two Years of College*, its second standards document, on November 2, 2006 at the 2006 AMATYC Annual Conference in Cincinnati.

In 1995, AMATYC, the leading organization of two-year college math faculty, published its first standards document, *Crossroads in Mathematics. Beyond Crossroads* builds on that earlier work to provide implementation standards to move college mathematics faculty from theory to practice. In effect, the new study is a call to action for faculty who provide the first college mathematics experience for a substantial number of U.S. undergraduates, including the most diverse student population and the majority of students needing developmental mathematics in order to enter college-level coursework.

Beyond Crossroads presents a renewed vision for mathematics courses offered in the first two years of college as well as an implementation cycle to help mathematics faculty make needed changes in learning and the learning environment, assessment of student learning, curriculum and program development, instruction, and professionalism. Recommended changes are designed to strengthen students' learning of mathematics as well as development of problem-solving and critical-thinking skills.

With its five new Implementation Standards, students, faculty, departments, institutions, and other stakeholders have a clear call to action, which will result in greater knowledge and understanding of mathematics, mathematical reasoning, and applications. Faculty are challenged to become lifelong learners as professionals and to embrace changes that impact their teaching in positive ways. Students are the ultimate beneficiaries of *Beyond Crossroads*; they can apply mathematics knowledge to their workplaces and their lives in our increasingly technological society.

Beyond Crossroads is intended to stimulate faculty, departments, and institutions to examine, assess, and improve every component of mathematics education in the first two years of college. The standards, recommendations, and action items are not intended to be prescriptive but are designed to meet the broad and varying needs of faculty members, departments and institutions that comprise community colleges – higher education's most diverse and fastest growing sector. Community colleges currently enroll almost half (45 percent) of all U.S. undergraduates, placing these institutions at the center of improvement in post-secondary mathematics education.

Kathy Mowers, AMATYC president, stated, "In 1995, AMATYC members embraced the first *Crossroads* document and asked how to implement those recommendations. Today *Beyond Crossroads* brings mathematics educators clear guidance on how to better prepare two-year college mathematics students for the workplace or for advanced education by embracing change, lifelong learning, and growth as a professional."

Electronic resources accompanying *Beyond Crossroads* will be available in early November 2006, following the distribution of the *Beyond Crossroads* document to the AMATYC membership at its annual conference in Cincinnati. These electronic resources extend and enhance the messages of *Beyond Crossroads*. Focus areas for electronic resources include a web-enhanced version of the document, an outreach kit for communicating the messages of *Beyond Crossroads*, and resources on assessment and quantitative literacy.

AMATYC is "Opening Doors through Mathematics." Founded in 1974, AMATYC represents mathematics faculty and students in two-year colleges with forty-four affiliate organizations representing forty-seven states and one Canadian province. With approximately 2,500 individual members and more than 100 institutional members, AMATYC is the only organization exclusively

devoted to providing a national forum for the improvement of mathematics instruction in the first two years of college.

The following individuals led the way in developing *Beyond Crossroads:*

***Beyond Crossroads* Project Planning Team:**
Judy Ackerman, AMATYC Past President, Montgomery College (MD)
Richelle Blair, AMATYC President-Elect, Lakeland Community College (OH)
Sadie Bragg, Borough of Manhattan Community College (NY)
Rob Kimball, AMATYC Southeast Vice President, Wake Technical Community College (NC)
Philip Mahler, Middlesex Community College (MA)
Kathy Mowers, AMATYC President, Owensboro Community and Technical College (KY)
Susan Wood, Virginia Community College System (VA)

Writing Team Chairs, *Beyond Crossroads* Project:
Nkechi Agwu, Borough of Manhattan Community College (NY)
Geoffrey Akst, Borough of Manhattan Community College (NY)
James Hall, Parkland College (IL)
Mary Ann Hovis, Rhodes State College (OH)
Judy Marwick, Kankakee Community College (IL)
Sue Parsons, Cerritos College (CA)

For more information, go to the AMATYC website www.amatyc.org. The Executive Summary of *Beyond Crossroads* is available at www.bc.amatyc.org. ■

Articles Needed for Next Newsletter

As you can tell, this issue is one of our largest ever. Maybe we can keep it up! Our next newsletter will go out in mid to late February in order to give people time to read it before the NADE 2007 conference. If you would like to submit an article, a blurb promoting something your institution (or another organization with similar interests to the Math SPIN) is doing, e-mail it to Daryl Stephens (stephen@etsu.edu) by February 1, 2007. Any personal accomplishments of interest to the membership would be good, too. If you would like to run for office in the SPIN, feel free to submit a short biography. Articles may be included in the body of the e-mail or submitted in one of the following formats: plain text (.txt), rich text (.rtf), Word (.doc), or WordPerfect (.wpd).

Some Casual Observations on What Keeps Students Engaged

Ed Gallo, Sinclair Community College
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I've been thinking about this for a while. I often hear comments like "Why are my students not coming to class?" and "Some of my students are falling asleep in class!"

Well, I can recall looking out at my class (during and after a very "well done" lecture) and seeing several students' feigning attention, at best, or downright sleeping – in the head down position. That was a while back.

Many positive things happened to me and my teaching style since then. As a result of attending many conferences and observing many of my fellow instructors in their classrooms, I now use a variety of techniques that keep students actively engaged in my math classes. Here is a short description of my "top 8" techniques.

Worksheets. I give my students worksheets to use as in-class activities in between my "mini lectures." After presenting a new topic or concept, I give my students five to ten minutes to work on a few worksheet problems. The students work together in small groups of three or four. Some worksheets may have a few "drill" type of problems, while others might have an interesting application problem. One of my favorite worksheet activities is for the students to graph two linear equations, comment on whether or not the lines are perpendicular by looking at the graphs, and then show algebraically if they are perpendicular.

Quizzes. I give a short quiz near the end of the class period. Students may use their notes, but not their textbook. I grade a student's quiz as he or she looks on. If there is an error, I give the quiz back to the student to correct the error.

This comes with a one-point (out of five points) deduction. A second error results in another point deduction. As you might guess, a side effect of end-of-class quizzes is improved attendance!

Stickers. I bought a book of 2,520 stickers at a teacher's supply store a while back. While the students are working on an in-class problem or a worksheet, I walk throughout the classroom, providing help or suggestions to students as needed. Then, I award stickers to the first three or four students who have a correct solution. I make a big deal out of putting the stickers on their papers. Oh, yes! My students do look forward to getting a sticker!

Web Projects. I use web projects as a homework assignment or an extra credit activity. A typical project sounds like this: Research (on the web) why we use m for slope, include copies of web pages from two web sites, write a paragraph on what you discovered at each website, and include a summary of what you learned overall. Other good project topics include why we call the x-y coordinate system the Cartesian coordinate system, what does it mean by conjugates (complex numbers), and find out about complex numbers.

Homework. I assign homework, collect it, and return it at the next class meeting. Many of us do this. For a new twist, I ask the students to review their homework, evaluate it, and assign a grade (10-point basis) to it before they turn in their papers. I still grade the papers and either concur with the students' grade or make a change.

Grade Computation Worksheet. I provide the students with a worksheet that they can use to keep track of all of their homework, quiz, lab, and exam grades. The students also compute their current course average, compare that against what grade they "want" to get, and write a few comments on what they must do in order to get the grade that they want. The students submit their grade worksheet to me twice during the term. The second time is right before the "W" date. I review their grades, make changes if necessary, and return the worksheet.

Exam Study Guides. My students prepare their own study guide for the exams. The directions are simple: Develop a study guide, two pages max, in your own handwriting. Include notes, definitions, and/or examples from each section that is covered on the exam. Students turn in the study guide before taking the exam. The study guide is an official part of the exam and counts as one problem on the exam.

Mid-Term Assessment. This is a pretty standard classroom assessment technique. I complete the loop by reviewing my students' comments, summarizing them, and providing feedback to the class. At this point, I mention some changes that we will make in the classroom or explain why we will continue to do certain things (like not reduce the amount of assigned homework).

I would like to make something clear. No one told me that I had to use any of these techniques. In addition, I didn't start to use all of these approaches at the same time. Instead, I picked up something here and something there and started using them.

The bottom line of all of these techniques is to keep the students active and to get them to do as much as possible. My motto is to "***Have the students do more work in the course than I do!***" I am convinced that students want to be engaged in mathematics – it may just take a little "engaging spirit" on our part. ■

Five Rules of How the Brain Learns*

Roberta S. Lacefield, Waycross College
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For far too long, we have considered the brain and the mind to be two different entities. In fact, all learning is biological – it requires construction of biological entities in the brain. When we first are exposed to a new idea, the body builds a cell body. As we learn more about that idea, the cell body acquires dendrites. As our understanding becomes richer, the dendrites connect to other dendrites through synapses. The interconnected synapses form the web that is a neural network.

Understanding this biological process helps both faculty and students to understand why learning takes time and why once is not enough. It helps both understand what is happening when the "lightbulb" comes on. It explains the importance of good nutrition and proper sleep. And, that is only the beginning of what this understanding can give us. The following are five "rules" of how the brain learns as explained by Rita Smilkstein in her book *We're Born to Learn*. It is information we can ALL use.

1. Dendrites, synapses, and neural networks grow only from what is already there. The first time we experience a new subject, our brains must build a dendrite on a cell body for that topic or must connect to an existing idea. Only after that dendrite is in place or the related idea identified can we begin to know, remember, and understand a topic.

2. Dendrites, synapses, and neural networks grow for what is actively, personally, and specifically experienced and practiced. Nothing will happen in the brain for someone passively sitting in a class. We MUST make lessons and lectures engaging.

3. Dendrites, synapses, and neural networks grow from stimulating experiences. The more interesting we make the material, the more likely students are to learn it. Stimulation of the brain causes growth. Of course, this is also happening when we watch a stimulating horror flick, so be careful.

4. Use it or lose it. This is actually true; our brains prune off the unused dendrites and synapses to reuse the cellular material somewhere else. The brain will first deconstruct those ideas we haven't practiced very much or haven't used in a long time. The brain is more likely to need to do this when we aren't eating right.

The good news is that the brain prunes the bad along with the good. Wrong ideas and thoughts are also pruned if we quit using them.

5. Emotions affect learning. We all know it and now research supports it. For those who say, "I hate math," or "I can't learn this stuff," learning is much more difficult.

The Brain's Innate Resources

The brain has a natural learning process with an innate sense of logic that seeks patterns and solves problems. The brain is innately motivated to learn. Every student we have is born to learn.

*Smilkstein, R. (2003). *We're Born to Learn: Using the Brain's Natural Learning Process to Create Today's Curriculum.* Thousand Oaks, CA: Corwin Press Inc. ■

Editor's note: Rita Smilkstein will be giving a pre-conference institute at NADE 2007 on Wednesday, March 21, 2007, 1:3 to 4:30 p.m. Cost is $50. See http://www.nade2007.net/sessions/pre-conf_inst.htm *for details.*

Defining Developmental Mathematics

By Selina Vásquez-Mireles, Ph.D. and David Morales
Texas State University, San Marcos

The birth of developmental math can probably be attributed to the establishment of land-grant colleges which occurred around the middle of the 18th century (Payne & Lyman, 1998). Perhaps developmental math programs came to be since more individuals that were underprepared for college were now attending college and the introduction of new disciplines (A&M, Agricultural and Mechanical). Nevertheless, Breneman and Haarlow note it was not until 1849 that the first remedial education program in arithmetic was offered at the University of Wisconsin (as cited in Merisotis & Phipps, 2000). Thus, it may be safe to conjecture that developmental math was more remedial (arithmetic) or preparatory (for individuals who may not have had formal schooling prior to the college experience).

Currently, developmental math is defined by one or a combination of the following:

(1) relationship to other math courses, e.g., below college algebra;
(2) topics taught, e.g., operations with whole numbers through quadratic equations; and,
(3) standardized exam, e.g., the Texas Higher Education Assessment.

How developmental math is defined may have significant implications for developmental math programs in general. For instance, the definition of developmental math may have a bearing on how many developmental courses are offered. Moreover, existing definitions do not embody the essence of developmental education, which identify programs as remedial more than developmental.

A review of government literature, professional organizations, and select colleges and universities produced interesting results regarding the definition of developmental math. At the federal policy level, there is no record of a developmental math definition. A report for the U.S. Department of Education, Office of Vocational and Adult Education states that "no consistent definition of math standards for college-level preparation exists" (2005, p. 2). However, at the state governing level, such as coordinating boards, the use of topic lists to define developmental math is common. For instance, the Texas Higher Education Coordinating Board has two courses that are noted as developmental math:

1. Developmental Mathematics: Topics in mathematics such as arithmetic operations, basic algebraic concepts and notation, geometry, and real and complex number systems.
2. Intermediate Algebra: A study of relations and functions, inequalities, factoring, polynomials, rational expressions, and quadratics with an introduction to complex numbers, exponential and logarithmic functions, determinants and matrices, and sequences and series. (2005, p. 130).

In terms of professional organizations, the most recognized definition of developmental math is that cited by a joint effort from the National Association of Developmental Education [NADE] and the College Reading & Learning Association [CRLA].

developmental mathematics course

> 1: pre-collegiate mathematics courses that are designed to prepare students for the study of college-level mathematics, as defined by entrance requirements of the institution. The levels of developmental mathematics courses vary from basic arithmetic through any prerequisite course(s) for calculus (Duranczyk, 2004). 2: instruction that may contain one or more of the following topics: arithmetic operations, math symbolism, geometry and measurement, functions, discrete math algorithms, probability and statistics, and deductive proofs. 3: specialized mathematics instruction for students who do not meet entry into a college-level mathematics course. (NADE, 2005, p. 11).

This definition is a combination of all three definition builders, "relationship to other math courses," "topics taught," and "standardized exam." The American Mathematical Association of Two-Year Colleges' [AMATYC] definition is

> Developmental mathematics courses in this document are defined to be courses below the level of the first mathematics course that earns full college credit at the institution. For most two-year colleges, this includes mathematics courses below the level of College Algebra. (2006, p. 44).

This definition is of the "relationship to the other math courses" type. Nevertheless, there is mention of including "mathematics anxiety, develop study and workplace skills, promote basic quantitative literacy, and create active problem-solvers" as content in the course (AMATYC, 2006, p. 44). Representatives from another predominant developmental organization, namely the National Center for Developmental Education [NCDE], acknowledge the disparity regarding the definition of developmental math and cites the NADE/CRLA definition as a resource. Math-based professional organizations namely the Mathematical Association of America [MAA], American Mathematical Society [AMS], and the National Council of Teachers of Mathematics [NCTM], have developmental math subgroups none of which have a noted definition of developmental math.

The next step is to investigate what researchers, publishers (of textbooks and academic resources) and other colleges/universities consider developmental math. Thus, a broader perspective including that of more stakeholders will yield a better understanding of what, if any, a standard definition of developmental math should be. Furthermore, it may be possible to identify what elements or characteristics are or should be common to all developmental math programs. This may allow for ranking of developmental math programs as well as assist with research and/or grant writing.

For contributions to these efforts, please contact Dr. Selina Vásquez-Mireles at sv10@txstate.edu.

References

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A Conversation on Placement

Editor's Note: *Placement has been a topic of interest to Math SPIN members for years. A "Sound Off!" column in the October 2006* Mathematics Teacher *sparked additional interest in the topic. Here are several viewpoints on the subject submitted by Math SPIN members.*

The MT article is: Gordon, Sheldon P. (2006, October). Placement tests: The shaky bridge connecting school and college mathematics. *Mathematics Teacher 100*(3), 174-78.

From the Trenches: My Opinion on Placement

Margaret Patin
Mathematics Instructor, Vernon College

The idea has been expressed that commercial placement tests are placing high numbers of students in developmental courses because implementation of the new NCTM Standards in high school curricula has changed what should be tested. Perhaps there is some truth to that; however, I think there are several more obvious reasons for the growth in developmental math placements. Two primary reasons are large numbers of under-prepared entering freshmen as well as large numbers of non-traditional students. While placement tests are never as accurate as we would like, maybe we should more carefully consider the story they are telling.

For many years our school used scores on the state's college readiness test for determining placement in mathematics classes. Our math instructors agreed that this was not providing a realistic assessment of student's mathematics skills. During the 2005-2006 year we began using the Accuplacer for math placement. Our enrollment in developmental courses did increase, but is now more in line with the instructor's assessments of student performance.

Many of the students I see in my developmental courses are those who have a serious deficit in basic arithmetic and a complete lack of basic algebraic concepts. Having recently taught high school, I am sure that these are not neglected in the Standards. However, the majority of students I receive do not grasp even the most basic concepts presented in the NCTM Standards. Their inability to read and understand a simple word problem is evidence that no matter how superior the Standards and their application, student learning is not necessarily happening at the rate we would like. The lack of basic arithmetic skills seems to indicate that perhaps we are short changing students in elementary classrooms—perhaps in deference to "higher order thinking skills" or in an effort to push students into algebra at an earlier age. (I am still astounded that I have students with high school diplomas who do not understand long division.)

Many traditional students attending our community college are those who would not have attended college in the not-so-distant past: those who do not have the academic credentials or test scores to be admitted to a four-year school. Some are students for whom college was not a consideration during high school. Whatever the circumstances, these are students who successfully navigated the high school math curriculum or passed the GED tests with few math skills and little if any ability to reason through the logic of mathematics.

Additionally, a large portion of our students are non-traditional. They have been out of school for several years; they may work full time and have family responsibilities. If they were able to be successful with algebra in high school, it is now difficult for them because they have not found a use for it in their day-to-day life and have forgotten most, if not all, of their previous study. Others may have attended high school in a time when algebra was not a required subject (hard to believe—but I've met them!).

In conclusion, I realize that my views are limited by the students in my personal experience. I do not, however, think that my experience is abnormal. As more people come to a realization that education past the high school level is necessary and as the curriculum at the high school level becomes more accelerated (leaving average and below average students in the dust), I believe it is realistic to expect larger numbers in developmental courses, regardless of the placement instruments used. ■

Opinion: Placement Using COMPASS

Tim Gail, Kodiak College

Last year I had a student place into Elementary Algebra using a COMPASS placement test. This student had taken Trigonometry four years prior. This student took the placement test's advice and enrolled in this developmental algebra course. Within a week it was obvious that he was severely under-challenged. He finished the course with 100% on every assignment, bored throughout.

At the end of the semester, out of curiosity, he took another COMPASS placement test. Again, he placed into Elementary Algebra! To me, this says that the placement test (at least COMPASS) is inaccurate at best.

Since then, Kodiak College has switched to Accuplacer, but I am taking the results of all math placement tests with a grain of salt. ■

Late-Breaking Conference News

Because of a problem with the rooms the hotel assigned to the NADE 2007 conference, we have been informed that each SPIN can only submit one SPIN-sponsored session. We had submitted three or four. Apologies to those who worked hard to get together discussion groups and then had this happen to them. Perhaps at the 2008 Boston conference, things will work out better.

We have also been told that decisions for which sessions are accepted are running later than usual for most conferences, so if you haven't heard anything about your session proposals, that probably means nothing ("no news is no news").

Professional Development Opportunities

AMATYC Annual Conference "Building a Better Tomorrow"
November 1-4, 2007, Minneapolis, MN
http://www.amatyc.org/Events/conferences/2007/index.html

8th International Conference on Technology in Mathematics Teaching, July 1-4, 2007
University of Hradec Králové, Czech Republic
https://www.ictmt8.org/ictmt8/

The Nineteenth Annual International Conference on Technology in Collegiate Mathematics
February 15-18, 2007, Boston, Massachusetts
http://www.aw-bc.com/ictcm/boston/

National Council of Teachers of Mathematics
March 21-24, 2007, Atlanta, Georgia
http://www.nctm.org/meetings/atlanta/

Joint meeting of the American Mathematical Society and the Mathematical Association of America
January 5–8, 2007, New Orleans, Louisiana
New Orleans Marriott and Sheraton New Orleans
http://www.ams.org/amsmtgs/2098_intro.html

College Reading and Learning Association
October 22- 25, 2008, Crowne Plaza, Cleveland, Ohio

Multiple workshops are offered by Texas Instruments (http://education.ti.com/educationportal/sites/US/sectionHome/pd.html) including 18 regional T^3 conferences.