

NEMATYC NEWS

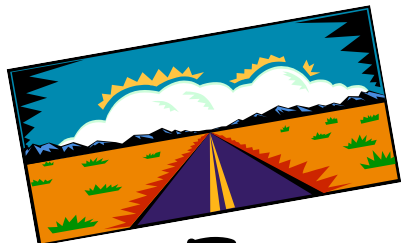
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Vol 15, No 2

Newsletter of the New England Mathematical Association of Two-Year Colleges

Spring, 2007



33rd Annual Meeting

NEMATYC 2007

Download this issue in color at the web site www.nematyc.org

EXPAND YOUR HORIZONS



Bristol Community College

Fall River, Massachusetts
Friday and Saturday
April 20 – 21, 2007



NEMATYC 2007: E X P A N D Your Horizons *Program and Details Inside*

Greetings from your Conference Chair

By Elaine Previte, NEMATYC 2007 Chair and NEMATYC Past President

The annual NEMATYC conference will be held at Bristol Community College in Fall River, Massachusetts on Friday and Saturday, April 20-21. This year's theme is **E X P A N D Your Horizons**. As a long-time member of NEMATYC, I chose this theme because I believe that by attending our regional conference, we get the opportunity to expand our horizons on many fronts: we learn valuable pedagogical ideas from colleagues who are incorporating new teaching approaches in their classes; we are exposed to the newest technological developments because publishers attend the conference and provide presentations of their latest software; and we expand our personal horizons by interacting with and developing friendships with colleagues from across the New England area.

For this conference, there will be over thirty presentations covering a variety of areas – surely something will strike your mathematical fancy! This year, our colleagues will offer their insights into a wide variety of areas: We will have presentations on everything from developing online classes and tutorials to the latest software being developed for tablet PCs; pedagogical ideas from developmental mathematics to calculus; valuable insights into preservice courses and ideas on how to work within your town's mathematical educational structure. We will also have presentations on statistics reform, probability, and a "how-to" lesson on creating effective writing assignments.

I am especially excited about some new features we will be including in this year's conference: there will be a department chair's session where you may share ideas about managing curriculum, full-time and adjunct faculty, etc.; also, there will be a session spe-

Continued on page 6

NEMATYC EXECUTIVE COMMITTEE 2006-2007

President 06-08 Andrew Perry Springfield College perryand@yahoo.com 413-748-3193	Past President 06-08 Elaine Previte Bristol CC eprevite@bristol.mass.edu 508.678.2811 x 3072	Vice President 06-07 Carol Henry Middlesex CC henryc@middlesex.mass.edu 781-280-3982	Secretary 06-08 Dora Ottariano Middlesex CC ottarianod@middlesex.mass.edu 978-656-3192
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Visit the NEMATYC website!

At <http://www.nematyc.org> :

- Constitution
- Officers and Executive Board
- Membership
- History
- Mathematics Associations
- E-mail for NEMATYC
- NEMATYC 2007 Conference
- On-line NEMATYC Newsletters
- Info About The NEMATYC Math League
- Job Opportunities
- Other Web Pages You Might Find Interesting

Webmaster: Rick Butterworth, Massasoit CC



**New England Mathematical
Association of Two Year Colleges**

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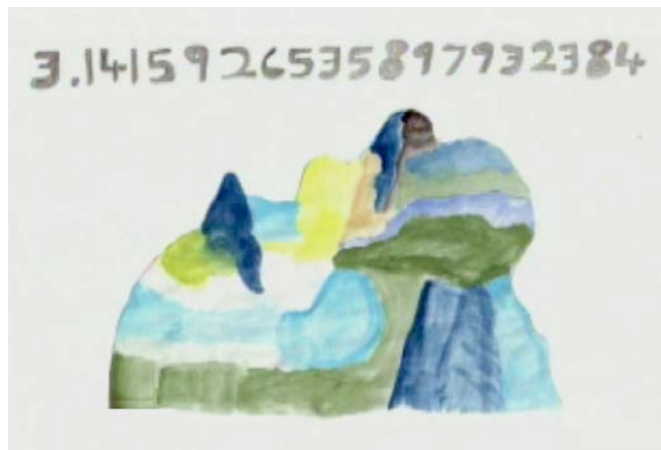
Please send comments to the NEMATYC [Webmaster](#)

MIT Launching Cheer (from MIT web site)

Beaver: I'm a Beaver!

All: You're a Beaver! We are Beavers all,
 And when we get together,
 we do the beaver call!
 e to the u, du dx, e to the x, dx;
 cosine, secant, tangent, sine,
 3.14159;
 integral, radical, mu, dv;
 slipstick, sliderule, MIT!
 Go Tech!

**How
British
math
calculating
savant
Daniel
Tammet
visualizes
the value
of the
number π .**



NEMATYC STUDENT MATH LEAGUE RECOGNITION AWARD PROGRAM

The purpose of the NEMATYC Student Math League Recognition Award Program is to foster extracurricular mathematics learning opportunities for students through participation in the AMATYC Student Math League.

Annually, the top placing student in the AMATYC Student Mathematics League Competition, in up to five schools in NEMATYC's service area, Maine, Massachusetts, New Hampshire, Rhode Island, Vermont, will receive a \$100 Recognition Award. The first awards will be given in spring 2007. Full rules and more information will be disseminated at the conference and will be on the web site.

NEMATYC encourages you to consider joining the AMATYC Student Mathematics League and participating in this NEMATYC program. Your involvement can be as simple as advertising and conducting one one-hour testing session each semester, and can include pre-test study sessions, or even a campus mathematics club. It may be noted that AMATYC is a sponsor of Mu Alpha Theta (MA Θ), a national mathematics honor society primarily for high school students but which supports two year college chapters as well. Information on both the SML and MA Θ is at the AMATYC web site, www.AMATYC.org.

What Do You Do For Your Best Students?

NEMATYC Student Math League Recognition Award Program – Spring 2007

This spring when NEMATYC makes its first Student Math League Recognition Awards, it will honor, with a \$100 award, the top scoring student (who competes in both rounds) from each NEMATYC area school.

In the first round test in November, NEMATYC schools and individuals placed exceptionally well in the Northeast Region. Of the top 9 (of 16) schools in the Northeast, NEMATYC schools took 7 places:

1. Monroe CC, NY
2. Onondaga CC, NY
3. Bristol CC (only ½ point behind Onondaga)
4. Middlesex CC
5. STCC
6. Massasoit CC
7. Holyoke CC
8. North Shore CC
9. Cape Cod CC

Individually, 10 of the top 20 students in the Northeast region come from NEMATYC schools. First place Michael Priio from STCC edged out Nathan Gilbert from Middlesex CC by 1/2 point. Other top 20's hail from Holyoke CC, Cape Cod CC, Massasoit CC, North Shore CC, and Bristol CC.

In STCC's first involvement in the competition in recent years, both the team and individual students scored high. The Springfield Republican recently highlighted the team and advisors Lauren Brewer, Richard Burns, and Jean-Marie Magnier. The team meets weekly to solve problems that require "out of the box" solutions. STCC student and Northeast Region top-scorer Mike Priio claims his strategy for the multiple-choice questions is breaking each answer apart and eliminating those that make the least sense.

This is also North Shore CC's first year in the competition, with Judy Carter advising the team. She reports that two of the competitors were a brother and sister and that the enthusiasm level on the Lynn campus is high. At Middlesex CC, high scorer Nathan Gilbert is in his second year with the team. Phil Mahler organizes review sessions, with the help of Dora Ottariano and Mary Mogan-Vallon, and awards prizes to the top scoring students.

Lauren Brewer says that the Springfield Technical team is currently focusing on winning the Northeast competition. But out in the eastern part of the state, Lois Martin, advisor to the Massasoit team (winners of the Northeast Region in 2003-2004 and 2004-2005), hopes her team will rally in the second round. At Middlesex, advisors Phil Mahler and Dora Ottariano are hoping that their team will top the New England schools, as it did last year. And down in Fall River, Sue Hoy and the Bristol team are planning to hold onto their lead. Stay tuned for results of the second round competition in February/March.

Lois Martin

NOMINATING COMMITTEE REPORT

The NEMATYC Nominating Committee is pleased to present the following slate of officers for election at the annual business meeting in April.

VICE-PRESIDENT ONE YEAR TERM

CAROL HENRY

Carol Henry is a Professor of Mathematics at Middlesex Community College. She is currently finishing her first term as Vice President of NEMATYC. She has also served as a Member-At-Large on the NEMATYC Board. Carol has also been a presenter at both AMATYC and NEMATYC conferences.

TREASURER THREE YEAR TERM

LAUREN BREWER

Lauren Brewer has been teaching at STCC since 1987. She has been the co-chair of the math department since 2002. Lauren was also the Mathematics team chair for STEMTEC (Science Technology, Engineering and Mathematics Teacher Education Collaborative), an NSF funded program to promote excellence in teaching.

MEMBERS-AT-LARGE TWO YEAR TERM (TWO TO BE ELECTED)

JUDY KING

Judy King has many years of teaching experience at primarily the middle school and college levels. She has taught at Hesser and Granite State colleges, as well as the New Hampshire Technological Institute. Since her “relatively late entry into mathematics,” she has been interested in working with others passionate about teaching and learning mathematics, and about researching how best to accomplish that.

Nominations will also be accepted and welcomed from the floor prior to the election.

Respectfully submitted,
Elaine Previte, Chair

NEMATYC Donates \$500 to Colleagues Affected by Hurricane Katrina

Lois Martin

At its January meeting, the NEMATYC Executive Board voted to donate \$500 to the AMATYC Foundation, specifying that the money go towards helping to bring the New Orleans Local Planning Committee to the relocated 2007 conference in Minneapolis. According to Judy Ackerman, Foundation Chair, the committee members and their colleges are still focused on rebuilding their homes and schools, so money to send faculty to an out of state conference is nonexistent. Many of our Executive Board members served on the local committee for the 1993 conference in Boston and know first hand about the hard work and commitment involved in Local Planning. We wish our New Orleans colleagues a safe trip and look forward to seeing them in Minneapolis.

Winter Math

The equation for the Wind Chill factor seems appropriate for this time of year, and provides an “everyday” example of a function of two variables:

$$W(V, T) = \frac{3.71\sqrt{V} + 5.81 - \frac{V}{4}}{12.24}(T - 91.4) + 91.4$$

To my surprise I also found the following as purporting to be the equation (from the National Weather Service):

$$W(V, T) = 35.74 + 0.6215T - 35.75(V^{0.16}) + 0.4275T(V^{0.16})$$

You can find them both online. I haven’t played with them to ascertain their equivalence, or not. But they can provide interesting examples for students, I think, both for algebraic content and for their curve-fitting, math modeling origins, which can be easily researched.

Phil Mahler, Editor



FROM YOUR NEMATYC PRESIDENT

ANDREW PERRY



Greetings! I imagine that it's my job in this column to inspire the NEMATYC membership as well as provide valuable news. Let's start with the news. This April 20-21 we'll be holding our Annual Meeting in Fall River, and the meeting promises to

be one of our best ever, with a particularly large number and wide-ranging scope of presentation proposals submitted. The Friday evening social event, still unfolding, looks to be a groundbreaking musical extravaganza. It's said to include a performance by one of our NEMATYC Board members who sings professionally, along with a finite but probably positive number of other NEMATYC members, and perhaps some outside talent as well.

Our first annual Fall Dinner Meeting (see page 7) was a tremendous success, and planning is underway for the second. Speaking of the fall, it's not too early to plan for AMATYC 2007 in Minneapolis.

As far as inspiration, let me introduce here a quick plug for the history of mathematics. If you incorporate even a little bit of history strategically into your teaching, vast amounts of anecdotal evidence suggest that students are all but certain to appreciate it and feel inspired themselves- even the mathematically challenged among them. If you're not an expert on the History of Mathematics, don't worry: it's easy to learn enough to teach the students *something*. You don't even have to read a book on the subject, but if you're so inclined, [Journey Through Genius](#) by Bill Dunham is beloved by everyone I've talked to who's read it, and I know a large number of such people, including myself.

Let me close with a plea: please contribute to future NEMATYC newsletters whatever you think might be of interest to some of our members: campus news items, book reviews, teaching tips, or anything else that seems appropriate. See the preceding paragraph for an example of one type of contribution that would be welcome. Please send your notes or articles to Phil Mahler. What an easy way to add another publication to your curriculum vita!

See you in Fall River,
Andrew

FROM YOUR AMATYC REGIONAL VICE PRESIDENT

MARYANN JUSTINGER



I hope everyone is having a good semester! There are exciting things happening in AMATYC! Project ACCESS will now be completely taken over by AMATYC. The new title will be "AMATYC project ACCESS". This will require a

few changes and the updates are currently being worked on. Keep an eye on the AMATYC website for information on the program and applications. The four objectives of the project are for the Fellows to gain knowledge of the culture and mission of the two-year college and its students, acquire familiarity with the scholarship of teaching, commit to continued growth in mathematics, and participate in professional communities.

Mark your calendar for November 1 – 4, 2007 and meet us in Minneapolis for the annual conference! The theme is *Building a Better Tomorrow*. The New Orleans local planning committee with the AMATYC affiliate, LaMATYC, is joining forces with colleagues in the Minneapolis area and MinnMATYC to host our conference. They seem to be building a very powerful conference and I would like to encourage all of you to attend. The AMATYC Foundation has started a fund to help our New Orleans team attend the conference, as their colleges obviously cannot help with their expenses (see page 4). Should you like to contribute to this cause, you can get information on the Foundation from the AMATYC website.

There is still excitement about the *Beyond Crossroads* document. All AMATYC members should receive a copy in the mail. It is also available online at www.bc.amatyc.org. You can view the entire document or Executive Summary, or download pdf versions. Representatives from each of the Northeast Affiliates attended a "Spreading the Word" workshop at the Cincinnati Conference so I am hoping that your spring conference will provide more information on BC. Unfortunately, the AMATYC Board Meeting is the same weekend as some of the spring conferences, so I will not be able to attend. I will miss being there!

Continued on the next page.

Greetings from your Conference Chair

Continued from page 1

cifically geared to the challenges faced by adjunct faculty; and there will be a special presentation on some exciting work being done in Southeastern Massachusetts to “connect” the community colleges, state college and U Mass in their understanding of each other’s curricula with the goal of easing students’ transition from institution to institution.

And of course there will be opportunities for us to relax and socialize with each other! We have planned a Friday evening cocktail hour, dinner and after-dinner cabaret. Local musicians will entertain us – and perhaps the audience will want to join in! We may have more surprises in store too!

Please come join us for what promises to be a fun, informative event! We look forward to seeing you in April. Please contact Elaine Previte, Chair, at 508.678.2811 x 3072 or eprevite@bristol.mass.edu for further information.

From “A Fresh Start for Collegiate Mathematics”

MAA Notes #69

Each year, over 1,000,000 students take college level courses below calculus such as precalculus, college algebra and others that fulfill general education requirements. Most college algebra courses, and certainly all precalculus courses, were originally intended to prepare students for calculus. Most are still offered in this spirit, even though only a small percentage of students have any intention of taking calculus.

From AMATYC’s Beyond CrossRoads: Implementing Mathematics Standards in the First Two Years of College (as taken from the Fall 2005 CBMS Survey)

The 8,793 full-time permanent faculty teaching mathematics in two-year colleges in the year 2005 had the following characteristics:

- 44 percent were women
- 14 percent were ethnic minorities
- 46 percent above the age of 50
- 82 percent of full-time faculty had a master’s degree; 16 percent had a doctorate
- a full-time teaching load was 15 contact hours or less per week (average is 15.3 hours) at 85 percent of two-year colleges
- 53 percent of full-time faculty participated in professional development activities offered by their college
- 38 percent of full-time faculty participated in professional development activities provided by professional associations.

Regional VP Report

Continued from previous page

These items are just the highlights of “What’s happening with AMATYC”. Be sure to read your *AMATYC News* for further details and announcements on the many other activities AMATYC has to offer. If you not an AMATYC member, you can find information on membership at the AMATYC website (www.AMATYC.org)! As one of our colleagues told me, “I find the AMATYC website has a wealth of information!” I’m sure you will find it useful too!

Willkommen, bienvenue, welcome!
Fremde, étranger, stranger.
Glücklich zu sehen, je suis enchanté,
Happy to see you, bleib, reste, stay.

Willkommen, bienvenue, welcome
Im Cabaret, au Cabaret, to Cabaret

Remarks to a National Mathematics Panel

September 2006

Richard Bisk, Worcester State College

If your child had a teacher who was reading at the 10th grade level, you might be concerned. If they were reading at the 6th grade level, you’d be outraged. But that’s the situation that we have in mathematics. And that’s why many of the students who enter our college classrooms are operating at the sixth grade level. ... I don’t blame the teachers. ... I blame the programs that prepare teachers ...

NEMATYC Hosts Its First Fall Dinner Meeting

On Friday September 29 NEMATYC hosted its first fall dinner meeting at Quinsigamond Community College. With 25 attendees the meeting indicated member support for this kind of event. The original speaker was forced to cancel due to illness, and Professor Richard Bisk of Worcester State College was kind enough to present on short notice. Richard's topic was *The Mathematics Knowledge Required of Elementary School Educators*. All present enjoyed a lively, fact-filled and thought provoking presentation. Among other things Richard made the case that teachers of basic number facts, operations, and algorithms (aka arithmetic) require a deep knowledge of arithmetic to properly teach the subject, and that this must transcend simple knowledge of the algorithms we call arithmetic. He made the case that a solid knowledge of arithmetic – including an understanding of its algorithms – forms the necessary basis for success in the more abstract parts of mathematics. These teachers should also have a good grasp of geometry concepts, and be able to relate them to arithmetic. As an example, using the basic axiom that areas add, we can compare the algorithm for 28×47 , with the geometric figure shown.

Richard also stated that his research has shown a strong positive correlation between MCAS scores of incoming students at his institution and their scores on the Accuplacer exam, which is now administered to all incoming students at Massachusetts' community and state colleges. He also noted that at Worcester State College they improved the "pass" rate on the Accuplacer entrance math exam from 46% to 65% simply by requiring students to take an in-house pre-test first. WSC further improved this rate to 76% (wow!) by requiring that students either pass the pre-test on one of two attempts or else come in for a two hour review before taking the actual Accuplacer. Richard noted that further research is required to ascertain that this has not reduced the effectiveness of the test as an initial placement vehicle.

President Andrew Perry thanked Maureen Woolhouse and Elaine Previte for their efforts in making this great meeting happen.

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8	320	56



Professor Richard Bisk of Worcester State College addresses NEMATYC members at Quinsigamond Community College.

Preliminary Program
NEMATYC 2007 – E X P A N D Your Horizons
Bristol Community College, Fall River, Massachusetts

Watch for Program Updates on the web site!

<i>Friday, April 20</i>				
2:30 – 3:30 Registration and Refreshments There will be signage directing you to parking and registration				
3:30 – 4:15	FluidMath: Revolutionary Math Software for Tablet PCs	Are You Considering Teaching Probability?	The Hat Problem and Coding Theory	The Presentation of Fundamental Math Skills in an Introductory Chemistry Course
4:30 – 5:15	Designing an Effective Writing Assignment		An Application of Bayes' Rule: The Gambler's Ruin Problem	
5:30 – 6:00	Wine and Cheese Reception			
6:00 – ?	Dinner/Cabaret... and more in store.... watch the web site for the latest conference information www.nematc.org .			

<i>Saturday, April 21</i>				
8:00 – 12:00	Registration, Exhibits, and Continental Breakfast until 10:00			
9:00 – 9:30	Welcome			
9:30 – 10:15	Connect Math: Facilitating Transfer in Mathematics	Creating Multimedia Lessons and Tutorials for Your Courses	Conducting Child Interviews: Connecting Preservice Teachers to Mathematics	
	Exploring New Horizons in Calculus: Learning with Innovative Technology	Civic Engagement: What's Math Got To Do With It?	MyMathLab Commercial Presentation	
10:30 – 11:15	The Road From Outcomes To Assessment	Science, Math and the Role of the Community College	Reading in Mathematics	
	Creating Online Math Tutorials: An Interactive Approach	Key Curriculum Press Commercial Presentation		
11:15 – 12:00	Visit the Exhibits			
12:00 – 1:30	Luncheon			

1:30 – 2:15	Tablet PCs: What Works for Me	Statistics Using Excel	Incorporating Geometer's Sketchpad into Developmental Algebra
	Improving Student Success in Statistics Courses	An Assessment Procedure for a First Semester Calculus Course	Using Activities to Stimulate Mathematical Thinking in Developmental Math Classes
2:30 – 3:15	Girolamo Cardano and Solutions of Cubic Equations	Department Chairs' Sharing Session	Adjunct Faculty Sharing Session
	Psychology, Math and Credit Card Debt	Go International with AMATYC!	Timely Reflection ↔ Fast-Serve Feedback
3:30 – 4:30	Business Meeting and Door Prizes		

LOCAL HOTEL FOR NEMATYC 2007

We have arranged for a special conference discounted room rate at

Hampton Inn – Fall River/Westport
53 Old Bedford Road
Westport, MA 02790
508.675.8500

Rate: \$82/night. Ask for Bristol CC Convention Rate when reserving rooms.

Don't wait! Make your reservation now!

DIRECTIONS: Maps elsewhere in this issue.

Web search on "hampton inn fall river/westport" should get you directions, etc.

MEETING LOCATION
Bristol Community College
777 Elsbree St
Fall River, MA 02720

Go to <http://bristol.mass.edu/> and use the "Quick Links" for Directions.

Map of the Bristol Community College Fall River campus.



Friday 3:30 – 4:15

FluidMath: A Mathematics Sketching Tool

Donald Carney, Ph.D., Fluidity Software, Inc. and Joseph J. LaViola, Ph.D., Brown University

We will present FluidMath, a revolutionary software tool for creating and exploring dynamic illustrations of mathematical concepts. Using a Tablet PC or SmartBoard, both teachers and students can associate handwritten mathematics with simple drawings to create visualizations with the promise of more effective learning in mathematics and science.

Are You Considering Teaching Probability?

Roberta Kieronsky, UNH Manchester

When was the last time you worked with counting techniques and probability? Come and see some ways to introduce this material. Different visuals and explanations will be presented as well as common student errors.

The Presentation of Fundamental Math Skills in an Introductory Chemistry Course

James Pelletier, Ph.D., Bristol Community College

Assuaging the anxieties of students relative to their math skills is an immediate challenge for the instructor in the particular course. This instructor has found that an initial review of math skills rewards the student and the instructor with an information base and a skill base which makes the process of learning the chemistry more efficient. Topics such as significant figures, scientific notation and dimensional analysis are then challenged by the student without the intimidation which would result without the initial presentation of the math skills. This presenter has found that students who would otherwise be doomed to failure in chemistry are elated to find themselves able to succeed...their self image is greatly enhanced and their motivation is greatly improved. It is the intent of the presenter to share some of the methodology that he has found of great benefit to the introductory student and to himself in assisting in student success.

Friday 4:30 – 5:15

Designing an Effective Writing Assignment

Howard Tinberg, Ph.D., Jean-Paul Nadeau and Michael Geary, Bristol Community College

We will offer both theoretical and practical considerations when crafting writing assignments. Among the elements that we will discuss as important to successful assignments: Explicit description of the purpose of the assignment (especially as tied to course outcomes and

objectives); Useful and realistic models of successful responses; Clear and precise criteria for success (rubric for grading); Careful and explicit attention as to the form and content expected; Practical emphasis on the process and not the just the product of writing; Practical timelines that will promote maximum student effort and chances for success.

An Application of Bayes' Rule: The Gambler's Ruin Problem

Eiki Satake, Ph.D., and Philip Amato, Ph.D., Emerson College

Consider two gamblers with a finite amount of money who repeatedly play the same game against each other. The sequence of fortunes of either of the gamblers forms a probabilistic model called Bayes' Rule. Using the tools of Bayes' Rule, we will show how to calculate the probability that one of them runs out of money.

Saturday 9:30 – 10:15

Connect Math: Facilitating Transfer in Mathematics

President Jack Sbrega, Ph.D., and Elaine Previte, Bristol Community College, Mary Moynihan, Cape Cod Community College, Ronald Pitt, Ph.D., Bridgewater State College

Mathematics faculty from CONNECT schools have been discussing comparable math courses at their institutions. Goals include developing learning outcomes, aligning learning goals and facilitating the transfer of mathematics courses. We will report on methods used, the nature of the findings and future aspirations. Participants will be asked to share transfer issues.

Creating Multimedia Lessons and Tutorials for your Courses

Judy Carter and Beth Lucas, North Shore Community College

See how easy it is to create voice-narrated, animated lessons and tutorials for your courses! We've used tablet PCs in combination with *Camtasia* (software that records still and moving images on the computer screen) to create lessons and tutorials for use in both our in-class and online sections.

Conducting Child Interviews: Connecting Preservice Teachers to Mathematics

Kathleen Rondonone, Southern Connecticut State University

Students taking my mathematics education courses do not always believe that the math I teach is what

they will encounter when they teach mathematics. I have them interview a K-8 student and write a personal reflection paper to help them connect their understanding of mathematics to their teaching of mathematics.

Exploring New Horizons in Calculus: Learning with Innovative Technology

Robert E. Kowalczyk and Adam O. Hausknecht, University of Massachusetts – Dartmouth

With minimal effort and new technology, you can add lively visual demonstrations to your mathematics class that enhance the learning and understanding of the core calculus concepts. Want to convince your students that the trajectory of a thrown ball follows a parabolic path? Take a short video clip of two of your students throwing (and catching) a ball, import the frames of the video into our software package TEMATH, mark the position of the ball in each frame on a set of coordinate axes, fit the resulting data with a quadratic function, and your students will be convinced for life that the path of the ball is parabolic! This entire process can be done within 10-15 minutes and the best part is that it always works!

Civic Engagement: What's Math Got To Do With It?

Dora Ottariano, Beth Fraser, Michael Williamson, and Linda Dart-Kathios, Middlesex Community College, and Becky Warren, Lowell National Historical Park

This session provides an opportunity to highlight The Lowell Civic Collaborative, a unique civic engagement partnership between Middlesex Community College and its outstanding community resources, Lowell National Historical Park and Minute Man National Historical Park. Participants will be provided with ideas on how to embed civic engagement knowledge and skills into math courses of all levels. Materials will be shared.

MyMathLab: Commercial Presentation

Kevin O'Brien, Addison Wesley and Prentice-Hall

During this presentation, the Addison Wesley and Prentice-Hall representatives will present two web-based resources being offered with their math texts. These web resources would be of interest to instructors looking to offer easily accessed online homework, quizzes, practice problems and tutorials to enhance a traditional course, as well as those teaching hybrid and online courses. Both these resources correlate directly with the scope and sequence of math texts that Addison Wesley and Prentice-Hall publishes

Saturday 10:30 – 11:15

The Road From Outcomes To Assessment

Lois Martin, Kerry Snyder, Jack Keating, and Marianne Rosato, Massasoit Community College

The mathematics faculty at Massasoit Community College worked for several years writing outcomes for the courses they offer. With the outcomes in place, the work on assessment began. Departmental final exams were analyzed to determine if they reflected the outcomes and item analyses were done to identify problem areas.

Science, Math and the Role of the Community College

Ed Blomdahl, Cape Cod Community College

Albert Einstein's Special Theory of Relativity was written just over 100 years ago – 1905. Despite its fundamental acceptance in the worldwide physics community, there have always been not a few scientists – including myself – who have firm doubts of its veracity. When I tried to have my scientific papers published, I was met with closed minds and politics. My experience has led me to reevaluate the role of the two-year college and the relationship between student, instructor and institution.

Reading in Mathematics

Amanda Hattaway, Wentworth Institute of Technology

This talk offers a few strategies for motivating students to read their mathematics textbooks, their course lecture notes and online material. I will show how I have done this in my college math, calculus and linear algebra courses.

Creating Online Math Tutorials: An Interactive Approach

Mary E. Sullivan, Cape Cod Community College

Would you like to create engaging, interactive learning materials? Learn how to use Adobe Captivate to easily create Flash-based e-learning content that will increase comprehension and improve student outcomes.

Key Curriculum Press: Commercial Presentation

Rori Reber, Key Curriculum Press

Saturday 1:30 – 2:15

Tablet PCs: What Works for Me

Rick Butterworth, Massasoit Community College

I will compare and contrast various strategies and software; e.g., Journal, One Note, Math Journal, Word, and PowerPoint. I will explain strengths and weaknesses I have discovered in each. Plus, I will demonstrate how I actually use a tablet and the software.

Incorporating Geometer's Sketchpad into Developmental Algebra

Frank Cabral, University of Massachusetts, Dartmouth

I have spent extensive time on research projects integrating technology into existing curriculum. One of the software packages that I am especially fond of is Geometer's Sketchpad. It is engaging and allows for a high level of cooperative learning for students. I urge schools that teach Geometry, and pre-calculus to make use of this software to keep up with the mandate that we integrate technology into the Mathematics Classroom. Sample lessons will be shared with participants.

Statistics Using Excel

Barry Woods, Unity College

Designed to engage and challenge students in using Excel, this presentation offers statistics faculty new modes of expanding Excel's capabilities to include Box Plots, Normal Probability Plots, Descriptive Statistics (no Data Analysis ToolPak), Z and t-tests for one mean, Z-tests for proportion(s), along with other formulas if time permits.

An Assessment Procedure for a First Semester Calculus Course

Eric Johnson, United States Coast Guard Academy

Today, the number of students who take their first calculus course in high school is greater than the number who take calculus for the first time in college. The Mathematics Department is interested in investigating the preparedness of our students in the Calculus I course. To this end, we give an exam the second class meeting. The test is a thirty-seven (37) question multiple choice exam developed and published by Rensselaer Polytechnic Institute. The same exam is given on the last day of classes. Scores on both exams plus correlations with high school experience, SAT scores, AP Scores, and Algebra and Trigonometry diagnostic exams will be presented.

Using Activities to Stimulate Mathematical Thinking in Developmental Math Classes

Fran Seigle, New Hampshire Community Technical College

In this hands-on session, I will present ideas concerning the use of activities that stimulate mathematical thinking in developmental classes. After two years of development and classroom testing, I am happy to share these activities with participants. Students have enjoyed them and they have been quite successful in my classes.

Improving Student Success in Statistics Courses

Mary Kehoe Moynihan, Cape Cod Community College

During the Fall 2006 semester, I completed a sabbatical project with the goal of improving the statistics curriculum at Cape Cod Community College. Tasks included developing learning outcomes with the CONNECT schools and surveying the topics taught in introductory statistics courses at other colleges such as UMass Amherst, UMass Boston, UCal Poly, and the University of Minnesota, and attending the AMATYC conference and webinars on improving statistics. I will share my findings with participants.

Saturday 2:30 – 3:15

Girolamo Cardano and Solutions of Cubic Equations

Andrew Perry, Ph.D., Springfield College

Girolamo Cardano (1501-1576), dubbed "the most bizarre character in the whole history of mathematics", did groundbreaking work in discovering a method to solve the general cubic equation $x^3 + ax^2 + bx + c = 0$. We'll look at the deceit, treachery, and triumph of Cardano's stormy mathematical career.

Department Chairs' Sharing Session

Jerry LePage, Bristol Community College

This session will provide an opportunity for mathematics department chairs to network and discuss common concerns. In addition, information may be shared concerning curriculum issues. If participants wish, they may also compile a listing of available adjunct faculty who may wish to teach at multiple institutions.

Adjunct Faculty Sharing Session

Judy King, New Hampshire

This session will offer adjunct faculty the opportunity to discuss issues they face in the daily conduct of their duties. Other issues may include unionization (not all adjunct faculty have union protection).

Psychology, Math and Credit Card Debt

Evelina Lapierre and Cheryl Almeida, Johnson & Wales University

In an effort to demonstrate the various applications of mathematics, Johnson & Wales University offers a series of inter-disciplinary lectures. The lecture we are planning to present involves statistics and psychology. In this lecture we share data collected from our students concerning locus of control and credit card usage. Through this example we illustrate

the application of research methods and comparison of means.

Go International with AMATYC!

Steve Krevisky, Middlesex (CT) Community College
Come hear about the world of international math conferences! The presenter will show slides of his trips to conferences in such places as Brazil, Japan and South Africa! Hear about what goes on at these gatherings, and make plans to attend ICME-11 in Mexico in 2008!

Timely Reflection ↔ Fast-Serve Feedback

Adele Miller and S. Louise Gould, Central Connecticut State University

Come learn how elementary education students and their instructors profit from students reflecting electronically on ideas presented in class. See example reflection assignments, students writing about concepts and feelings, and instructor responses.

100% MATH INITIATIVE

The report from the 100% Math FIPSE Funded Project is now available: *The 100% Math Initiative - Building A Foundation for Student Success in Developmental Mathematics*

<http://cit.necc.mass.edu/100math/>

MEETING DATES

ICTCM	19 th Annual Conference on Technology in Collegiate Mathematics February 15 – 18 in Boston
NCTM	Annual Meeting March 21 – 24 in Atlanta
ATMIM	Spring Conference April 5 th , 8:00 am – 2:30 pm in Marlboro
NEMATYC	April 20 – 21, 2007, Bristol CC
MATYCONN	April 27, 2007, Manchester CC, Manchester, CT
MAA	Mathfest, Aug. 3-5, 2007, San Jose, CA
AMATYC	Nov. 1-4, 2007, Minneapolis

Join NEMATYC!

Can't attend the conference? We hope you'll support NEMATYC by renewing your membership. Annual dues are \$5. Please complete and return with a check for \$5 to Lois Martin, NEMATYC Treasurer, 25 Lydon Lane, Kingston, MA 02364

Name _____

Preferred Complete _____

Mailing Address _____

City _____ State _____ Zip _____

Phone Number _____

e-mail Address _____

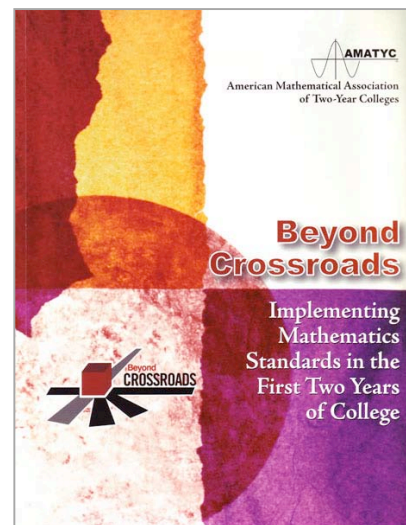
Institution _____

Join AMATYC, at www.amatyc.org, click on "Get Involved".

Hope you got your copy of AMATYC's **Beyond CrossRoads: Implementing Mathematics Standards in the First Two Years of College**. You did if you are a member. If not, you can always join! And you can read the document at the AMATYC web site, www.amatyc.org.

"We believe this standards-based reform effort will provide all students with a more engaging and valuable learning experience. Our students deserve no less; our nation requires no less; and we must demand no less of ourselves."

"... We also believe that ongoing professional growth is the key to a rewarding, enjoyable career in teaching. So let us all grow, learn, enjoy...teach!"



PROPOSED CHANGES TO THE CONSTITUTION

To be voted on at the conference business meeting.

Carol Henry

Deletions shown by strikethrough.
Additions shown underlined.

The NEMATYC Executive Board has been reviewing the NEMATYC Constitution that was adopted on April 8, 2000 and amended on January 17, 2003. As a result of this review, the Executive Board is proposing minor changes that we feel update, clarify, and simplify, some of the articles of the constitution. Per the constitution, all NEMATYC attendees will be given an opportunity at our April meeting to vote on these changes.

ARTICLE 2

MISSION AND OBJECTIVES

A. MISSION

The mission of the Association is to ~~expand and/or improve~~ encourage and promote the expansion and improvement of the mathematics curriculum, mathematics education, and related experiences of students in two-year colleges, and in similar programs within any institution of higher education, in the greater New England area.

B. OBJECTIVES

The objectives of the Association are, within the scope of the mission, the following:

1. Provide a forum for the exchange of ideas and experience among mathematics educators through conferences, meetings, workshops, newsletters, web sites, e-mail and other appropriate means;
2. Encourage the development of effective mathematics programs;
3. Promote the professional welfare and development of all members ~~mathematics~~ educators.

ARTICLE 3 MEMBERSHIP

A. Membership Year

The membership year of the Association is May 1 of one year to the following April 30.

~~B. Membership Categories and Requirements~~
There are two membership categories, Regular and Student.

B. Membership

Membership is open to any educators, students, retired educators or other persons who are interested in the mission and objectives of the organization.

~~1. Regular membership~~

~~a. Regular membership is open to any person who is interested in the mission and objectives of the organization.~~

~~b. The primary target for regular membership is mathematics educators in the two-year colleges, and mathematics educators in four-year colleges~~

~~who teach a similar curriculum, in the states of Maine, Massachusetts, New Hampshire, Rhode Island, and Vermont.~~

~~2. Student membership~~

~~Student membership is open to any person who is primarily an undergraduate student in mathematics or a related discipline.~~

ARTICLE 6 APPOINTED POSITIONS

The Executive Committee may appoint association members to assist the Association in fulfilling its mission. These appointees ~~will~~ may include a newsletter editor, membership coordinator, conference chairperson, immediate past conference chairperson, and webmaster. Other positions may be created by the Executive Committee as needed. Members may be reappointed to successive terms. No person should fill two positions. No elected officer should fill an appointed position. ~~The Executive Committee may terminate an appointment as it deems necessary.~~ With the exception of the Conference Chair and the Past Conference Chair, The Executive Board will review all appointed positions annually. The policy manual provides the most up-to-date list of responsibilities of these positions. In addition to the stipulated duties members may be called upon to perform additional duties as required.

Note: The positions below are described in the policy manual instead of the constitution.

~~A. The Newsletter Editor will:~~

- ~~1. create and mail a Newsletter in the Fall to include a call for papers at the next conference.~~
- ~~2. create and mail a Newsletter in the Spring to include the conference announcement, a tentative program, registration form, and the recommended slate of candidates.~~
- ~~3. create and mail a newsletter at other times as determined by the Executive Committee.~~
- ~~4. serve on the Executive Committee as a non-voting member.~~
- ~~5. serve a three year term.~~

~~B. The Membership Coordinator will:~~

1. — Solicit and recruit new members through the newsletter and other means of communication
 2. — Encourage membership participation in organization conferences and programs
 3. — Maintain a system of campus representatives to facilitate timely electronic and written communication with colleges in the service area.
 4. — perform other related duties.
 5. — serve on the Executive Committee as a non-voting member.
 6. — serve a three year term.
7. — serve on the Executive Committee as a non-voting member.
 8. — serve a three year term.
- C. — The Conference Chairperson will:
1. — recommend the date(s) for the next Annual Conference to the Executive Committee.
 2. — organize and host the next Annual Conference.
 3. — assume the role of Past Conference Chairperson at the conclusion of the Annual Conference.
 4. — serve on the Executive Committee as a non-voting member.
 5. — serve until the end of the conference for which this appointee is the chairperson.
- D. — The Immediate Past Conference Chairperson will:
1. — serve as advisor to the Conference Chairperson and Executive Committee.
 2. — issue a written report at the next Executive Committee meeting on the Annual Conference which that person organized. This report should include recommended changes for future conferences.
 3. — serve on the Executive Committee as a non-voting member.



No the battleship Massachusetts isn't on the program, but maybe you can fit it into your travel plans to the conference. <http://www.battleshipcove.org/>

4. — serve from the end of the conference for which this appointee is the chairperson to the end of the following conference.
- E. — The Webmaster will:
1. — maintain the NEMATYC website.
 2. — consult with the members of the Executive Committee.
 3. — serve on the Executive Committee as a non-voting member.
 4. — serve a three year term.
- F. — Other positions:
- The Executive Committee may create and eliminate other appointed positions and appoint members to fill those positions. The Executive Committee will define each position's duties and term of appointment, and appoint a member to perform those duties.

ARTICLE 7 EXECUTIVE COMMITTEE

A. MEMBERSHIP

The Executive Committee is comprised of the officers, At-Large members, and Article 6 appointees as stipulated below.

B. MEETINGS

1. Frequency

The Executive Committee will meet at least once per semester and at other times as necessary to facilitate the business of the organization. The President will schedule these meetings.

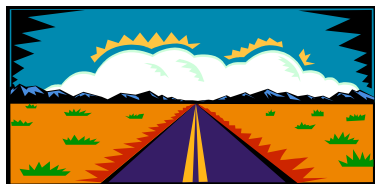
2. Quorum

A quorum is six voting members, which must include two officers and two at-large members.



President Andrew Perry presents on 19th Century math textbooks at the last conference. More pics at http://history.nematyc.info/NEMATYC_2006/NEMATYC_2006_Photos/ . Or go to www.nematyc.org and follow the history link.

NEMATYC NEWSLETTER
Philip Mahler, Editor
Middlesex Community College
591 Springs Road
Bedford, MA 01730



33rd Annual Meeting

NEMATYC 2007

EXPAND YOUR HORIZONS



Bristol Community College

**Fall River, Massachusetts
Friday and Saturday
April 20 – 21, 2007**



Program, registration, and directions are in this newsletter.

Also, check www.nematyc.org for updates.

JOIN NEMATYC

Not a member of NEMATYC? We hope you'll join! See page 13.
Better yet, attend the conference this year! You'll have a great time.