



NEMATYC NEWS

The News is available online at www.NEMATYC.org



Vol. 24, No 1

The newsletter of the New England Mathematical Association
of Two-Year Colleges

Fall, 2015

NEMATYC 2016

42nd Annual Meeting

R3 AT 4Cs T2

Friday and Saturday, April 29-30, 2016

Mary Kehoe Moynihan, Wanda Garner, Co-Chairs

Cape Cod Community College

West Barnstable, MA

Call for Presenter Proposals Inside or
<http://nematyc.info/PROPOSAL/>



From the President
Dave Henry

Welcome back!

We're a month in already and hopefully getting to know our students. New faces, maybe new courses for some of us, and right around the corner for Massachusetts and Rhode Island is the Partnership for Assessment of Readiness for College and Careers (PARCC). Massachusetts and Rhode Island are two of the 14 states that are still on board for this new assessment of math placement, which will take the place of MCAS in Massachusetts. We'll certainly keep you posted on how things progress. Hopefully we'll see some colleagues make a presentation on the subject at our Spring Conference on the Cape April 29th & 30th. Former NEMATYC President Mary Moynihan gave us a spectacular weekend of fun and learning back in 2011. She's graciously offered to have us back, so make sure to put it on your calendar.

Continued on page 3

**From Your AMATYC
Northeast Regional
Vice President**

Ernie Danforth



NEMATYC Colleagues:

As I sit down to write this the temperature outside is approaching 90 degrees. It is warm for September, but since it is September the cold will come soon enough and I know you all remember last winter, so ... no complaints.

First and foremost I want to let you know that I am looking forward to visiting as many of you as I can next Friday evening in Worcester for the fall dinner meeting. My wife Kate and I enjoyed ourselves last year and look forward to a return trip. By the time this is published, the meeting may be past, but I am sure we will enjoy it.

If you haven't already I am hoping you have the opportunity to select a student to be nominated for the AMATYC student scholarship. The nomination must be received by the AMATYC president by October 15th.

Continued on page 3

Call for
Presenters
Inside

NEMATYC 2016

42nd Annual Meeting
Friday-Saturday, April 29-30, 2016

Early Decision
Saturday
Feb 13 2016

R³ AT 4Cs T2

Cape Cod Community College, 2240 Iyannough Rd, West Barnstable, MA 02668

Mary Kehoe Moynihan, Wanda Garner, Co-chairs

Whether it's your first visit or a favored getaway, welcome to Cape Cod. We'll provide good food, a classic Cape Cod beach hotel, some interesting mathematics talks, and the opportunity to meet some new colleagues or reconnect with longtime friends. And if we get a few rays of sunshine, so much the better.

Attend a Friday talk and join us for dinner at the beach. We'll have dinner Friday night at the Commodore House, located on the grounds of the conference hotel, The Corsair and Cross Rip. Join us for breakfast Saturday morning and a full day of talks, rounded out by the business meeting to end the conference. Then, stay another day for free!

The Corsair and Cross Rip Oceanfront Resort, located at 41 Chase Ave, Dennis Port, MA 02639 has a special for April 29th and 30th: "Book two nights and pay for one". If you book a room for the conference (\$125/night plus tax) the second night is free. You don't have to stay the second night but... why wouldn't you! Call (508) 398-2279 to make a reservation. Be sure to mention NEMATYC 2016.

(R³ AT 4Cs T2 is "Relax, Refresh, Renew at the 4-C's x 2") (4-C's is of course "CCCC")

Some pics from NEMATYC 2011, R³ AT 4Cs ☺. The college and hotel are the same.
Lots of pictures at http://history.nematyc.info/NEMATYC_2011/.



Co-Chair **Wanda Garner** (past AMATYC President, current AMATYC Executive Director), **Jack Keating** (Past NEMATYC President, Past AMATYC Northeast Vice President, Conference Chair AMATYC 1993), Co-chair **Mary Kehoe Moynihan** behind the flowers, **Cliff Martin** standing.



The hotel is on the water! Mike Cassie of iLearn surveyed the beach from his room.

YOU are the **M** in STEM

From the President– continued from page 1

I know many colleges have had better times with funding professional development opportunities, but the Cape is a relatively low cost trip and maybe you would get a little help. If you are fortunate to work somewhere that is still providing out of state travel, we would love to see you down in New Orleans at AMATYC Nov. 19-22. However, whatever your situation is, I am sure there is a lengthy approval process, so don't procrastinate. The national conference is a great place to get new ideas, share your ideas, and network with colleagues. Throw in a few beignets from Cafe du Monde, and I don't think you could ask for much more from a conference!

To usher in the fall semester, NEMATYC hosted our seventh fall dinner series with a return to O'Connor's in Worcester. Vice President **Anne O'Shea** coordinated another great event, this time welcoming Gareth Roberts from the College of the Holy Cross. Professor Roberts talk on the Mathematics of Music was intriguing and provided us with some concepts to bring into our classroom, from series, number theory, to basic abstract

algebra. Be on the lookout for his upcoming book from Johns Hopkins press for something new for liberal arts majors. Also thanks to Quinsigamond's **Denise Robichaud**, Southern New Hampshire's **David Cox** and North Shore's **Marsha Pease** for helping run the event.

Back to the Cape. Or, rather, where to next. We are always looking for new places to go, which may allow more members to attend. So whether it is Western Massachusetts, Southern Maine, Vermont, Rhode Island or New Hampshire, reach out to me, or someone else on the board, and we'll figure out a way for you to host the conference in one of the upcoming years. We are looking for 2018 or beyond.

Dave Henry

NEMATYC President
Bristol Community College

From the Regional VP – continued from page 1

Details can be found on the AMATYC website at www.AMATYC.org.

Also Affiliate scholarships are available for one early bird registration for the New Orleans conference. NEMATYC is responsible for determining how the scholarship is awarded, but I hope it is used. It would be a shame to waste it.

For those of you who are AMATYC members elections will take place this fall for President-elect, Treasurer, Secretary, and NE Vice President. The elections for President-elect and NE Vice President are unopposed, but the races for Treasurer and Secretary are contested so I urge you to check out the candidates and vote. These people are your representatives.

Finally I want to encourage you to consider attending the 41st Annual AMATYC Conference in New Orleans November 19-22. If you have never attended an AMATYC Conference, you should seriously consider it. You will get to hear the leading trends, developments, initiatives and programs in mathematics education for the first two years of college and to meet colleagues from all over the country. It is a chance to learn about what is on the cutting edge and a chance to pick the brains of these leaders. One thing that I know from personal experience over my previous 26 years of attending this conference is that everyone is willing to share and everyone is willing to listen. This together with the location makes the conference a can't-miss opportunity. Hope to see you all there as we Jazz It UP!

Submit a presentation proposal for the March 2016 NEMATYC meeting at <http://nematyc.info/PROPOSAL/>.

Do you know that the NEMATYC web site is at www.NEMATYC.org, and maintains lots of good information about your organization?

Other places you may want to visit.

| | |
|---------|--|
| AMATYC | www.AMATYC.org |
| NEMATYC | www.NEMATYC.org |
| NCTM | www.NCTM.org |
| MAA | www.MAA.org |
| NES/MAA | sections.maa.org/northeastern/ |
| ASA | www.AMSTAT.org |
| ATMNE | www.ATMNE.org |
| NADE | www.nade.net/ |

Focus on a Colleague – Aisha Arroyo

In past issues we have occasionally featured a colleague, and in particular all (I believe) of the Project ACCESS fellows from NEMATYC colleges. The following reflects an email interview of the latest fellow, **Aisha Arroyo**, Massasoit Community College.

I received my B.S. in Applied Mathematics from the Georgia Institute of Technology and my M.S. in Mathematics from the University of Illinois at Urbana-Champaign. I was a Teaching Assistant at Georgia Tech for two years and at UIUC for my first year. After moving to Boston I taught part-time and full-time temporary at Wentworth Institute of Technology and part-time at Bunker Hill Community College. I started working full-time at Massasoit Community College in Fall 2013.

One of my favorite things about working at Massasoit is the wide variety of courses I get to teach. Each semester I typically teach a developmental-level course in a self-paced format. I really enjoy the self-paced format as it allows students to work at their own pace and even complete multiple courses in the same semester. It also really enforces to students that they need to be doing homework and practicing math outside of class! I also typically teach a Calculus course. I very much enjoy teaching calculus although the sheer amount of material and the fact that the material is completely new to most of the student tends to require more of a lecture based approach. I try to make my lectures interactive to allow students to discover some of the theorems and properties on their own before formally introducing them in class. My third class each semester is a bit of a wild-card. I have taught Topics in Mathematics I and II (which cover everything from Probability to the Metric System) and will be teaching a math course for Culinary Arts majors in the Spring. I consider these courses to be more of the fun side of math. These courses are not as rigorous as is required in Calculus and let students explore new branches of mathematics and see the real world usefulness of mathematics. Finally, I tutor in the Academic Resource Center on campus. This allows me to work one-on-one with students in a very different setting than the classroom.

I have attended the last two AMATYC meetings along with several of my coworkers. I was encouraged to apply to project ACCESS by **Jack Keating** who was the Northeast Regional VP for AMATYC for several years and continues to be involved in both AMATYC and NEMATYC. I was drawn to the fact that Project ACCESS has each fellow design and implement a project in one of your classes. I try to innovate and experiment in all of my classes, but am very excited by this opportunity to conduct a more formal project and work with other Project ACCESS fellows.

Aisha

By the way you will find Aisha on page 14 of the Spring 2014 edition – she tied for second place (with **Aaron Levin** of Holyoke CC!) in the Faculty Math League competition at AMATYC 2013 in Anaheim, and page 14 of the Spring 2015 issue, when she tied for first place at AMATYC Nashville! She is also currently serving on the NEMATYC Executive Committee as an at-large member.



JOINT NATIONAL SUMMIT ON DEVELOPMENTAL MATHEMATICS

The American Mathematical Association of Two-Year Colleges (AMATYC) and the National Association for Developmental Education (NADE) are hosting a national summit on developmental mathematics. It is planned to precede the NADE conference in Anaheim in March 2016. It begins Tuesday, March 15 at 1 p.m., with a panel discussion led by representatives of AMATYC, NADE, the National Center for Developmental Education, the Carnegie Foundation, the Dana Center and the Mathematical Association of America. Concurrent sessions will follow that afternoon and all day on March 16.

The planned pre-conference sessions are not a replacement for the NADE national conference that will follow. As the program is finalized, information will be made available on the NADE and AMATYC websites. Registration information will be available in the fall of 2015 at nade2016.net and amatyc.org.

So Descartes goes into a bar late one night for a beer. At closing time, the bartender makes Last Call and asks him, "Get you another?" Descartes replies, "I think not." And disappears.

How do you know when you are talking to an extroverted mathematician? ... He looks at *your* shoes when he talks to you.

Fall Evening Speaker Event

The 7th Annual NEMATYC dinner meeting was held September 18, 2015 at O'Connor's Restaurant in Worcester. The featured speaker was Professor **Gareth E. Roberts** of the College of the Holy Cross, who spoke on *Math and Music: The Greatest Hits*. Vice president **Anne O'Shea**, North Shore CC, coordinated the event, with the assistance of Quinsigamond's **Denise Robichaud**, Southern New Hampshire's **David Cox** and North Shore's **Marsha Pease**.

As reported by Treasurer David Cox, "The fall dinner meeting was another splendid evening. Thank you to the organizers! There were 30 members and 5 new members there."



Professor Roberts presenting.



Vice President Anne O'Shea and Treasurer David Cox (back to camera) and others enjoy the great food.

Memorial FRANK BATTLES

It is sad to report the passing in August of a long-time NEMATYC attendee, colleague and friend, Frank Battles. Frank taught for more than 40 years at the Massachusetts Maritime Academy, and retired a few years ago. Frank was best known for his contributions to the Northeast Section of the MAA, where he served for many years as newsletter editor. (In fact he succeeded me in that position.) The section established the Frank Battles Lecture Series in 1998 to honor his many services to the section, and a lecture in the series is presented at the annual Spring meeting of the section <http://sections.maa.org/northeastern/lecturers.html>. Although best known for his contribution to the Section, he attended NEMATYC meetings for many years, going back at least to 1983. Frank was also our first campus contact at Mass Maritime and served NEMATYC that way for many years, up to his retirement. He also attended occasional AMATYC annual meetings. It was always nice to see his friendly face at a meeting, which he attended even after his retirement.

Phil Mahler

NEMATYC HAS A FACEBOOK PAGE

Autumn Alden, NEMATYC Social Media Director maintains NEMATYC's Facebook page.

If you want to get news about NEMATYC and math and you're on Facebook, search for New England Mathematical and you'll find us.

If you "Like" the page, you'll see items of interest to NEMATYC members and friends. If you're not on Facebook, please share this information with your colleagues.



Follow NEMATYC on Twitter! Our name is NEMATYC.

NEMATYC STUDENT MATH LEAGUE REPORT

Mary Kehoe Moynihan (Cape Cod CC), Student Math League Awards Coordinator

RECOGNITION AWARD PROGRAM

The purpose of the NEMATYC Student Mathematics League Recognition Awards Program is to foster extracurricular mathematics learning opportunities for students through participation in the AMATYC Student Mathematics League (SML). The top-placing student in the AMATYC SML Competition at each school in NEMATYC's region receives a

\$100 award. The only criteria is the student must participate in both the Fall and Spring competitions.

The top school receives the Lois A. Martin NEMATYC Student Mathematics League Award.

Offer Your Best Students A Chance To Compete Nationally

Highlights and History

Middlesex CC took top honors for the highest team score among NEMATYC participants in 2013-2014. Middlesex was 4th among all AMATYC SML schools in the Northeast region. Middlesex placed first in both the NEMATYC and Northeast region in 2007, an honor shared when it tied with Massasoit.

Join the Fun

The first test of the 2015-2016 competition will be given between Friday, October 16 through Saturday, November 7. If your college does not have a team, please consider joining the

collegial rivalry among NEMATYC schools. Your involvement can be as simple as just administering the tests or you might include practice sessions and even advise a campus mathematics club. Your students will thank you for giving them the opportunity to compete. It is free for institutional members, or a one-time fee of \$50 after Sept. 30. Visit www.amatyc.org, or contact Mary Kehoe Moynihan for more information. MMoynihan@capecod.edu

NEMATYC 2014-2015 Student Math League Individual and College Standings*

| Rank | Student | College | Score | Rank | College | Score |
|------|--------------------|-----------------------------|-------|------|-----------------------------|-------|
| 1 | Minwoo Yoo | Bunker Hill CC | 71.5 | 5 | NHTI - Concord CC | 138 |
| 2 | Daniel Glassman | Springfield Technical CC | 47.5 | 6 | Springfield Technical CC | 134.5 |
| 7 | Nicholas Giacchino | Middlesex CC | 37 | 7 | Middlesex CC | 131 |
| 11 | Zachery Dias | Bristol CC | 31.5 | 8 | Massasoit Community College | 127.5 |
| 13 | Jason Webster | Bristol CC | 30 | 9 | Greenfield CC | 119.5 |
| 14 | Gunnar Nichols | NHTI - Concord CC | 29 | 9 | Bristol CC | 119.5 |
| 15 | Alexander Turner | NHTI - Concord CC | 28.5 | 12 | Cape Cod CC | 111.5 |
| 16 | Tasaday Green | Greenfield CC | 27.5 | 13 | Holyoke CC | 101 |
| 16 | Roy Gernhardt | Massasoit Community College | 27.5 | 15 | Bunker Hill CC | 71.5 |
| 18 | Danielle Brewer | Springfield Technical CC | 27 | 17 | Roxbury Community College | 48 |
| 19 | John Curl-Larson | NHTI - Concord CC | 26.5 | 18 | North Shore CC | 41.5 |
| 20 | Christopher Taylor | NHTI - Concord CC | 26 | 19 | Mount Wachusett CC | 28.5 |

*Rankings are for NEMATYC participants in the AMATYC Northeast Region top 20

New registrations are welcome at AMATYC anytime during the testing year. However, to insure receiving materials in time to compete in the first round and to avoid the late fee, register online by September 30.

Dates for the 2015-2016 Student Mathematics League Math Competition

Round 1: Friday, October 16 through Saturday, November 7, 2015

Round 2: Friday, February 12 through Saturday, March 5, 2016

CALL FOR NOMINATIONS

Do you like getting together and having a good time with a great group of people? Are you a mathematics educator? If so, then NEMATYC is the group for you and the NEMATYC Executive Committee wants you to join our enthusiastic, friendly group.

Every year, during the business meeting at the annual conference, NEMATYC holds elections for open positions. At the 2016 conference, we will need to fill a number of Executive Board positions. The positions that will be available are:

President, Vice President, Secretary, Treasurer
and
Two Executive Committee At-large positions

We are looking for you to help us fill these roles. Working with the NEMATYC Board is a rewarding and fun experience, and is a wonderful way to put your professional dedication into action! It's great for you, your department and college, and the New England mathematics community. The time commitment includes attending the annual conference (which hopefully you would attend anyway) and Board meetings that occur three times per year. These meetings are typically held in September, January, and June.

Here is a brief overview of the available positions (see the Constitution at www.NEMATYC.org for a more detailed description of each position).

President

- Two-year term
- Schedule and preside over Executive Committee meetings
- Assume the role of past-president at the conclusion of the term

Vice-President

- One-year term
- Conducts meetings and fulfills the obligations of the President if the President cannot
- Assumes Presidency if the President is unable to continue in office

Secretary

- Two-year term
- Responsible for the official correspondence of the Association
- Take minutes of the meetings of the Association
- Maintain an up-to-date copy of the Constitution

Treasurer

- Three-year term.
- In charge of all the financial records and funds of the Association.

At-Large Member (two to be elected)

- Two-year term
- Attend Board meetings
- *A great way to get involved with NEMATYC!!*

Constitutional Duties of the Executive Committee:

1. Certify nominees as candidates for elected positions.
2. Review and present new business items to the annual meeting.
3. Review all constitutional amendments and bring their recommendations to the annual meeting.
4. Select the site and the date(s) of the annual conference.
5. Maintain the policy manual.
6. Perform all other duties needed to maintain the well-being of the association within the limitations of the constitution.

Please contact Past President **Meredith Watts** at
MWatts.math@gmail.com

for questions, information, or to place your name – or that of a colleague – into nomination!

**Early Decision
Deadline
Sat Feb 13**

Call for Presenters
42nd Annual NEMATYC Meeting
 Cape Cod Community College – West Barnstable, MA
 Friday–Saturday, April 29-30, 2016

Easiest for everyone

R³ AT 4Cs T2

Early Decision Deadline: Saturday, February 13, 2016

EASIEST! Submit Your Proposal Online at <http://nematyc.info/PROPOSAL/>

Suggested themes: STEM starter programs, Data Science in the first two years, Vision Project course revisions, boot camps, using math in other disciplines, online college math labs/math tutoring, online/blended courses, Gateway Programs, teaching techniques and learning styles, cutting edge software/technology, modeling data, service learning, flipped classrooms, emporium classroom or other accelerated classrooms, and K-12 and college collaboration, to name a few.

Presenter: _____

Note: The registration fee for ONE presenter per presentation will be waived. Please specify which one if there are multiple presenters. For multiple presenters, please provide the following information for EACH presenter. Use additional pages as needed.

Contact information:

College or affiliation _____

Contact Address (College Home) _____

Telephone: _____ E-mail _____

| | | | | |
|--|------------------|------------------|--------------------|---------------|
| Time preference: Please indicate a first and second choice. | | | | |
| | Friday afternoon | Saturday Morning | Saturday Afternoon | No Preference |

| | | |
|--------------------------------|----------------|---|
| Length of presentation: | ___ 45 Minutes | Workshops, short seminars, discussion panels, poster sessions are encouraged. |
| | ___ 90 Minutes | |

Presentation Title: _____

Abstract: Normally 50 to 100 words. Please attach on a separate sheet.

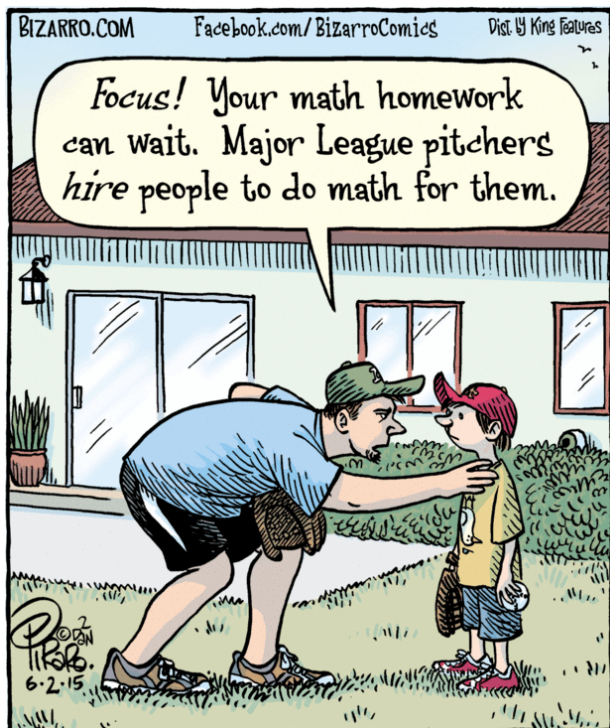
Biography: Please supply a 25 to 50 word biography of each speaker, on a separate sheet.

Equipment/technology needs: _____

If you need additional information or have any questions, please call Wanda Garner at 831.479.6329 or email her at wagarner@cabrillo.edu .

Proposal Early Decision Deadline Saturday, February 13.

| | |
|---|---|
| Mail to: Wanda Garner, Dean Natural & Applied Sciences Division Cabrillo College 6500 Soquel Dr Aptos, CA 95003 | Online submissions preferred. Email submissions accepted. Please include all of the above information. Email to wagarner@cabrillo.edu All submissions will be acknowledged by email. |
|---|---|



Used with permission
© BIZZARO © 2015 Dan Piraro, Dist. By King Features

*to quote Radar O'Reilly in M.A.S.H.

This material is from http://www.guidebookamerica.com/gb/ma/cape_cod/trivia.htm and elsewhere.
Answers on page 12.

Miscellaneous

I just read a biography of Jefferson Davis. I am a history buff and that terrible period of our history is very interesting. The text says this of Davis' wife, Varina, describing John C. Calhoun, famous statesman, this way:

Varina was deeply impressed by Calhoun's forceful personality, his "eagle eyes" that looked straight ahead, his great mane of white hair pushed back from his forehead, his strong emaciated countenance, his tall slender figure, and his kindly manner in speaking to her. Nevertheless, she noted that his voice was not pleasant and that he spoke rapidly and in the manner of a professor of mathematics, with no attempts at rhetoric or ornament or appeal to the emotions, and with few gestures. She did not perceive him as dominated by personal ambition, only by his theories

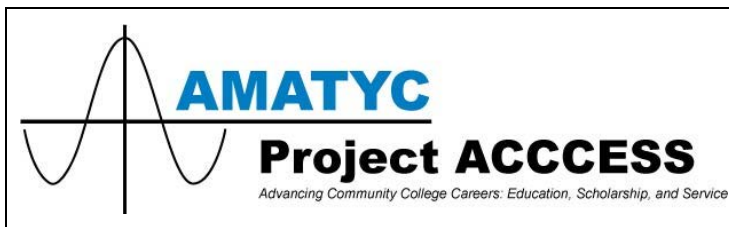
The author describes the famous "Stonewall" Jackson as having been an eccentric professor of mathematics at the Virginia Military Institute. Actually he taught math and physics in a course called "Natural and Experimental Philosophy", described elsewhere as "brutally difficult", and notes that his poor teaching method didn't help.

Test Your Knowledge about "the Cape of Cod"*

You don't want to arrive ignorant about Cape Cod, they may not let you cross the bridge. (Turn your computer off for this test, or you get no points at all. ☺)

True or False?

1. The Pilgrims first landed in Provincetown, not Plymouth.
2. Wellfleet contains the only town clock which rings ship's time.
3. Hyannis was originally named Large Cod Village.
4. The Cape Cod Canal is the world's widest sea level canal.
5. The speed of the current in the Cape Cod Canal averages 5.2 miles per hour.
6. Heritage Museums & Gardens of Sandwich owns and exhibits the most important collection of American antique automobiles in the United States.
7. Eugene O'Neill's first plays were written and produced in Provincetown.
8. The highway rotary was first used on the Cape.
9. The paper bag was first created in Dennis, Cape Cod, in 1867.
10. Driving is forbidden on all the beaches of Cape Cod.
11. The current in the Cape Cod Canal changes direction every 6 hours.
12. The creation of the Cape Cod National Seashore was the first time the federal government purchased land for a park.
13. At 252 feet Provincetown's Pilgrim Monument is the tallest all-granite structure in America.
14. The Wizard of Oz premiered on Cape Cod.



is a mentoring and professional development initiative for two-year college mathematics faculty. The project's goal is to provide experiences that will help new faculty become more effective teachers and active members of the broader mathematical community.

From the Archives at <http://history.nematyc.info/> .

by Phil Mahler, Editor

The NEMATYC Conference: 40, 30, 20, 10 years, and... 1 Year, Ago



NEMATYC 1976 I do not have any record of a NEMATYC 1976 meeting, if one was held. NEMATYC was still very young, existing under that name only since 1974.

NEMATYC 1986 Chairing the 1986 Annual Conference was Dolores Riollano of Post College, Waterbury, Connecticut. The conference fee was \$18, and it was held at Post College* in Waterbury, CT, on March 22, 1986. The theme was **Toward The 21st Century: Mathematics, Interface With The Future**. Sidnie Feit of Carlsen Company gave the keynote, The Global Network. A sample of the presentations is

- Algebra I And Logo: Maximizing The Learning Environment, Michael Rood, Asnuntuck CC
- A Sabermetric Model For Predicting The Baseball Standings, Stephen Krevisky, Middlesex CC
- A 'Rational' Approach Toward The Teaching Of Mathematics: An Exploration Of Some Psychological Aspects Of The Mathematics Classroom, Maureen O'Grady, Suffolk County CC
- Integer Arithmetic Using Machine Code, Richard Johnson, Mass Bay CC
- The Electronic Blackboard, Hank Harmeling, North Shore CC

*Post College, founded in 1890, was Teikyo Post University for a while, then Post University, its current name.

NEMATYC 1996 was held at Dean College, Franklin, Massachusetts, on March 22 - 23, 1996. The theme was **Math for a New Millennium**. Vice president and program chair was Elaine Previte.

Thomas Banchoff of Brown University was the banquet speaker, and Mary Margaret Shoaf-Grubbs gave a keynote address on Saturday. A sample of presentations:

- TI-92 Workshop - Introduction to the TI-92, Philip Mahler, Middlesex CC, Rick Butterworth, Massasoit CC
- Social Choice and Decision Making: Learning Mathematics through Modeling Real-World Situations, Walter E. Stone, Lesley College
- Teaching Calculus with the Graphing Calculator, Marvin E. Stick, University of Massachusetts at Lowell
- The Application of Cartesian Tensors to Classical Vector Analysis, David C. Mello, Johnson & Wales University
- Using Projects to Teach Developmental Mathematics, Dawn Kindel, Newbury College, Carol Lerch, Newbury College
- Logical Thinking and Problem Solving in Statistics, Gail St. Jacques, Johnson & Wales University, Sandra Weeks, Johnson & Wales University
- Back to the Future: 1962-66 versus 1992-96, Domenico Rosa, Teikyo Post University
- Developmental Mathematics: Self-Paced with a Push!!, Roberta Demers, Dean College, Luanne Giorgio Galt, Dean College, Michael Mongiat, Dean College

NEMATYC 2006 was held at Southern New Hampshire University on Friday and Saturday, April 21, 22, 2005. The theme was "Building A Better Math Class". The conference co-chairs were **David Cox** and **Alec Ingraham**, both of SNHU.

The picture is of former NEMATYC President Andrew Perry presenting on 19th century math textbooks. Lots of pictures at http://history.nematyc.info/NEMATYC_2006/ .

Besides a great program, attendees had an opportunity to visit a Frank Lloyd Wright house, the Zimmerman House, as tours during dinner.

Some of the presentations were:

- Teaching Mathematics to Art College Students, *Ben Blum, Massachusetts College Of Art*
- Redesigning College Algebra Delivery from Direct Instruction to a Computer Environment, *Brian Beaudrie, Plymouth State University*
- Motivating Math Learning with Robotic Brains, *Lundy Lewis, Southern New Hampshire University*
- Exploring Calculus, A Guided Discovery Approach, *Joanna Kowsakowski, Lasell College*



- Web Based Homework, Quizzing and Course Management for Mathematics, *Kevin O'Brien, Addison Wesley and Prentice Hall (Commercial Presentation)*
- Early American Arithmetic and Algebra Books , *Andrew Perry, Springfield College*
- Using Excel In Finite Mathematics, *Florence Chambers, Toni Parise, Southern Maine Community College*
- The Model Drawing Approach to Problem Solving in the Developmental Mathematics Classroom, *Walter Stone, North Shore Community College*
- Laboratory-Based Learning to Build Conceptual Understanding of Rational Numbers, *Adele Miller, Central Connecticut State University*
- Join the Mathematics Across the Community College Curriculum Project, *Kim Rheinlander, Dartmouth College*
- Who Are the Best Sluggers in Red Sox History? , *Steve Krevisky, Middlesex Community College*

NEMATYC 2015 NEMATYC 2015 was held at Quinsigamond Community College, Worcester, MA, on Friday and Saturday, March 27 - 28, 2015. The theme was "STEM Rests on Math". The conference cochairs were Denise Robichaud and Steve Zona of QCC.

Besides a great program, attendees enjoyed a Friday evening event at the Worcester Historical Museum. At lunch on Saturday they enjoyed a talk by Soha Hassoun of Tufts University on "Computational Modeling and Design for Engineering".



Co-Chair Steve Zona talks with several attendees at the Friday evening reception.



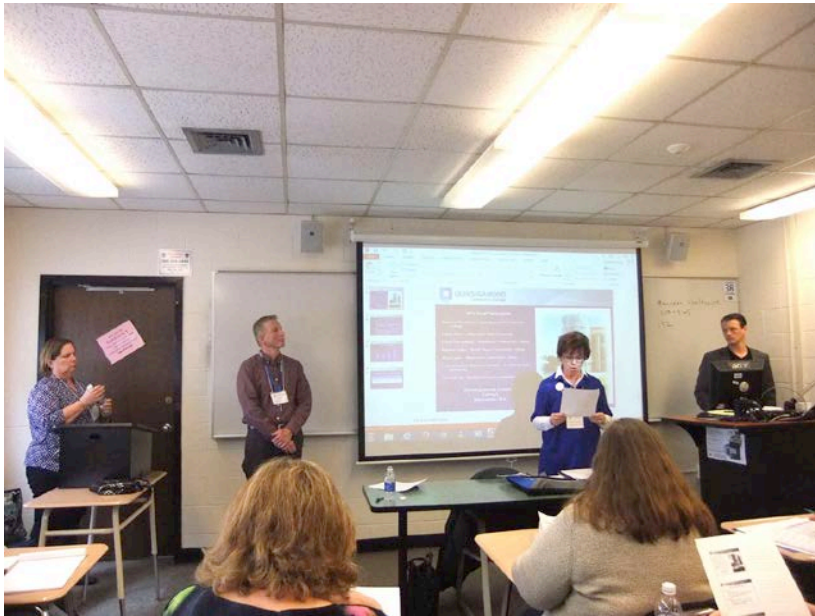
Bob Cantin, MassBay and Ken Takvorian, Mt Wachusett, discuss Ken's Hawaiian shirt for this year, left rear.



Phil Mahler, Middlesex, Cliff Martin, Massasoit, Mary Moynihan, Cape Cod, Wanda Garner, Cabrillo College listen to opening remarks by Quinsigamond President Gail Carberry.



Professors Andreana Grimaldo and Joseph Babu of Quinsigamond sell tickets for the great door prizes, including another David Cox corkboard!



The Mass Board of Higher Ed is considering using high school GPA for placement into mathematics classes. It piloted a program in the community colleges this past year. Presenting on this topic were from left to right Eileen Perez, Worcester State University, Jim Sullivan, Northern Essex CC, Maureen Woolhouse, Quinsigamond CC, Alex Cotter, Massasoit CC.

Always lots more history and pictures at <http://history.nematyc.info/> .

DO YOU WANT TO BE THE NEWSLETTER EDITOR? I've done this for over 10 years and would be happy to see another person doing it. Just let me know of your interest. Phil Mahler

| | |
|---|--|
| <p>Join NEMATYC Not a member of NEMATYC? Join by sending the \$10.00 annual membership fee, payable to NEMATYC, to the NEMATYC Treasurer.</p> | <p>David Cox, NEMATYC Treasurer Southern New Hampshire University 2500 N. River Road Manchester, NH 03106</p> |
|---|--|

Answers to the Quiz on page 9.

1. The Pilgrims landed in Provincetown first and stayed about a month. (True)
2. Wellfleet contains the only town clock which rings ship's time. (one, five and nine o'clock are two bells; two, six and ten o'clock are four bells; three, seven and eleven o'clock are six bells; and four, eight and twelve o'clock are eight bells. Half hours are struck by adding one stroke to the corresponding even hours). Ripley's Believe It or Not has listed Wellfleet's town clock's method of ringing time, as have many newspapers and magazines. (True)
3. Hyannis was originally named Cod Village. (That would be news to me. False)
4. The Cape Cod Canal is the world's widest sea level canal. (True)
5. The speed of the current in the Cape Cod Canal averages 5.2 miles per hour. (True. So, one boat leaves upstream and another boat...)
6. Heritage Museums & Gardens of Sandwich owns and exhibits the most important collection of American antique automobiles in the United States. (True)
7. Eugene O'Neill's first plays were written and produced in Provincetown. (True)
8. The highway rotary was first used on the Cape. (That would be news to me. False)
9. The paper bag was created in Dennis, Cape Cod, by Luther Child Crowell and patented by him in 1867. (True)
10. Driving is forbidden on all the beaches of Cape Cod. (False The off road vehicle corridor at Cape Cod National Seashore is comprised of miles of unspoiled beaches managed by the National Park Service to accommodate ORV enthusiasts and other beach goers.)
11. The current in the Cape Cod Canal changes direction every 6 hours. (True. Now that would make for an interesting word problem.)
12. The creation of the Cape Cod National Seashore, which was formerly private town and state owned land, was the first time the federal government purchased land for a park. (True)
13. At 252 feet Provincetown's Pilgrim Monument is the tallest all-granite structure in America. (True. Have you climbed it?)
14. Cape Cinema, the 92-seat theater on the grounds of the Cape Playhouse, with its 6,400 square-foot Art Deco ceiling mural of Prometheus opened July 1, 1930, world-premiering The Wizard of Oz. Its mural is the largest in North America! (True)

News from our Campuses and Colleagues

Bristol Community College

Dave Henry reports that **Elizabeth (Beth) Donovan** has left Bristol CC and moved on to an Assistant Professorship in the Mathematics and Statistics Department at Murray State University, Murray KY. Beth was serving as NEMATYC conference exhibitor chair. We wish her the best, and perhaps we'll see her at AMATYC meetings.

Middlesex Community College

Phil Mahler reports a major modification to our developmental math emporium curriculum. Several years ago Middlesex replaced our Fundamentals, Algebra I and Algebra II courses with MyMathLab, using 12 modules, roughly 4 for each of those courses. These 12 modules are entitled our RampUp program. Students wishing to take statistics had to then take Intermediate Algebra first or our math modeling course first.

This year the department initiated a major change. The first eight modules remain the same, and as in the past a student may place into the first, fifth, or ninth module, or possibly above that. But now there are two different tracks starting at module 9. One, with four modules, is dedicated to preparation for our Statistics and Liberal Arts for Mathematics courses and the other track of six modules replaces the previous modules 9-12, and also our Intermediate Algebra course. Thus students who do not need the intensive algebra prep for calculus have a shorter, more appropriate path to prepare for statistics or liberal arts mathematics, and students heading towards calculus can possibly and hopefully save themselves a semester. Needless to say we hope this improves student success in each area. The collaborative effort was led by **Joanna DelMonaco** and **Mike Williamson**.

Mount Wachusett Community College

Ken Takvorian reports that **Peter Olszak** has joined the college as a full time Professor of Math and Physics. Peter also volunteers at the Boys and Girls Club where he helps with science programs and runs the chess club. He has BS in Physics Engineering WPI and a PhD in Optics from the College of Optics and Photonics at the University of Central Florida. Prof. Olszak has 10+ years of research and development experience in the field of spectroscopy and lasers and has authored 12+ publications.

Festus Kiprono a math instructor at Mount Wachusett CC and his wife Pauline our the proud parents of a baby girl, Nehema Chebet Kiprono, born in late July in Eldoret, Kenya. He originally came to America as a high school student because of his athletic ability. Then went on to earn his Bachelors and Masters.

Paul Laverty, a reading and math faculty member for 40 years at Mount Wachusett CC, retired in May. He is enjoying life golfing and clamming on the Cape while assisting his wife in her musical endeavors. Recently, he served as the chairperson for the MWCC College Accreditation Committee. He has served on numerous teams accrediting New England Colleges.

Quinsigamond Community College

Denise Robichaud reports on new or continuing initiatives of the QCC Math Department.

- GPA Pilot: In the Fall of 2014, approximately 250 students that took the Accuplacer Test and placed into Developmental mathematics BUT had a High School GPA of 2.7 (or 2.4 with 4 years of math), were placed into college-level mathematics. The same pilot will be running during Fall 2015.
- Beginning Algebra to Statistics: In Spring 2015 the math department decided to pilot the idea of having the prerequisite of MAT 122 Statistics be MAT 095 Beginning Algebra instead of MAT 099 Intermediate Algebra. The pilot continues in Fall 2015.
- College Algebra with Intermediate Algebra: As part of Complete College America's initiative to accelerate students, for the last couple of semesters we have run a College Algebra course with Intermediate Algebra objectives woven in. The course continues in Fall 2015.
- 7-week Math Courses: As part of Complete College America's initiative to accelerate students and to move them into their STEM courses quickly, 7-week terms have been created for select courses. A student would sign up for a 3-credit MAT 099 Intermediate Algebra course but will meet six hours for seven weeks. Then, they could move into a 3-credit MAT 100 College Algebra course that will, again, meet six hours for seven weeks. By "doubling up", a student can move through two courses in one semester. The pilot runs for the first time in Fall 2015.
- Accuplacer Starting Point Change: Starting in late Spring 2015, the entry point for a new student into the Accuplacer Placement Test was changed from the Basic Mathematics test to the Algebra test. Now, students begin with the Algebra test and either move up to college-level math, stay at the developmental algebra level, or move down and take the Basic Math test. Even if a student does poorly on the algebra test and moves down to the basic math test, they can still score high enough on the basic mathematics test to put them back into the algebra level.
- Emporium Classrooms: We continue increasing the number of emporium classes at the developmental math level.

Visit the NEMATYC Website

Webmaster **Mary Sullivan**, Cape Cod CC, maintains the NEMATYC website. Go to <http://www.nematyc.org> and browse the links: Conference, Executive Board, Membership, On-line Newsletters, Member Colleges, Mathematics Associations, History, Documents, Job Opportunities, E-mail for NEMATYC.

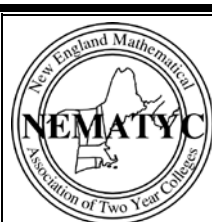


NEMATYC EXECUTIVE COMMITTEE – Fall 2015

| | | |
|---|---|--|
| President David Henry Bristol CC David.Henry@bristolcc.edu 508.678.2811 x3425 14-16 | Vice President Anne O'Shea North Shore CC AOshea@northshore.edu 978.762.4000 x6264 15-16 | Past President Meredith Watts MassBay CC MWatts.math@gmail.com 508.270.4264 14-16 |
| Secretary Marsha Pease North Shore CC MPease@northshore.edu 978.762.4000 x5495 14-16 | At-Large Member Robert Cantin MassBay CC RCantin@massbay.edu 508.270.4211 14-16 | At-Large Member Aisha Arroyo Massasoit CC AArroyo@massasoit.mass.edu 508.588.1637 15-17 |
| Treasurer David Cox Southern New Hampshire U D.Cox@snhu.edu 603.668.2211 x2223 13-16 | At-Large Member Alex Cotter Massasoit CC ACotter1@massasoit.mass.edu 508.588.9100 14-16 | At-Large Member Alice Wilson Bristol CC Alice.Wilson@bristolcc.edu 508.678.3782 15-17 |

Appointed NEMATYC Positions

| | | |
|--|---|--|
| Conference Co-Chair Mary Kehoe Moynihan Cape Cod CC MMoynihan@capecod.edu 508.362.2131 x4471 15-16 | Past Conference Co-Chair Denise Robichaud Quinsigamond CC DRobichaud@qcc.mass.edu 508.854.4373 15-16 | Membership Chair Maria Arambel Middlesex CC ArambelM@middlesex.mass.edu 781.656.3126 12-15 |
| Conference Co-Chair Wanda Garner Cabrillo College wagarner@cabrillo.edu 831.479.6329 15- | Past Conference Co-Chair Steve Zona Quinsigamond CC SteveZ@qcc.mass.edu 508.854.4408 15-16 | Student Math League Coordinator Mary Kehoe Moynihan |
| Webmaster Mary E. Sullivan Cape Cod CC MSulli01@capecod.edu 508.362.2131 12-15 | Newsletter Editor Philip Mahler Middlesex CC MahlerP@middlesex.mass.edu 781.280.3861 10-13 | Social Media Director Autumn Alden Bristol CC Autumn.Alden@bristolcc.edu 508.678.2811 12-15 |
| Conference Exhibitor Chair – vacant | | |
| AMATYC Regional Vice President Ernie Danforth , Corning CC, 1 Academic Dr, Corning, NY 14830 danforth_e @corning-cc.edu | | |



The NEMATYC Newsletter is issued twice a year, in the Fall and in the Spring. Suggestions and submissions may be directed to the president or the editor.

NEMATYC NEWSLETTER
 Philip Mahler, Editor
 Middlesex Community College
 591 Springs Road
 Bedford, MA 01730-1197