



NEMATYC NEWS

The News is available online at www.NEMATYC.org



Vol 22, No 1

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

Fall, 2013

On the Road with Math

NEMATYC 2014

40th Annual Meeting

Friday and Saturday, April 4-5, 2014

Maria Arambel, Dora Ottariano, Co-chairs

Middlesex Community College

33 Kearney Road

Lowell, MA 01852



Call for Presenter Proposals Inside or

<http://nematyc.info/PROPOSAL/>



From the President
Meredith Watts

Welcome back!

For those of you who attended the Fall Dinner Meeting, I hope you enjoyed the talk by **Tom Tucker** about Differentials in Exile. The Dinner Meeting and speaker were arranged by **Dave Henry** of Bristol CC and **Mary Moynihan** of Cape Cod CC. **Denise Robichaud** of Quinsigamond CC helped out with registration. Thanks to them for their hard work! Tom Tucker, the Hetherington Chair of Mathematics at Colgate University, spoke about how differentials have been banned from the first two semesters of calculus, mostly for foundational rather than practical reasons. (FYI Tom has graciously allowed us to put his slides on the NEMATYC website.) To all those who were able to attend, it was lovely catching up with old faces and meeting new ones. To all those who were unable to attend, we hope to see you at the Spring Conference at Middlesex Community College—see the Co-Chairs column in this newsletter for more information!—or in Anaheim, California for the AMATYC 2013 Conference October 31 - November 3. By now,

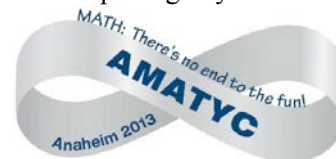
From Your AMATYC
Northeast Regional
Vice President
Jane Tanner



NEMATYC Colleagues:

Wasn't today a gorgeous fall day with a bright blue sky and the trees that have just begun to change their colors? Of course we won't be having many more of these days, but you might have four or five days of beautiful sunshine in southern California if you decide to attend the 39th Annual Conference in Anaheim, California, October 31 through November 3! Its theme is "MATH: There's No End to the Fun!" If you have been to an AMATYC conference, you will definitely vouch for this statement.

And, since the opening day of the conference just



happens to be Halloween, be sure to wear a costume and enter the contest in the hospitality room.

Continued on page 3

Continued on page 3



Middlesex Community College

33 Kearney Square
Lowell, MA 01852

Friday and Saturday
April 4th and 5th

**Call for
Presenters
Inside**

NEMATYC 2014

40th Annual Meeting

On the Road with Math

Maria Arambel, Dora Ottariano, Co-Chairs

**Call for
Presenters
Inside**

We are happy to announce that Middlesex Community College will be hosting the NEMATYC 2014 Conference on April 4th and 5th at its Lowell, Massachusetts campus.

The theme of this year's conference is "**On the Road with Math.**" National trends in Mathematics education place a strong emphasis on acceleration through developmental math and providing students with multiple



pathways (roads) that will prepare them more fully for their chosen careers or future studies. A "one path fits all" approach for all students is no longer appropriate.

We encourage you to **share your experiences** in meeting the challenges presented by these changes. What new classroom models are you and your colleagues currently developing: acceleration through modularization; acceleration through targeted interventions; contextualized delivery; co-requisite support



models; flipped classrooms; others? What difficulties have you encountered in implementation? Or maybe you are just getting started. Wherever you are in your journey on the road, the opportunity to collaborate and discuss with your peers at the annual NEMATYC conference is always an enjoyable and worthwhile experience.



Kerouac Park

What better place to start our journey than Jack Kerouac's Lowell. Our campus is centrally located and many museums, restaurants, theaters, and parks are within walking distance. A block of rooms has been reserved at the UMass Lowell Inn and Conference Center for only \$99 for Friday night. Stay there on Saturday, too, and explore the city after the conference is over. The hotel offers free parking. (Hotel, parking and conference are all contiguous and you can easily walk to the Lowell national park and museums.)



Boot Mill and Trolley

After the Friday afternoon presentations, we will go on a trolley tour of Lowell, followed by a visit to the Boot Mills Museum and appetizers at a local restaurant. One of the Lowell National Historical Park rangers will join us to tell us all about this wonderful city and its rich history.

On both Friday and Saturday, we will have many interesting and informative presentations. We will welcome Professor **Steve Pennell**, from UMass Lowell, who will be our keynote speaker at Saturday's lunch. Professor Pennell, in keeping with the theme, will be speaking about Hungarian mathematician, Paul Erdős. Erdős did not have a home and traveled from place to place, visiting, working, and writing with other mathematicians. Do you know someone who has an Erdős number?

Get your bags ready, mark your calendars, and prepare for a weekend of fun and learning! We can all benefit from your experience in the classrooms, so please consider submitting a proposal for a presentation and encourage your colleagues to do so, too.

Thank you,

Maria F. Arambel & Dora Ottariano, Co-Chairs

From the President— continued from page 1

hopefully, our students are getting settled into our classes. The fall semester brings many new faces through the doors of our institutions and our classrooms. Some of these students are ready for the toil of college classes—they have parents who attended college or a support system to help them in their endeavors or they were adequately prepared before they walked through the door—but many of them do not. They are making the journey through college alone, as the first member of their family to do so, with children, with families that rely on them and maybe don't understand the struggle and stress that lies before them. They are coming to college not prepared and upward of 60% are ending up in Developmental math.

In her TED talks (www.ted.com), Brené Brown, a research professor at the University of Houston, spoke about vulnerability, courage, authenticity and shame and how these affect our ability to connect, which in turn affects the ability to form a sense of community, a word which is many of our institutions' middle name.

I mention these two seemingly disjoint topics to focus a different sort of light on the developmental student or even all of our students in general. According to Professor Brown, shame is the voice that tells people that they are not good enough.

Shame prevents people from trying. It holds people back. For many students, their math anxiety stems from this shame. Shame is strongly correlated with depression and aggression. I know that I have seen it in my students: the ones who either face their studies of the subject we teach with sadness or anger because the very material they are trying to learn seems to be proving what shame is telling them.

Through her research Professor Brown concludes that the antidote to shame is empathy. She states that “the two most powerful words when we're in struggle: me too.”

So maybe during one of those rare free moments we have this semester, we can reflect not just on the math we teach and how we teach it, but on the fact that we were once students, too. Though we might not have struggled with math, there was probably a subject we did struggle with. And maybe through this reflection we can find that antidote and be able to truthfully say to our struggling students, “Me too.”

Meredith Watts
NEMATYC President
MassBay Community College

From the Regional VP – continued from page 1

So, what is exciting in AMATYC? Of course there is always the annual conference and one thing that is exciting (and sold out unfortunately) is the National Summit on Developmental Mathematics - hosted by AMATYC and NADE (National Association for Developmental Education). This is being offered as a pre-conference activity to further expand upon the sessions that our annual conference always has. Be sure to get the proceedings from AMATYC's website (www.amatyc.org) or start up a conversation with someone who attended.

What can you do if you arrive in Anaheim on Wednesday evening? Another pre-session is being hosted by AMATYC's Research Committee on October 30th at 6-9 p.m. The keynote address will be given by Dr. Karen Marrongelle, Vice Chancellor of Academic Strategies and Mathematics Education Researcher, entitled “The Time is Now: The Critical

Role of Mathematics Education Research in Two-Year Colleges.” No pre-registration is needed; just show up and be prepared to learn more about mathematics research in two-year colleges.

On Halloween night, why risk encountering ghosts and goblins? You might want to attend one or all of the three forums that will allow you to provide input on work that AMATYC committees and task forces have done. The three task forces include initial hearings on the position statements The Appropriate Use of Intermediate Algebra as a Prerequisite Course and The Academic Preparation of Mathematics Faculty at Two-Year Colleges as well as discussions on the proposed by-laws revisions and AMATYC's regional structure. We need to hear your opinions! Be sure to attend!



(Continued on next page)

Have you been to AMATYC's website lately? It has completely changed and makes greater use of available technology. Many thanks go to Jim Ham (Midwest VP) and George Hurlburt (AMATYC's website coordinator and NYSMATYC member) for their countless hours with this redesign process.

Do you know someone who should be honored because of his or her contributions to mathematics or mathematics education at the two-year college? The following criteria are used for the Mathematics Excellence Award: national reputation; leadership and activities in professional organizations; professional talks and presentations; awards and grants received; publications; professional activities on a regional, state, and national scale; and teaching expertise. For more information see

www.amatyc.org/awards/MathExcellence/. It's not too late to nominate that one special person as all nomination packets are due to Rob Farinelli, chair, rfarinelli@csmd.edu, by November 1st.

How about publishing an article in AMATYC's *MathAMATYC Educator*? There will be a special issue focusing on best practices in international mathematics education in the near future. The deadline is December 1st and all articles can be submitted at www.amatyc.org/publications/mathamatyceducator/. For further information, contact Editor David Tannor at David.Tannor@muskegoncc.edu.

Does your college participate in the Student Math League? It isn't too late to enter this year's competition – the first round will take place October 18th through November 9th. Last year the top school in the Northeast was Springfield (MA) Technical Community College and the top individual scorer was Seong Ham from Queensborough (NY) Community College.

It seems like I am asking a lot of questions in this article. So here's another one (and I believe that I asked this question in the last newsletter as well). Have you participated in one of AMATYC's webinars? They are absolutely fantastic! I have attended them "live" and I have also viewed them at <http://www.amatyc.org/?page=Webinars>. This is one way that I can keep current in mathematical and technological trends without leaving home. Jon Oaks, AMATYC's Professional Development Coordinator, is looking for topics and presenters for upcoming

webinars. Contact him at oaksj@macomb.edu. Maybe you have a topic that you would just love to give as a webinar?

Do you have a favorite AMATYC memory? What does AMATYC mean to you? AMATYC's historian Russell Simmons (Rsimmons@dcccd.edu), is collecting reminiscences to be incorporated into AMATYC's 40th Anniversary to be celebrated in 2014 in Nashville. The deadline is November 15th.

It is hard to believe that this is the final article that I will submit as your Northeast Vice President.

It has been an honor to represent you on AMATYC's board for six years. The friendships that I have made; the places that I have had the pleasure of visiting; the things that I have learned from presentations – all have allowed me to grow personally and professionally. Your support has meant a lot to me and I want to thank you for it. I know that you will warmly welcome and support your new Northeast Vice President.

Even though I am sad to leave my role as vice president, I am excited to tackle an even bigger role – that of President-Elect of AMATYC. It will be a challenging experience for me to maintain those members we currently have and at the same time attract those who are just beginning their career as two-year college math educators. If you are reading this, are you a member of AMATYC? I hope so as my membership has afforded me opportunities of a lifetime! If you are not a member, why not check out all we have to offer and make an informed decision to join the premier organization that deals with mathematics at two-year colleges?

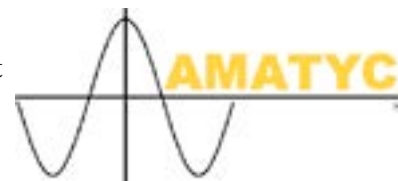
I hope to see you in Anaheim, and with my apologies to Walt Disney – there will be more there than a mouse with funny ears!

Jane

AMATYC Regional Vice President

Jane D. Tanner

Onondaga Community College
Syracuse, NY 13215
tannerj@sunyocc.edu



Submit a presentation proposal for the April 2014 NEMATYC meeting at
<http://nematyc.info/PROPOSAL/>.

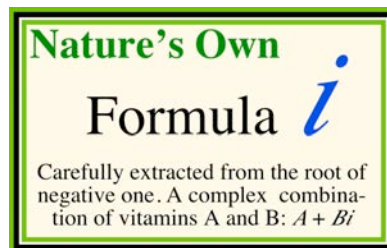
QUIZ (originally appeared in Fall 2004)

Quiz rules: You may use any source you like (open book!). You may use a calculator. Send your answers to the newsletter editor. The first perfect set of responses will receive a 30-day supply of Nature's Own Vitamin e (see below). Answers will be in the Spring Issue, or email the editor.

- The home office of the following are in Washington, D.C. or a suburb thereof:
A. American Mathematical Society C. Mathematical Association of America
B. American Statistical Association D. National Council of Teachers of Mathematics
a. A, C b. All of them c. A, C, D d. B, C, D e. None of them
- MathFest means
a. AMATYC's symposium for Anaheim c. The opening ceremony at the annual NCTM meeting.
b. The joint annual meeting of the AMS and the MAA d. MAA's annual summer meeting
e. None of these
- AMATYC's home office was in Washington, D.C. before it was moved to Memphis, Tennessee.
a. True b. False
- The National Science Foundation is located in
a. Arlington, VA b. Boston, MA c. Gaithersburg, MD d. Washington, DC
- $\sqrt{\frac{1971755000 - \sqrt{8884794895}}{199771000}}$ is the exact value of π . How do you know your answer is correct?
a. True b. False c. This is an open question
- To find the 256,488th hexadecimal digit of π you must first calculate all the digits which precede it.
a. True b. False c. This is an open question

Do you know that the NEMATYC web site is at www.NEMATYC.org, and maintains lots of good information about our organization?
Other places you may want to visit.

| | |
|---------|--|
| AMATYC | www.AMATYC.org |
| NEMATYC | www.NEMATYC.org |
| NCTM | www.NCTM.org |
| MAA | www.MAA.org |
| ASA | www.AMSTAT.org |
| ATMNE | www.ATMNE.org |



**Congratulations to our Regional Vice President Jane Tanner,
who is the AMATYC President-elect!**

Jane has worked for AMATYC for years as, among other things, production editor for the AMATYC Review and our Northeast Region Vice President for the last six years.



NEMATYC STUDENT MATH LEAGUE REPORT

Dave Henry (Bristol 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. Springfield Tech dethroned two-time defending champion Quinsigamond, earning the 2nd Annual Lois A. Martin Award.

Do you offer your best students a chance to compete nationally?

Highlights and History

Springfield Tech took top honors for the best team score not only among NEMATYC participants, but the for the entire Northeast Region, which includes New York schools. STCC was also the last team to achieve this feat in 2009, which was the first time a NEMATYC school finished first in the Northeast since 2007, when Middlesex and Massasoit tied atop the rankings. Overall, NEMATYC placed six teams in the top 100 out of 180 teams nationally (Springfield Tech 23rd, MassBay 32nd, Massasoit 75th, NHTI Concord 86th, Holyoke 96th and Middlesex 100th). A total of 1,677 students participated across the country.

Join the Fun

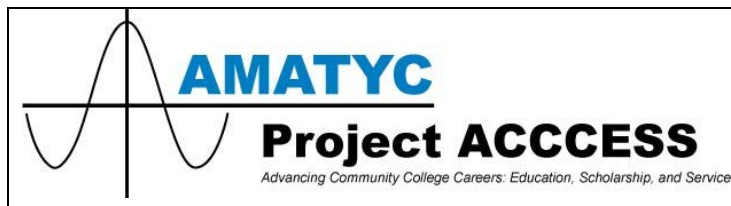
The first test of the 2013-2014 competition will be given from Friday, October 18 through Saturday, November 19. If your college does not have a team, please consider joining the spirited rivalry among NEMATYC schools. Your involvement can be as simple as just administering the tests. Or, you might include 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 \$35 before Sept. 30. Visit www.amatyc.org, or contact Dave Henry (david.henry@bristolcc.edu) for more information.

NEMATYC 2012-2013 Student Math League Individual and College Standings*

| Rank | Name | College | Score |
|------|---------------------|------------------|-------|
| 2 | Daniel Glassman | Springfield Tech | 46.0 |
| 3 | Timothy Thomas | MassBay | 45.5 |
| 5 | Stephen Peloquin | Springfield Tech | 41.0 |
| 6 | Daniel Paine | Springfield Tech | 39.5 |
| 9 | Minh Nguyen | Southern Maine | 35.0 |
| 10 | Stephen Obinna | MassBay | 33.0 |
| 13 | Julian Kuk | MassBay | 32.0 |
| 15 | Ekaterina Shipunova | Cape Cod | 30.5 |
| 15 | Nicholas Huntoon | MassBay | 30.5 |
| 15 | Tianyuan Liu | Roxbury | 30.5 |
| 18 | Christian Rainey | NHTI - Concord | 30.0 |
| 20 | Michael Sousa | Holyoke | 28.5 |
| 20 | William Hogan | Holyoke | 28.5 |

| Rank | College | Score |
|------|------------------|-------|
| 1 | Springfield Tech | 181.0 |
| 3 | MassBay | 168.0 |
| 9 | Massasoit | 124.5 |
| 10 | NHTI - Concord | 118.0 |
| 11 | Holyoke | 104.0 |
| 12 | Bristol | 101.5 |
| 13 | Middlesex | 100.0 |
| 15 | North Shore | 87.0 |
| 16 | Cape Cod | 83.0 |
| 17 | Roxbury | 80.0 |
| 18 | Quinsigamond | 77.5 |
| 19 | Southern Maine | 74.5 |

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



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.

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 2014 conference, we will need to fill a number of Executive Board positions. The positions that will be available are:

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

We are looking for you to help us fill these roles. Working with our 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. We can't promise a career boost, but for those of you who do not yet have tenure, just think how impressive it will look if you can say that you are on the NEMATYC Executive Committee! We would love to be able to say that every one of our member colleges has a representative on the Board.

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

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 **Mary Kehoe Moynihan** at
MMoynihan@capecod.edu

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

**Early Decision
Deadline
Fri Jan 24**

Easiest for everyone



**Call for Presenters
40th Annual NEMATYC Meeting**

Middlesex Community College – Lowell, MA Friday–Saturday, April 4-5, 2014

ON THE ROAD WITH MATH

Early Decision Deadline: Friday, January 24, 2014

EASIEST! SUBMIT YOUR PROPOSAL ONLINE at <http://nematyc.info/PROPOSAL/>

Suggested themes: teaching techniques, curriculum changes/development, distance education, assessment, new uses for technology, modeling data, connecting with students, math in the first two years, calculus, precalculus, service learning, transfer and articulation agreements, pedagogy, critical thinking, statistics, developmental math, or any other you feel is relevant to math education for the first two years of college.

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 necessary.

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. Attach separate sheet if this is easier.

Equipment/technology needs: _____

If you need additional information or have any questions, please call Maria Arambel, 978-696-3126 or Dora Ottariano, 978-656-3192, or email arambelm@middlesex.mass.edu, ottarianod@middlesex.mass.edu.

Proposal Early Decision Deadline Friday, January 24, 2014.

| | |
|---|---|
| <p>Mail to: Prof Maria Arambel Middlesex Community College 33 Kearney Sq Lowell, MA 01852</p> | <p>Email submissions accepted. Please include all of the above information. Email to arambelm@middlesex.mass.edu All submissions will be acknowledged by email.</p> |
|---|---|

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

NEMATYC 1974 This organization was called MMATYC until 1974. From the history: “In a meeting held on May 11 at **Quinsigamond CC** it was decided to approve a new organizational structure for MMATYC. A Senate type forum was used, and to acknowledge the fact that so many non-Massachusetts people were members, the name became the New England Mathematical Association of Two Year Colleges, **NEMATYC**. The following positions were filled. Moderator: **Lenora Leonard**, Bunker Hill CC, Arrangements chairman **Al McCooey**, Quinsigamond CC, 1975 Spring Meeting: **Jino D'Alessandro**, North Shore CC, **Ted Carlson**, Bunker Hill CC, **Bob Cohen**, Greenfield CC, **Frank Deane**, Berkshire CC “.



NEMATYC 1984 was held at **Springfield Technical Community College**, **Robert Yawin** as program chair. The keynote was **The Role Of Mathematics In Business Decision Making**, **Gordon Prichett**, Babson College, and talks were *The Role Of Computer Science In Business And Industry*, *Mathematical Modeling*, *Students As Mathematics Tutors*, *Logo: A Lab In Computer Graphics For The Uninitiated*, *Mathematics Placement: Issues And Position*, *Building A Competitive Mathematics Team*, *Statistics For Computer Science Majors*, and *Cryptanalysis*.

NEMATYC 1994 The Annual Meeting was held at **Mount Wachusett Community College** in Gardner, Massachusetts, on Saturday, April 9, 1994. The President was **Steve Krevisky**, Middlesex CTC, and the Vice President and conference chair was **Susan Blain**. The theme was **Math In Action**. The meeting included a NEMATYC 20-year anniversary reception sponsored by Wadsworth, Inc.

The keynote was **Teaching The Need To Know vs. The Nice To Know**, **Edward R. Terceiro, Jr.**, Executive Dean of Administrative Services, MWCC, and sample presentations were *Cooperative Problem Solving for Students of Mathematics*, *Math Anxiety Causes, Effects and Solutions: A Student Perspective*, *Some Simple Applications Taken from Epidemiology*, and *Towards a New Precalculus Course*

NEMATYC 2004 was held at ... Mt. Wachusett Community College! just as in 1994, 10 years earlier. It met on Friday and Saturday, April 2-3, 2004. The theme was **Climbing New Heights**. The conference co-chairs were **Bonnie Wicklund** and **Paul Laverty**, both of Mt. Wachusett CC. All the Friday activities were held at the Wachusett Village Inn in Westminster. Historians Tom and Brenda Malloy presented a well-received slide presentation of “Murder in Massachusetts - Written in Stone”. At Friday's banquet the long service to NEMATYC of **John**



Co-Chairs Paul Laverty and Bonnie Wicklund address the group with President Maureen Woolhouse looking on



AMATYC Regional Vice President Jack Keating honors President Woolhouse

Jacobs was recognized; John retired at the end of the spring 2004 semester. John served as NEMATYC Secretary, Vice-President, President, and newsletter editor, and hosted two NEMATYC conferences at MassBay Community College. Saturday's luncheon speaker was **Herb Gross**, founder of NYSMATYC, NEMATYC and AMATYC. Herb presented a talk entitled “The Future Never Was What It Used To Be”. Herb's recent retirement from Bunker Hill CC was noted, and his 75th birthday (on Friday) was celebrated with cake and good cheer. As Herb would say “A good time was had by all”.

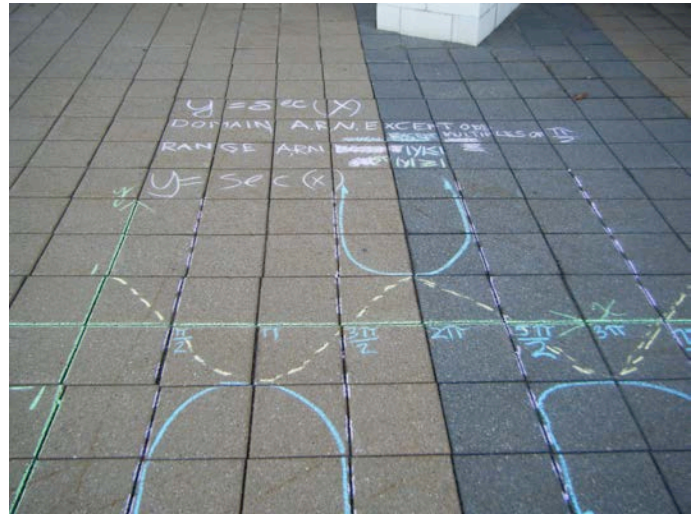
(continued on next page)

NEMATYC 2004, continued: A sample of the 25 presentations: *New Probability Rules of Succession: An Alternative Version of LaPlace's Rule*, *100% Math Project - Targeting Success*, *Reconciling the Abstract Definition of a Limit with the Students' Concrete Intuition*, *Order and Disorder: Entropy in Nature, Math and Science, and the Arts*, *Bridging the Gap Between Mathematics and the Physical Sciences*, *Psychology and Statistics: A Critical Partnership*, *Elementary Algebraic Models in Our World: An Alternative Approach to College Algebra*, *An Activity-Based, Context-Rich Approach to Developmental Mathematics*, Presenter: Gary Simundza, *Web Based Homework, Quizzing, and Course Management for Mathematics*, *Mathematics, Art, and the Renaissance World*, *Joining Forces for Student Success in Elementary Algebra*, *Using Excel and the TI-83 Plus to Interpret the Central Limit Theorem*, and *The Mathematical Preparation of Future Elementary Teachers*

NEMATYC 2013 was held at **North Shore Community College**, Danvers, MA, on Friday and Saturday, April 5-6, 2013. The theme was **Community Colleges: Beacons for Success**. The conference co-chairs were **Anne O'Shea** and **Marsha Pease**, of North Shore CC. NEMATYC President was **Meredith Watts**, MassBay CC. Besides a great program, attendees enjoyed Friday evening dinner at the Tapley Memorial Hall in Danvers, where they were entertained by a talk on the history of the area, and at lunch on Saturday heard a talk by **Phil Mahler**.



Friday evening talk was at Tapley Memorial Hall, Danvers.



Want to drive home a graph of a trig function? Go out and graph it on the entrance to a building! And don't step on the discontinuities.



Jim Sullivan and **Lori Heymans**, Northern Essex CC, talk about their alternative developmental algebra course



Project ACCESS Fellows: **Alice Wilson** (Bristol CC), **Beth Donovan** (Project NeXT, Bristol CC), **Anne O'Shea** (North Shore CC), **MaryAnn Rossato** (Massasoit), **Dave Henry** (Bristol CC), **Marsha Pease** (North Shore CC), **Meredith Watts** (MassBay CC)

5th ANNUAL NEMATYC FALL DINNER/SPEAKER EVENT

The 5th NEMATYC Fall Dinner/Speaker Event was held Friday September 20, 2013, at the Wildwood Steakhouse in Marlborough. The speaker was **Thomas Tucker** of Colgate University, and his title was “Differentials in Exile”. (Did you know that other disciplines handle partial derivatives in a more practical and easier fashion than mathematicians?)

In a drawing at the event **Autumn Alden** won a registration to this Fall’s AMATYC conference in Anaheim, worth over \$300! Autumn is mentioned in the *News from our Campuses and Colleagues*, from Bristol CC, as a new full-time colleague. Congratulations to Autumn on both counts!



Cliff Martin (left) and **President Meredith Watts** with speaker **Tom Tucker**

A DOSE OF GROSS

Before there was Khan Academy there was **Herb Gross**. Herb is the founder and/or first president of NYSMATYC, NEMATYC, and AMATYC! Talk about a Johnny Appleseed! Herb enjoyed a long and colorful career at MIT, Corning Community College, and Bunker Hill Community College, from which he retired. (And he was founder of the math department at each of those then-fledgling community colleges!)

At MIT and since, Herb has made videos and other materials which amount to complete courses in arithmetic, algebra, and calculus.

If you have heard Herb’s message to educators, you may want to check out what he has done... and is still doing.

If you would be interested in looking at Herb’s free materials, check out <http://www.mathasasecondlanguage.com/>.

From MMATYC Musings by Frank Deane, on the early days of MMATYC/NEMATYC: *Herb Gross moved back to Massachusetts, to Bunker Hill CC, from ... New York state where he was a live wire and also an organizing inspiration to us neophytes. He used to say that “An expert was anyone who crossed a state line to get here”. He was very visible at annual gatherings.*



Herb Gross, keynoter at NEMATYC 2013... And NEMATYC 2004! And AMATYC 1993! And NEMATYC 1991!

And other past and future MATYCONN, NYSMATYC, AMATYC, and still other, conferences.

JOIN NEMATYC

Not a member of NEMATYC?

Join by sending the \$10.00 annual membership fee, payable to NEMATYC, to

David Cox, NEMATYC Treasurer
Southern New Hampshire University
2500 N. River Road
Manchester, NH 03106

News from our Campuses and Colleagues

Bristol Community College

Susan McCourt reports that Bristol has welcomed new math faculty member: **Autumn Alden** earned her BS in Math from UMass Amherst, her M.Ed in Math Education from UCLA, and just recently, her MS in Math from Salem State. She began her teaching at Leuzinger HS (in Lawndale, CA) and then at East Bridgewater HS. She continues to be an adjunct faculty member at Massasoit CC and Bridgewater State. In the past, she has also taught at Fisher College and Bunker Hill CC.

Bristol is running about 50 sections (with a cap of 22 students) of Computer Aided instruction classes for developmental mathematics. **Susan McCourt** is piloting a co-requisite model for introductory algebra with statistics.

The department has adopted early transcendentals in the Calculus sequence.

Cape Cod Community College

Mary Keyhoe Moynihan reports “A decade ago, mathematics faculty at CCCC recognized that our Intermediate Algebra was “one size fits no one”. We split the course into STEM and non-STEM tracks (in those days called Calculus and non-Calculus tracks). We spent a lot of time working with other departments that used Intermediate Algebra as a prerequisite to determine appropriate learning outcomes. For the past year, we've been designing a sequence that makes the split at the first algebra course. **Mary Kehoe Moynihan** taught one section in Spring 2013 and is teaching two sections in Fall 2013 of a 6-hour per week combined Intermediate Algebra and Statistics course. **Aaron Wan** is teaching a 6-hour per week combined Intermediate Algebra and Finite Mathematics. In the meantime, we've been studying other redesign models. The result is a sequence of 3 credit, 5 hour per week courses that begin rolling out in Spring 2014. A student testing into Algebra can complete the sequence in one year.”

MassBay Community College

Bob Cantin reports that MassBay continues to roll out a “self-accelerated” developmental math program. Based on several sister colleges' models, we split developmental math topics into fifteen “modules” and allow students to progress through a review of the material as fast as they want (we call that the “self-acceleration” part). On the low end, students can fail the course but when they re-enroll next time, they can pick up where they left off, so it's even accelerated for those students. Many students have found they can really accelerate their required review and save both time and money. We piloted six sections last spring and it was encouraging enough that we offered (and filled!) twelve this fall.

A group of math faculty/staff worked for the better part of last year, under a Title III grant, to develop the program. We involved other faculty and several administrative areas such as Advising and Registrar to make this a success. Our implementation had a couple of unique features we didn't see elsewhere. First, we integrated with PeopleSoft, our in-house record-keeping system. The Registrar and Advising offices were very collaborative to help make this work! We also have students complete a “portfolio” at the end of each module. This involves submitting solutions to all problems worked during the module (from a “journal” we highly recommend) and completing a “mini-project”, or “capstone”, that exercises topics reviewed during that module. It's been a very popular course so far and we're looking forward to tracking success in future courses. Meredith Watts and Bob Cantin (members of the NEMATYC Exec Board) are both actively involved in the development and delivery of this program at MassBay. Feel free to contact us for more information and even offer other great ideas!

Mount Wachusett Community College

Ken Takvorian reports a new math faculty member : **Shawn Case**. He graduated from the Univ. of Rhode Island, taught for 3 years at Templeton High School and also numerous courses at Fitchburg State Univ. and Mt. Wachusett CC. He has the dual role of teaching college level classes at the college and working on a new initiative with Leominster High School where he is assisting those teachers in using the college's developmental math program. The purpose is to better prepare the high school students for college level classes upon graduation. Shawn has many talents: home builder, soccer ref, Justice of the Peace ...

(continued on the next page)

Springfield Technical Community College

Richard Burns reports that the Springfield Technical Community College 2012-2013 AMATYC Math team scored a total of 181.0 points for the two competitions, capturing first place in the Northeast Region. Second place with a total of 171.0 points was Queensborough CC of New York.

The STCC team was led by Daniel Glassman, 46.0 points, 2nd in the Northeast Region, followed by Stephen Peloquin, 41.0 points, 5th in the Northeast Region, and Daniel Paine, 39.5 points, 6th in the Northeast Region. The team's advisors are Prof. **Richard Burns** and Prof. **Jean-Marie Magnier**.

CONSIDER BEING THE NEXT NEWSLETTER EDITOR



Fall 2004 was my first NEMATYC Newsletter. Wow. I didn't know myself until I checked. (Past newsletters are on the web site.) And this is Fall 2014. I took over the job from **John Jacobs** (mentioned in the review of NEMATYC 2004 elsewhere in this edition) who had set up the basic format and content standards that I still use. I was full of energy and it was a new challenge, and I have enjoyed doing every edition. But it is time to pass off the job to someone else.

If it would possibly interest you to be the editor, please let President Watts know. If you have questions about what the job entails, please ask me. I will try to give you an idea right now:

The newsletter is published twice a year, in early October and early February. There is quite a bit of the content that is standard, depending on whether it is the fall or spring issue: President's column, AMATYC Vice President's column, Call for papers, conference program, news from the campuses, ... I have a list.

I view a newsletter as the glue that binds – by setting deadlines for content, it asks that the officers and conference folks, and others, stay on

a schedule that gets the work done for the organization.

For many years now I have taken photos at our events, for both the newsletter and the online archive I maintain. I hoped, of course, that this would add to my reporting and interest the reader.

I also generally do publicity for other NEMATYC events, notably our Fall Dinner Meeting.

The newsletter is a challenge, but only that, a challenge. With rewards. When it's done, I feel good when I look at the product (except for any mistakes I catch). And a big reward for me is that it puts me on the NEMATYC Executive Board. I enjoy Board meetings, and interacting with these colleagues from around New England. And stepping down from that is my biggest regret about a transition. I think the next editor may enjoy the same things I have, perhaps more.

Philip Mahler
NEMATYC Newsletter Editor
Middlesex Community College
Bedford, MA
781-280-3861
mahlerp@middlesex.mass.edu

NEMATYC HAS A FACEBOOK PAGE

Dave Henry, 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.

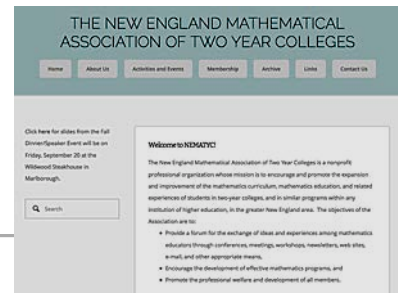
If you "Like" the page, you'll see items of interest to NEMATYC members and friends. If you're not on Facebook, please share this information with your colleagues.



Follow NEMATYC on Twitter! Our name is NEMATYC.

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 Spring 2013 - Spring 2014

| | | |
|--|--|---|
| President Meredith Watts MassBay CC MWatts.math@gmail.com 508.270.4264 12-14 | Vice President David Henry Bristol CC David.Henry@bristolcc.edu 774.357.3425 13-14 | Past President Mary Kehoe Moynihan Cape Cod CC MMoynihan@capecod.edu 508.362.2131 x4471 12-14 |
| Secretary Marsha Pease North Shore CC MPease@northshore.edu 978.762.4000 x5495 12-14 | Treasurer David Cox Southern New Hampshire U D.Cox@snhu.edu 603.668.2211 x2223 13-16 | At-Large Member Denise Robichaud Quinsigamond CC DRobichaud@qcc.mass.edu 508.854.4373 13-15 |
| At-Large Member Kenneth Takvorian Mount Wachusett CC KTakvorian@mwcc.mass.edu 978.630.9232 13-15 | At-Large Member Robert Cantin MassBay CC RCantin@massbay.edu 508.270.4211 12-14 | At-Large Member Anne O'Shea North Shore CC AOshea@northshore.edu 978.762.4000 x6264 12-14 |

| | | |
|---|--|--|
| Conference Co-Chair Maria Arambel Middlesex CC arambelm@middlesex.mass.edu 978.656.3126 | Conference Co-Chair Dora Ottariano Middlesex CC ottarianod@middlesex.mass.edu 978.656.3192 | Past Conference Co-Chairs Marsha Pease & Anne O'Shea |
| Conference Exhibitor Chair Beth Donovan Bristol CC Elizabeth.Donovan@bristolcc.edu 508.270.3828 12-15 | Membership Chair Philip Mahler Middlesex CC mahlerp@middlesex.mass.edu 781.280.3861 10-13 | Student Math League Coordinator Dave Henry Bristol CC David.Henry@bristolcc.edu 774.357.3425 12-15 |
| Webmaster Mary E. Sullivan Cape Cod CC MSulli01@capecod.edu 508.362.4260 12-15 | Newsletter Editor Philip Mahler Middlesex CC mahlerp@middlesex.mass.edu 781.280.3861 10-13 | Social Media Director Dave Henry Bristol CC David.Henry@bristolcc.edu 774.357.3425 13-16 |



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

$e^{i\pi} + 1 = 0$ Euler's Formula combines the three most well known transcendental numbers with the three operations of exponentiation, multiplication and addition, and the additive and multiplicative identities. Noteworthy I would say! *

*These statements contain a falsehood. What is it?

YOU are the **M** in STEM