

MATHACHUSETTS

Newsletter of the Massachusetts Mathematics Association of Teacher Educators

April 2015

Massachusetts Mathematics Association of Teacher Educators cordially invites you to attend the...

MassMATE 2015 SYMPOSIUM

Promoting a Culture of Independent Learners in the Mathematics Classroom

BRIDGEWATER STATE UNIVERSITY
MAY 26, 2015
8:30-3:30

(Registration and Breakfast 7:30-8:30)

KEYNOTE SPEAKER.

Dr. Nicki Newton

REGISTER AT.

WWW.MASSMATE.NET click on Events

Registration: Early Bird deadline: May 18, 2015 - \$50.00

Full Price \$60.00

Message from the President

Pedagogy, like language itself, can either liberate or imprison ideas, inspire or suffocate constructive thinking. ~Hyman Bass, "Mathematicians as Educators"

Greetings and welcome to spring! It has been along winter here in New England, and I am sure most of you are welcoming spring with open arms. I have been in Central America for the last three months and have missed most of the snow. I left Massachusetts right after the first blizzard in late January and returned to plant my garden in early May. I wish I could say I planned it that way weather wise, but actually I didn't. I was on sabbatical from Bridgewater State University and was doing some research in mathematics in Belize. What an adventure. I worked with the Ministries of Education in Corozal (a quiet town 12 miles south of Mexico). I had the opportunity to work with five practicing teachers on their mathematics instruction. I did this using a coaching model of professional development. I worked in three remote village schools helping teachers examine their teaching practices and conducting model lessons on best practices. What a challenge this was! I had to dig back into my early years of teaching in the late 80's and prepare lessons with no technology, limited resources, and barely a manipulative!

Back to basics, for me, was refreshing. Aside from mounds and mounds of data to examine, I left Belize with a renewed energy on the teaching of mathematics. Four things I will carry with me into my day to day practice with my pre service and in service teachers are: Simple is best. Make it real. Construct meaning. Let the math emerge. Sometimes I lose sight of this and get lost trying to figure out what to use to help students develop understanding of specific concepts. While planning I ask myself questions like "What should I use to demonstrate this concept?" or "Is this the best model to use?" or "What app can I use?" I think some of the questions I ask myself when planning are important for students to think about



By Patricia Emmons, Ed.D.

making sense of the math problems they are solving. Sure they need guidance and modeling but asking these questions with my students while they are engaged in problem solving will help them construct meaning and understanding. I think this will encourage them to develop a deeper conceptual understanding and take ownership of the content they are grappling with. I want my students to learn how to think mathematically, reason quantitatively, and make sense of the problems they are posed with. Wait, does this sound like the standards for mathematical practice? Indeed it does. My challenge now is to remind myself I don't need things to instill these practices in my pre service and in service teachers. I can provide the scenario and allow my students to ask the questions. I have to keep reminding myself: Simple is best. Make it real. Construct meaning. Let the math emerge.

I am looking forward to seeing all of you at our spring symposium "Promoting a Culture of Independent Learners in the Mathematics Classroom" on May 26, 2015. Our board has been working very hard and has put together a fantastic line up of speakers. Our keynote, Dr. Nicki Newton, has done a lot of research in creating rich mathematical environments and developing a community of mathematical thinkers. I am sure she will be an inspiration!

Keynote Speaker 2015

Dr. Nicki Newton is a dynamic presenter who is passionate about helping teachers to meet the diverse math needs of their students. She holds an Ed.D. from the Department of Curriculum and Teaching at Teachers College, Columbia University specializing in Teacher Education and Curriculum Development. With over 20 years of experience as a classroom teacher and math consultant, she has worked extensively with regular and special education students, bilingual and ELL students, classroom teachers, and math coaches. Dr. Nicki knows the challenges and rewards of working with students who have widely diverse needs in mathematics and she has seen remarkable improvement in student learning when using guided math groups and math learning centers.



Nicki Newton, Ph.D.

MassMATE's Purposes and Goals

The Massachusetts Mathematics Association of Teacher Educators (MassMATE) is a nonprofit organization whose purpose is to provide a forum for mathematics teacher educators to communicate with each other and collaborate with other groups interested in the teaching of mathematics in the state of Massachusetts.

Specifically, the goals of MassMATE are to:

- promote leadership among mathematics teacher educators
- serve as a forum for ideas and resources in mathematics teacher education
- encourage research related to mathematics teacher education
- promote quality undergraduate and graduate programs in mathematics education
- encourage and support professional development programs for in-service teachers
- encourage and support professional development programs for postsecondary faculty involved in mathematics education
- facilitate communication and collaboration among professionals involved in mathematics education and mathematics teacher education at all levels
- facilitate communication and collaboration among members of educational administrative units, such as departments of mathematics and departments of education
- coordinate activities and work collaboratively with other associations and organizations concerned with the preparation and professional development of mathematics teachers
- work cooperatively with the federal and state agencies to enhance the mathematical, pedagogical, and clinical preparation of teachers of mathematics at all levels with respect to criteria for credentialing and licensing teachers in Massachusetts.

Other Presentations

In addition to our exciting keynote speaker, there will also be many other interesting presentations Including:

Anne Brown: Close reading in the mathematics classroom

Ellen Metzger: Mean Absolute Deviation in Sixth Grade?? Don't Get MAD!

Molly Rawding: Developing Math Talk

Jill Milton: Changing Student Attitudes about Mathematics

Sarah Kent and Joanne Zaharis: Problem of the Week: Promoting Academic Talk and Student Independence – a Modern Twist on an Age-Old Practice

Victor Mateas and June Mark: Planning Instruction that Supports Student Engagement in the Standards for Mathematical Practice

Joey Kelly and CiCi Yu: Play With Your Math

June Kang and Mary Fries: Promoting Independent Learners and Creative Collaboration through Mathematical Puzzles

Barbara West: Writing and Solving Systems of Equations in Multiple Ways

Barbara Delaney: Promote a Culture of Independent Learners with the Standards for Mathematical Practices

Nancy Welch: Exploring Non-standard Algorithms Such as Visual Models in the Math Classroom

Kit Norris: Thinkers- Not Mimickers

Tracey Manousaridis: Designing meaningful "habits of mind" professional development for teachers and para professionals

Kate Marin: Fostering Student Talk in the K-8 Math Classroom

Norma Gordon: #makemathsocial. Critical thinking, reading, writing, communication skills = math practices.

Brian Frasier: Encouraging Independent Thinking through Connections throughout the K-12 Curricula

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Call for Manuscripts

We want to hear from you!!! Do you have something interesting to share with other mathematics educators and teacher leaders? Perhaps you have learned something recently or maybe you want to know how others are dealing with a problem you are facing? Research articles, opinion pieces, book reviews, students work with commentary, interesting math problems are all welcome. We look forward to hearing from you.

To be printed in our next issue manuscripts will need to be submitted by Aug. 15, 2015 Please direct correspondences to Newsletter@MassMATE.net.

Advertisements for relevant mathematics education events are welcome .

Please forward information to Newsletter@MassMATE.net