

Thursday, October 26, 2017

7:00 AM - 7:30 AM

1. First Timers' Session

An orientation for the program booklet and the conference.

Makoto Yoshida

AMTNJ President

East West Math, LLC

Conference Room B

8:00 AM - 9:00 AM

4. How Do We Dance Together?

General Interest

Participants will learn how to work collaboratively in an inclusion classroom.

Julie Norflus-Good

Ramapo College

Gallery

7:30 AM - 9:00 AM

Thursday Breakfast Function

Sponsored by Texas Instruments

Ticket required. Cost of ticket: \$10.

2. Services from TI to Address Teaching, Learning and Assessment Needs

General

Mathematics Educators at all levels are often surprised to learn of the wide range of complimentary services from TI designed to support and enhance effective teaching, learning and assessment practices. We will review how educators and administrators alike can access those services for the benefit of all students.

Jim Donatelli

Texas Instruments

Conference Room C/D

5. The Basics of Using SMART Board's Notebook Software

6 - 8, 9 - 12

It is fun and easy to make creative and informative lessons. Tips for setting up tool bars, changing defaults, and adding powerful new tools. Save your pictures, backgrounds, lesson activities and notebook pages for easy access in "My Content". Customize user-generated lessons from the SMART Exchange.

Linda Treilman

Mercer County Community College

Conference Room E

8:00 AM - 9:00 AM

3. State of the Union for New Jersey Mathematics Standards and Curriculum

General Interest

This session will highlight the role and critical work in Mathematics of the NJDOE's Office of Academics for 2017-2018. This session will highlight particular standards and mathematical concepts within the New Jersey Learning Standards, offer perspectives on coherence and progressions within the NJSLS-M, and frame our focus on program evaluation and critical consumerism. Additionally, we will share any future plans for any NJDOE sponsored math leadership seminars, as well as any resources or professional development opportunities focused on standards, curriculum, and local assessment.

Deidre Richardson

New Jersey Department of Education

Auditorium

6. Discovering Geometry: Using Patty Paper to Deepen Conceptual Understanding

6 - 8, 9 - 12

During this hands on workshop, we will investigate concepts from vertical angles, to properties of transformations, to discovering triangle proofs! We will explore ways to enhance student conceptual understanding of these topics in your classroom, through the use of patty paper.

Stephanie Sheehan

Port Richmond High School

Conference Room F

Thursday, October 26, 2017

8:30 AM - 10:00 AM

7. K-2 Number Bonds: A "Game-Changer" for our Youngest Mathematicians

K - 2

This simple part/whole model is changing the way students interact with numbers. Come practice the importance of composing and decomposing numbers, making and taking from ten, and working with "friendly" numbers. The structural foundation we lay at Grades K-2 undoubtedly impacts the way students solve problems later on.

MaryJo Wieland & Dominique Paladino

Pascack Valley Regional School District

Conference Room A

8. Making Fractional Linear Equations Concrete

6 - 8

In this workshop I will be demonstrating Hands-On Equations Fractions, a new program developed by Dr. Henry Borenson, to provide a concrete introduction to fractional linear equations to students in grades 5 and up. Each participant will receive a student kit of manipulatives.

Mary Geschel

Borenson and Associates, Inc.

Conference Room B

9:30 AM - 10:30 AM

9. Advancing Algebra Project

6 - 8, 9 - 12

A discussion of the work of the Advancing Algebra Committee convened in the Spring of 2107. Benchmark units and rubrics will be discussed, among other topics.

Deidre Richardson

New Jersey Department of Education

April Morgan

Long Branch Public Schools

Auditorium

9:30 AM - 10:30 AM

10. Modeling and Technology in the Secondary Mathematics Classroom

9 - 12

Tom Shown works as a High School Mathematics teacher for the West Deptford Township Schools Alternative Program. He will be sharing strategies and resources to develop students' mathematical thinking through 3-act lessons, Desmos, and rich problem solving opportunities.

Thomas Shown

West Deptford Township Schools

Gallery

11. Positive Math Mindsets: Encouraging Self-Directed Learning

3 - 5

Joseph is a fifth grade math teacher with a gamified classroom. Sera is a third and fourth grade math teacher at an independent Montessori school. In this workshop, we will facilitate discussion about Mathematics Mindsets. Autonomous students tend to be self-motivated and classroom culture and organization are key components in helping them to be successful. We will share our unique perspectives and experiences in order to have teachers reflect on their own class environment.

Joseph Capriotti

Byram Township Board of Education

Sara Capriotti

The Red Oaks School

Conference Room E

12. Hands-On Algebra and Graphing Calculator

6 - 8, 9 - 12

This session will focus on a variety of activities that are both hands-on and technology based. Participants will take the role of a student to explore and experience interactive learning. Participants will work in a group and utilize a TI-84 CE as well as manipulatives.

Holly Terril

T³ Regional Instructor

Conference Room F

Thursday, October 26, 2017

9:30 AM - 11:00 AM

13. Effective Practices that Support Growth in Student Achievement

General Interest

Presenters will highlight research based best practices in Mathematics that have demonstrated growth in assessment data. Participants will experience real classroom strategies that have a strong impact on student achievement.

Tina Powell, Daniel Ramirez, Asale Harris, Mengli ChiLiu, Min Kim, Belinda Koloska, & Farjana Rahman

Orange Public Schools

Conference Room C

14. Problem Solving Activities Articulating the Practice of Constructing Viable Arguments

6 - 8, 9 - 12

Rich problem solving activities serve to articulate the eight Standards For Mathematical Practice alluded to in The Common Core document. This hands-on workshop will encompass many of these practices including the construction of viable arguments. Problems are selected from number, algebra, geometry, pre-calculus, calculus and discrete mathematics.

Jay Schiffman

Rowan Univeristy

Conference Room D

10:30 AM - 12:00 PM

15. Asking the Right Question

6 - 8, 9 - 12

Promoting mathematical discourse in your classroom is one of the best ways to impact student learning! It all starts with the right questions. In this workshop, we will look at the purpose of different questions. We will study different types of questions and we will ask each other some questions to encourage mathematical conversations.

Andrea Bean

West Windsor-Plainsboro Regional School District

Amphitheater

10:30 AM - 12:00 PM

16. Strategies and Tasks to Build Procedural Fluency from Concept

3-5, 6-8

Procedural fluency--skill in carrying out arithmetic and algebraic procedures flexibly, accurately, efficiently, and appropriately—is an important component of mathematical proficiency. Yet, many students fail to develop such fluency despite our best efforts. Connecting procedures to underlying concepts is essential for building fluency. This session answers the questions: “What tasks and strategies help students build fluency from conceptual understanding?” and “What common pitfalls should I avoid?”

Diane Briars

National Council of Teachers of Mathematics

Conference Room A

11:00 AM - 12:00 PM

17. Challenges in Mathematics Education: A Call to Action

General Interest

My annual address on the challenges we face in mathematics education, potential solutions and the politics of education in NJ.

Eric Milou

Rowan University

Auditorium

18. Mathematical Mindset: Supporting Students to Persevere through Complex Tasks

General Interest

Can students develop a growth mindset? Based on the work of Dweck and Boaler, learn how to shift grades and use assessments for a tool for growth. The session will showcase instructional and assessment practices to encourage a growth mindset.

Dominique Paladino & MaryJo Wieland

Pascack Valley Regional High School District

Gallery

11:00 AM - 12:00 PM

19. Get Published! Share That Idea!

General Interest

Editors of the AMTNJ Journal will discuss the simple guidelines and requirements for publication in the journal. Share a favorite strategy or a new idea. Get published. Enhance your resume!

James Clayton

Saint Peter's University

Conference Room B

20. Fractals and Honors: Perfect Together

6 - 8, 9 - 12

In this session, the presenter will describe her experiences in teaching fractal geometry and infinity concepts in the Honors Program. High cognitive demand activities that integrate algebra, calculus, and geometry topics in grades 6-14, while promoting conceptual understanding and supporting student engagement in meaningful mathematical experiences, will be shared.

Eliza Leszczynski

Montclair State University

Conference Room E

11:00 AM - 12:30 PM

21. Teaching Mathematics Modeling and Modeling Mathematics in PRISMS

9 - 12, Teacher Educators

This presentation focuses on how we incorporate mathematical modeling elements into our daily teaching process and develop students' modeling capability in an extra-curricular activity in Princeton International School of Mathematics and Science (PRISMS). Evidence suggests our approaches engage students more closely, and improve their modeling success more effectively.

Xiang Gong & Qiusheng Li

Princeton International School of Mathematics and Science

Conference Room F

11:30 AM - 12:30 PM

22. Inclusion and the Growth Mindset for Successful Classroom Instruction

PK - 2, 3 - 5

Attendees will walk away with strategies and technology tools to implement this model. Using this approach will help foster collaboration among special education and general education learners. Classrooms will cultivate natural inclusion. All students have a sense of belonging and support.

Kristin Vona, Christine Picerno, Kevin Ruane & Jon Molinelli

Township of Ocean School District

Conference Room C

23. A Practical Approach to Mathematical Modeling in the Middle School Classroom

3 - 5, 6 - 8

Join this session to hear how one teacher tries to find time for engaging, challenging, and fun math problems in his classroom. Tom Shown is a 6th grade math teacher at West Deptford Middle School. He will be sharing strategies and resources to develop students' mathematical thinking through 3-act lessons and rich problem solving opportunities.

Thomas Shown & Kelley Mason

West Deptford Township Schools

Conference Room D

12:30 PM - 1:30 PM

24. How Do You Get Your Students Talking Mathematically?

PK - 2, 3 - 5, 6 - 8

Participants in this session will learn how to jump-start rich student discourse and increase collaboration in K-8 math classrooms. They will explore conversation starters, meaningful questions, and the four operations to gain insight into their instructional process and students' learning processes.

Ellen Edmonds

William H. Sadler, Inc.

Auditorium

25. Developing Algebraic Reasoning with Microsoft Excel

6 - 8, 9 - 12

In this session we will explore how Microsoft Excel can be utilized in middle school and high school mathematics classes. Concepts will include functions, sequences and series, multiple representations, and statistics.

Mark Russo

Pascack Valley Regional High School District

Amphitheater

26. Lesson Study as a Professional Learning Model for Sharing Math Teaching Knowledge

Teacher Educators, School Administrators

NJ supports implementation of high-quality professional learning communities. Lesson Study is an example of a highly developed PLC used by educators in the U.S. and internationally. Somerset Hills educators will explain how middle school math teachers are practicing Lesson Study to improve content knowledge, resources, beliefs about teaching and learning, and collegial interactions.

Jennifer Shouffler & Grant Kolmer

Somerset Hills School District

Gallery

12:30 PM - 1:30 PM

27. October, March or May -- When Will You Take the new SAT?

9 - 12, School Administrators, Teacher Educators

Robin took the new SAT in May 2016 adding to her recent test experiences -- ACT (2012), "old" SAT (2009) and "ancient" SAT(1980). These recent exam experiences helped her to relive studying and test taking, fill gaps in her education, and relate better to students' experiences. Studying for the ACT/SAT helps students learn the content they need to successfully complete high school and/or avoid remediation. We will also discuss and profile examples of the SAT/ACT Math and show how improvement on these exams can help students (and adults alike) gain a new outlook and self-identity.

Robin Schwartz

Math Confidence

Conference Room B

28. Teaching about People and the Environment with Mathematical Models

6 - 8, 9 - 12, Teacher Educators

In this interdisciplinary workshop discover how mathematical models can be used to bring current events and top global challenges into the math classroom. Explore population growth models and probabilistic projections, create cartograms and use models to illustrate carbon emissions over time.

Judith Levine

Newark Public Schols

Conference Room E

12:30 PM - 2:00 PM

29. Number Talks: Developing Mathematically Powerful Students in Grades 3-5

3 - 5, School Administrators, Teacher Educators

What's all the buzz about Number Talks? Through purposefully-crafted problems, students engage regularly in Mathematical Practice Standards. They reason, defend and connect ideas, and develop mathematical flexibility and confidence. You'll be blown away by what your students can do!

MaryJo Wieland & Dominique Paladino

Pascack Valley Regional School District

Conference Room A

Thursday, October 26, 2017

1:00 PM - 2:00 PM

30. Centers in Middle School? They Said It Couldn't Be Done!

6 - 8, School Administrators, Teacher Educators

Participants will cycle through standards based, data driven, activity rich centers filled with opportunities for assessment. Walk away with ideas on how to implement centers in your classroom next week. See how we reach every student, every day. Skype with our students to hear and ask their point of view.

Dawn Boyer & John Fritzky
Byram Intermediate School

Conference Room C

31. "50 Shades of Cray" - Engaging the Middle School Math Classroom

3 - 5, 6 - 8

We will present 50+ games, technology tools, kinesthetic activities, as well as, brain teasers that prove to not only limit math anxiety, but make the entirety of your classroom more fun. This includes but is not limited to whole group review games, individualized practice games, as well as, how to involve your PLC in multi-class and team projects.

Melissa Gutkind, Michelle Carroll, & Tracey Roettger

Roxbury School District

Conference Room D

32. Let's Bring Social Justice into Elementary Math Classrooms!

General Interest

A college professor and pre-service teachers will share ideas for bringing social justice issues into elementary math classes. Participants will be asked to share their ideas, topics, and strategies with the group.

James Clayton
Saint Peter's University

Conference Room F

2:00 PM - 3:00 PM

33. Addressing Misconceptions That Impede Success in Both Mathematics and Science

General Interest

I will discuss an ETS research project that investigates the degree to which misconceptions common to both math and science problem solving, differentially affect the performance of low SES students collectively in math and science. The focus will be using formative assessments to identify and address the misconceptions.

Elizabeth Marquez
Educational Testing Service

Auditorium

34. Producing Math Videos that Introduce and Assess New Content

General Interest

Participants will learn the basics of creating assessments in Edulastic. Topics include: using the rich text editor, inserting a video, image, table or hyperlink into a question. Participants will also learn how to create questions in drag-and-drop, classification, graphing, matching and image labeling formats.

Michael Linskey & Dawn Boyer
Byram Intermediate School

Amphitheater

35. Real World Mathematics for All

6 - 8, 9 - 12, Teacher Educators

This presentation will inspire math educators to create their own real-world activities and games that promote conceptual understanding based upon the classes that they teach. Educators will be provided with ways to apply NJSLS in Math to real world scenarios that capture student interest: Uber (systems of equations), Uber vs. Lyft (Linear functions), Paycheck analysis (Earning Compound Interest) and Halloween (Pi & Circumference) to name a few.

Susan Wolff & Anne Richardson Vitale
Randolph Middle School

Gallery

2:00 PM - 3:00 PM

36. Changing Mindsets to Tackle Equity: One District's Journey

3 - 5, School Administrators

ALL learners should have access to rigorous, high-level mathematical content in an environment where risk-taking, deep conceptual understanding, and growth mindset are the norm. We will share lessons learned from our journey to reconceptualize the upper elementary math program and shifts we made to empower teachers and students as mathematicians.

Melissa Pearson, Susan Totaro, & Mary Ann Carnevale

West Windsor-Plainsboro Regional School District
Conference Room E

2:00 PM - 3:30 PM

37. Mathematical "Rules" That Expire

General Interest, School Administrators, Teacher Educators

"Overgeneralizing commonly accepted practices, using imprecise vocabulary, and relying on tips and tricks that do not promote conceptual mathematical understanding can lead to misunderstanding later in students' math careers." In the 2014 publication, NCTM highlights how well intended tricks promote short term success in mathematics. This workshop will look deeply at "rules" that expire while identifying instructional strategies that promote long term conceptual mathematical understanding.

Rosemarie Malloy & Amy D'Ambola

Northern Highlands and Upper Saddle River
Conference Room B

2:30 PM - 4:00 PM

38. Accessible Enriching and Engaging Lessons for All Students

3 - 5, 6 - 8, School Administrators, Teacher Educators

Effective teachers provide problem-solving experiences in which students engage in rich tasks that require them to use a variety of skills, ask questions, make meaning of mathematics as something that is interesting, engaging, and useful. We will focus on a few tasks that you can use immediately in your classroom.

Hugh Green

West Windsor-Plainsboro Regional School District
Conference Room A

39. Rich, Open Tasks and Assessment

PK- 2, 3 - 5, 6 - 8

Come hear how students can engage in rich tasks, promote problem solving, reasoning, allow for multiple entry points, representations, and solution strategies. Look closely at the development and process of creating tasks. Examine students' work for alignment to the Depth of Knowledge levels and the Standards for Mathematical Practice. For those who believe math should be engaging and meaningful!.

Dominique Paladino & MaryJo Wieland

Pascack Valley Regional School District
Conference Room D

40. Connecting Math Ideas Builds Student Confidence II

6 - 8, 9 - 12, Teacher Educators

Connecting Math to the world around us fosters gestalt perspective. Using Ocean Waves as an application, mathematics concepts and methods come alive in a meaningful and unforgettable way. Students see for themselves why ocean waves look like they do. The presentation includes a hands-on activity.

Patrick Murray

Malcolm X Shabazz High School
Conference Room F

Thursday, October 26, 2017

3:00 PM - 4:00 PM

41. Past-President's Reception

Sponsored event

By invitation only

JT's Restaurant & Pub

4:00 PM - 5:00 PM

42. President's Reception

Sponsored event

Open to all

Lobby

5:15 PM - 6:15 PM

43. Annual Business Meeting

Open to all

Conference Room A

6:30 PM - 8:30 PM

44. Annual Banquet

Ticket required. Cost of ticket: \$25.

Conference Room C/D

7:00 AM - 7:30 AM

45. First Timers' Session

An orientation for the program booklet and the conference.

Makoto Yoshida

AMTNJ President

East West Math, LLC

Conference Room B

8:00 AM - 9:00 AM

46. What Every High School Student Should Know About Discrete Mathematics

9 - 12

There are many areas of discrete mathematics to which all high school students should be exposed, either because they have important applications, or because they are particularly interesting or beautiful or surprising, or because they shed light on the "human endeavor" that we call mathematics. In this presentation, I will speak briefly about ten topics that every high school student should encounter, including, if time permits, Fibonacci numbers, the Four Color Theorem, the Traveling Salesman Problem, Tower of Hanoi, Euler and Hamilton circuits, the Utilities Problem and Euler's Formula, Probability Misconceptions, Apportionment and Redistricting, Addition & Multiplication Principles of Counting, and Pascal's Triangle.

Joseph Rosenstein

Rutgers University, Retired

Auditorium

47. Crafting Excellent Open-Responses in Math Class

3 - 5

A perfect blend of writing and math! Excelling at open-ended math problems can be a source of frustration and confusion, but often students haven't been taught how to write these responses. Tweaking your students' thought-process slightly may help them improve a lot. Come find out the magic word every good response has!

Linda Bortnick

East Brunswick Public Schools

Gallery

48. Developing Conceptual Understanding in Mathematics Using Multiple Representations and Modeling

6 - 8

Twenty-first century learning requires students to make meaningful connections in mathematics. Using real world examples, let's explore ways to develop conceptual understanding using multiple representations and models. Take back to your classroom ready-to-use activities to empower your students.

Tom Beatini

Union City Public Schools

Conference Room C

49. Math Activities for Fun

3 - 5

Provides engaging, standard aligned activities that make math competitive, personal, creative, artistic, relevant...and of course, FUN! Games and activities presented will have students rapping about patterns, finding their fractional heritage, competing in the Metric Olympics, role-playing Plus Kid, Minus Kid, and shouting "IZZA-IZNOTTA!"

Luann Voza

Lyndhurst Schools

Conference Room D

50. Model - Make Thinking Visible - Equivalent Fractions, Fraction Multiplication, Partial Products

3 - 5

This session models blended learning within diverse learning environments to Build It, Talk It, Write It before Owning It. Participants will explore 3 part lessons, discuss pedagogy and choose appropriate lessons and tools to grapple with and "see" solutions to problems in Equivalent Fractions, Multiplication of Fractions and Partial Products.

Rudy Neufeld

UMathX

Scott Donadio

Elizabeth School District

Conference Room E

Friday, October 27, 2017

8:00 AM - 9:30 AM

51. Math Cubed: Twisting Your Way to a New Understanding

3 - 12

Solving a Rubik's Cube is a challenging and interesting way to teach mathematical concepts and practices. Come learn the beginning stages of solving and learn which content standards and critical thinking skills are addressed along the way. Learn how you can engage your students with Rubik's content lessons, mosaics, and competitions - at no cost!

Matthew Martinez

You Can do the Rubic's Cube!

Conference Room A

52. Tricked into Thinking!

6 - 8

Everyday events make us wonder. Some of these events happen every day, others once in a while. Some events can easily be investigated, some not. However, each of these events provides us the opportunity to THINK. What's the importance of leading coefficients? Why do large value denominators make smaller fractions?

Thom OBrien

Explore Learning

Conference Room F

8:30 AM - 10:00 AM

53. Supporting All Learners in a Standards-Based Classroom

6 - 8

Together we will explore how using open questions and parallel tasks can help close the gap between where students are developmentally, and what the expectations of the standards are at each grade level. These low-threshold, high-ceiling tasks will provide opportunities to differentiate classroom tasks AND assessments.

Kristen Emmel

Franklin Lakes School District

Amphitheater

9:30 AM - 10:30 AM

54. Moving from a Teacher Centered to a Student Centered Classroom

6 - 8

This session will give teachers and administrators the vision for and pathway to make the transition to a more student-centered classroom. Emphasis: building students' desire to acquire knowledge, focus is on the students with fluid & flexible structures, learning outcomes for students that involve them asking questions & their active engagement. We will share our experiences with personalized learning that have created a strong student-driven culture at our schools.

Anne Richardson & Katie Thorn

Randolph Township Schools

Auditorium

55. Fun with Fluency: Developing a Number Sense through the Use of Games and Discussions

General Interest

In this session, I would like to demonstrate the use of games and discussion when working with fact fluency. According to the NJSLs every grade has a specific fact fluency that should be attained by the end of that school year. Through the use of games, students can practice explaining their thinking when working through basic facts. These discussions lead to a stronger number sense and fact fluency. Games provide a safe, fun way to teach students. In this safe environment we can teach students to discuss, ask questions and explain how they "know" an answer or discovered an answer. It should also be encouraged to look for alternate ways to find an answer. The greatest opportunity we can provide a child is a safe environment in which they feel comfortable enough to "play" with numbers. This allows them to discover and explore math in a way that promotes confidence.

Kimberly Salacki & Laura Colonelli

Oakland Public Schools

Gallery

Friday, October 27, 2017

9:30 AM - 10:30 AM

56. "Just Let Me Survive Today!!" (Classroom Management, Motivation)

General Interest

Through a unique combination of games, puzzles, rewards and incentives, lots of humor as well as some traditional techniques, you will learn how to motivate your students so that they will look forward to coming to your class to learn. They will be provided with opportunities for success and the building of confidence in a framework of fun and excitement.

Mark Richman

Columbia High School

Conference Room C

10:00 AM - 11:00 AM

59. Engaging Activities That Emphasize the FUN in FUNctions

9 - 12

Participants will be provided with classroom-ready hands-on lessons that enable students to examine functional behavior and discover FUN ways to make sense of transformations. We will connect the Algebra and Functions strands of the Common Core State Standards.

Tom Beatini

Union City Public Schools

Conference Room F

57. What's New for the SMART Board Software - Notebook 2017

6 - 8

An Equation Editor for Mac and Windows users! An improved SMART Response (2) with more improvements coming for formative and summative assessments, games and activities for SMART Labs, and some good tools to use in the math classroom. (Participants are encouraged to bring their own mobile devices.)

Linda Treilman

Mercer County Community College

Conference Room E

10:00 AM - 11:30 AM

60. Visual Representations for Proportional/Spatial Thinking and Algebraic Reasoning

6 - 8, Teacher Educators

How much of the Algebra that we teach will our students remember in a year? In a month? In a day? It is a common belief that visuals and manipulatives are used as a crutch on the road to learning the more abstract mathematics and that manipulatives are needed only for "babies" and the special needs students. This session will help rethink that belief and help your students create a mindset that enables them to use visual strategies that strengthen their quantitative literacy and reasoning skills in preparation for Algebra and subsequent mathematics. Come "see" for yourself!

Angelo DeMattia

Kean University

Conference Room A

9:30 AM - 11:00 AM

58. Video for 21st Century Classrooms: Before, During, After the Lesson

3 - 5

Before a lesson, teachers can use a video to review how to develop the lesson. During the lesson, videos can be used to review/reinforce the mathematics for the students. After the lesson, videos can be viewed at home by the student. This session will clearly show participants videos that can accomplish the three basic uses of videos.

Francis Gardella

Hunter College - The City University of New York

Conference Room D

10:30 AM - 11:30 AM

61. Using Desmos to Strengthen Math Instruction

9 - 12

Use of Customized Desmos lessons to strengthen math instruction for Algebra I. Desmos is a free web based program that can be utilized to explore every concept in mathematics! Participants will create activities that can be used immediately in the classroom. Grades 8-12

Nicole Ealey

Rutherford Public Schools

Amphitheater

Friday, October 27, 2017

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62. Building Bridges in Math Class

9 - 12

For the past 10 years I have been teaching secondary math classes with the theme of "Building Bridges." When I introduce myself and my passion for bridges, I establish the expectations for the class for the year. The year-long theme creates an atmosphere that stimulates discussion and increases student engagement in learning. Building bridges has transformed my classes into collaborative learning communities.

Kathleen Carter

North Hunterdon High School

Gallery

63. Let's Get This PARTY Started....with FRESH Ideas!!!

6 - 8

Do you need a new PARTY of FRESH IDEAS???

Then come on over.... Objective: To help teachers engage students in fun simple tasks that will challenge and drive instruction. To make the most of our time during the lesson while creating a deeper understanding through student question and discussion.

Amy Miele-Wilkerson

Franklin Township Public Schools

Conference Room C

64. An Introduction to Growth Mindset in Mathematics

General Interest

Students with a growth mindset have faith that they can develop their most elementary abilities through dedication and perseverance. We will examine the research of Carol Dweck and Jo Boaler and find out how we can help our students develop a Growth Mindset in and out of our classrooms.

Daniel Hrdina

School District of Chatham

Conference Room E

11:00 AM - 12:30 PM

65. Intervention Strategies for Struggling Learners in Middle School Mathematics

6 - 8

In this workshop participants will learn about specific recommendations to address the needs of struggling learners; discuss how to carry out each recommendation; review examples illustrating specific intervention strategies for different recommendations, and develop strategies based on these recommendations for teaching specific topics of middle school mathematics.

Irina Lyublinskaya

The City University of New York, College of Staten Island

Auditorium

66 Numbers are Flexible! Number Talk Strategies for the Primary Grades

6 - 8, Pre-Service Teacher

Help students learn from an early age that numbers are flexible! Together we will investigate how to tailor number talks for the primary grades through the use of dot cards, picture cards, and ten frames. As we review different tasks, we will evaluate how they promote the Mathematical Practices.

Kristen Emmel

Franklin Lakes School District

Conference Room B

11:30 AM - 12:30 PM

67. Fun with Fluency

General Interest

This workshop will provide educators with materials and ideas to teach and assess student fluency through the use of games and tasks. When using an interactive approach to work with numbers, the lesson becomes fun rather than intimidating for students. It's a great way to build fluency across grade levels.

Kimberly Salacki & Laura Colonnelli

Oakland School District

Conference Room F

Friday, October 27, 2017

11:30 AM - 1:00 PM

68. Using Mathematical Recreations to Balance Procedural Fluency and Conceptual Understanding

General Interest

Accomplishing both procedural fluency and conceptual understanding is not a bogus dichotomy. In this hands-on workshop, participants will be engaged in puzzles and other mathematical recreations to balance skills and concepts. The mathematical recreations will be selected from the fields of number and operations, discrete mathematics, algebra and geometry.

Jay Schiffman

Rowan University

Conference Room D

12:00 PM - 1:00 PM

69. Standards-Based Grading: Lessons Learned from Two High School Classes

General Interest

In this session, the presenters will share their experiences implementing different versions of a standards-based grading system in Geometry and Algebra I classes. The presenters will share the specifics of their respective systems, reflect on strengths and weaknesses, and share student feedback.

Mark Russo

Pascack Valley Regional High School District

Amphitheater

12:00 PM - 1:30 PM

70. Games and Manipulatives: Digital and Concrete 6 - 8

Examine these activities and games that help promote conceptual understanding. Grades: 7-8: Play "A Game for Two Players" for vocabulary skills and mental computation, "The Hundreds Board - Negatives" for signed number computation. Grades: 4-8: "Nomograph" for whole number, signed number, decimal, and fraction computation, "Slide Rule" for whole number, signed number, decimal, and fraction computation, "Multiple Strips & Fraction Bars" for equivalent fractions, least common denominator, "Area Formulas by Paper Folding" for triangle, parallelogram, circle, trapezoid. Grades: 4-11: "Term Tiles & Tokens" for signed number computation, algebraic computation, solving.

Agnes Azzolino

mathnstuff.com

Conference Room A

12:30 PM - 1:30 PM

71 Those Who Can, Do; Those Who Can't - Use Computer Simulation 9 - 12

Teachers are encouraged to use simulations in our teaching, but textbooks don't provide much help in how to construct simulations. The speaker will demonstrate simulations he has constructed in Excel for statistics, probability, and calculus. He will also discuss simulations he has used in his prior career as an insurance company actuary.

Jerry Tuttle

University of Phoenix

Gallery

72. The benefits of Teaching the Applications of Trigonometric Functions in Pre-Calculus Classes.

Teacher Educators

Teach your students Trigonometric functions through fantastic real life applications such as estimating the heights of objects, estimating the circumference of earth, musical symphonies, predicting weather, military operations, architecture and much more.

Ahmed Salama

PANTHER Academy

Conference Room C

Friday, October 27, 2017

12:30 PM - 1:30 PM

73. Incorporating Desmos in Geometry Classes

9 - 12

Desmos is much more than an online graphing calculator. Desmos can be incorporated into geometry classes for analysis of coordinate geometry topics, transformations and other topics. Transform your geometry lessons into student-centered learning and build connections with multiple representations in geometry using Desmos.

Kathleen Carter

North Hunterdon High School

Conference Room E

1:00 PM - 2:30 PM

76. Fun, Fast Formative Assessments

6 - 8

The exit ticket just became more exciting! Imagine faster, more engaging ways to assess your students. We will explore technological based formative assessment tools to use in your math classroom.

Nicole Ealey

Rutherford Public Schools

Conference Room B

1:00 PM - 2:00 PM

74. Equivalent Form: Can Students Recognize It?

9 - 12

Conceptual understanding and fluency are important elements of the shifts in the math standards. Participants will explore how they can use the power of equivalent form to promote in students, fluency, a deeper understanding of concepts, and an appreciation for the mathematical process.

Arpi Lajinan

Northern Valley Regional High School at Old Tappan

Conference Room F

1:30 PM - 2:30 PM

77. Less Equals More

6 - 8

Do you need a number of fresh ideas for your classroom? Then come and learn how teachers can engage students in some fun, simple tasks that will challenge them and deepen their understanding.

Amy Miele-Wilkerson

Franklin Township Public Schools

Amphitheater

1:00 PM - 2:30 PM

75. Using Math Strategies to Market Public Schools

School Administrators

Bill will demonstrate how math strategies can be used to convince parents and students that your school is the best choice for their family. He will provide explicit examples of how math should be taught to ensure their student success.

Bill Hanlon

Southern NV Regional Professional Development Program (retired)

Auditorium

1:30 PM - 3:00 PM

78. Developing Mindset: Coaching for a Growth Mindset in Math

General Interest

Develop your students from having math anxiety and believing that they cannot learn Mathematics to calm, focused, hard striving students that accept productive struggle as normal and natural. Coaching questions that guide students to powerful growth mindsets will be modeled and practiced.

Curtis Aubry

Trenton Public Schools

Conference Room D

2:00 PM - 3:00 PM

79. Easily Using Formative Assessment to Adjust Instruction

General Interest

Learn about the Progressive Mathematics Initiative® (PMI®) K-12 courses including embedded formative assessment questions using clickers or BYOD. All resources are editable and posted for free at www.njctl.org

Melissa Axelsson

New Jersey Center for Teaching & Learning

Gallery

2:00 PM - 3:30 PM

82. Integrating Coding into Mathematics Classroom - Let's Make Some Music!

9 - 12

In this hands-on workshop you will learn how coding can enhance your mathematics classroom and engage your students in meaningful problem solving and creating music! Explore new TI-Innovator Hub along with TI-Nspire CX or TI-84 CE technology. Ready-to-use handout will be available.

Irina Lyublinskaya

The City University of New York, College of Staten Island

Conference Room E

2:00 PM - 3:30 PM

80. Effective Mentors of New Teachers: Characteristics, Roles, and Responsibilities

General Interest

The presenters will share resources developed for a series of workshops for mentor teachers hosting student teachers for a student teaching internship. This session will include example activities in order to help mentor teachers become better mentors to student or new teachers, such as structuring conversations to offer supportive feedback.

Cathy Liebars

The College of New Jersey

Conference Room A

81. Opening the Curtain on The AP Statistics Exam

9 - 12

This session will cover topics needed to teach Statistics in an Algebra 2 classroom. Topics will include (1) understanding and evaluating observational studies and experiments, (2) summarizing, representing, and interpreting data, and (3) using normal distributions to make inferences and justify conclusions

Ryan Postman

Pascack Valley Regional High School District

Conference Room C