Thursday, October 25, 2018

7:00 AM - 7:30 AM

1. First Timers' Session
An orientation for the program booklet and the conference.
Tom Walsh
AMTNJ President
Kean University

Conference Room B

8:00 AM - 9:00 AM

2. Visualizing Math and Deepening Understanding with Technology
9 - 12 (6 - 8, College Teachers)
So many tools, so little time! Come explore a new, all-in-one, FREE, dynamic math tool that helps you provide visualization, exploration and deepen students mathematical understandings. We'll be exploring statistics, graphing, geometry, calculations and more so come have fun with math!
Karen Greenhaus
Drexel University

Auditorium

3. From Data to Equations
9 - 12 (6 - 8, College Teachers, Pre-Service Teachers, Supervisors, Teacher Educators)
Pattern recognition with numbers creates rich discourse among students. Many struggle to move from the arithmetic to the algebra. This session will present strategies to help students bridge the number patterns with explicit & recursive equations for linear, quadratic and exponential functions.
Kethleen Carter
North Hunterdon Hight School

Amphitheater

4. Less Equals More (<=>)
6 - 8
As educators we have all the tools already in front of us it is just using a little creativity to help bring it to life. Less = More is an encouraging approach to helping teachers realize that they can assess and teach while their students are learning and deeply understanding the given content.
Amy Miele-Wilerson
Franklin Township Public Schools

Gallery

8:00 AM - 9:00 AM

5. Fractions - Making them Stick
5 - 8 (3 - 5, Pre-Service Teachers, Supervisors, Teacher Educators)
This session will focus on building student understanding of fractions and making them stick. Participants will complete a variety of hands-on activities designed to lead students through all four fraction operations. Shift from teaching the HOW to showing the WHY!
Dawn Boyer
Byram Intermediate School

Conference Room A

6. So Why Should We Teach Math?
9 - 12 (6 - 8, College Teachers, Pre-Service Teachers, Teacher Educators)
We've struggled with this as teachers and as students ourselves, and it's a hard question to answer. Even harder to answer than, "Why can't we integrate e^(x^2)?" The speaker is an insurance company actuary and college teacher, and has some different perspectives on why we should teach math.
Jerome Tuttle
University of Phoenix

Conference Room B

7. Standards Based Learning and Assessment
9 - 12 (6 - 8, Pre-Service Teachers)
Are the grades that students earn a good indicator of student knowledge? We will provide you ways to allocate common core standards into units, and develop formative/ summative assessments linked to those standards. We will also offer ways to have students self-assess their content understanding.
Amanda Mihalic & Kevin Dziuba
Rancocas Valley Regional High School

Conference Room D

Thursday, October 25, 2018

8:00 AM - 9:30 AM

8. Using GeoGebra to Engage Elementary School Students in Math

6 - 12 (Pre-Service Teachers, Teacher Educators, General Interest)

Come to learn how you can use GeoGebra in your classes to teach geometry topics to students in grades 1 - 5. This free multi-platform software/APP will engage your students in dynamic explorations, problem solving, and doing math!

Irina Lyublinskaya
CUNY College of Staten Island

Conference Room C

9. Fostering Math Communication through Effective Questioning

6 - 8 (3 - 5)

How can you ensure that all students are included in a dialog rich in mathematical communicating? Participants will learn how to build a community of learners where students are encouraged to take risks and engage in effective dialogue.

Carri Strunk & Kristin DeLorenzo
The Flemington-Raritan Regional School District

Conference Room E

10. Problems Fostering Effective Mathematics Teaching Practices

9 - 12 (6 - 8, College Teachers, Pre-Service Teachers, Teacher Educators, General Interest)

This hands-on workshop will engage participants in rich problems selected from middle and high school mathematics and beyond that foster one or more of effective mathematics teaching practices supported by NCTM. Areas covered include algebra, geometry, discrete mathematics, precalculus and calculus.

Jay Schiffman
Rowan University

Conference Room F

9:30 AM - 10:30 AM

11. Challenges in Math Education: A Call to Action

General Interest (PK - 2, 3 - 5, 6 - 8, 9 - 12, Supervisors, Department Chairs and Coaches)

My annual address about the state of mathematics education in NJ (and throughout the country) including thoughts about necessary and long overdue changes that need to be made in instruction, curriculum and assessment.

Eric Milou
Rowan University

Auditorium

12. BYTE'ing Into Differentiated Instruction

General Interest (PK - 2, 3 - 5, 6 - 8, 9 - 12, Pre-Service Teachers, Supervisors, School Administrators)

Technology can be easily adapted to differentiate instruction for all students in an inclusion classroom. Participants will learn various strategies of how to incorporate math and technology into choice boards.

Julie Norflus-Good
Ramapo Colleg

Amphitheater

13. Taking Action: Bring Teaching Practice 3 to Life with CRA

3 - 5 (PK - 2, Teacher Educators, School Administrators)

How can we "Use and connect mathematical representations?" Join this session to see how the CRA model makes connections for students that deepens their conceptual understanding and makes math accessible for all students. Take action - master the CRA process and Teaching Practice 3!

Sue Vohrer
Eastern Region 2, NCSM

Conference Room A

Thursday, October 25, 2018

9:30 AM - 10:30 AM

14. Sense-Making Smash K-2

PK - 2 (Supervisors, Teacher Educators, School Administrators)

Are you looking for ways to help students be sense-makers rather than answer getters? Get ready to explore a rapid-fire selection of engaging tasks designed to ignite mathematical curiosity and promote rich math discourse. Used individually or smashed together...activities from Fetter, Fletcher, Stadel, Danielson, Wyborney, Stevens, Bushart and more!

LeighAnn Layton and Nan Evans
Brick Township Public School District

Conference Room B

15. Polynomial Division: Developing Conceptual Understanding

9 - 12 (College Teachers, Pre-Service Teachers, Supervisors, Teacher Educators)

Students struggle with manipulation of polynomials. This session will share strategies that help students develop better understanding of polynomial division for algebra to calculus. Students will develop greater flexibility in their procedural thinking and make connections to rational functions.

Meghan Devaney & Kathleen Carter
North Hunterdon High School

Conference Room D

9:30 AM - 11:00 AM

16. Geogebra - Dynamic Mathematics

9 - 12 (College Teachers, Supervisors, Department Chairs and Teacher Educators)

Introduction to Geogebra with many hands-on applications for teachers of mathematics at the high school level. Turn the classroom into a dynamic exploration of ideas, with students collaborating with each other as they analyze and draw conclusions.

Miguel Bayona
The Lawrenceville School

Gallery

10:00 AM - 11:00 AM

17. Teaching and Learning with Bar Models

9 - 12

Bar models are a powerful tool for solving word problems. The models activate visualization, giving students a clear picture of the relationship between the quantities.We will look at the different problem types, discuss strategies for teaching, and create "teacher's solutions" to problems.

Michael Carlucci
Passaic Valley High School

Conference Room C

10:00 AM - 11:30 AM

18. Math Games for Grade 3 - 5

3 - 5

Support your instruction by using meaningful math games. These games will develop and strengthen conceptual understanding and have students creating mathematical strategies. Suggestions for modifications of the games will make them easy to differentiate.

Suzanne McManimon & Kyle McCarthy
Hamilton Township School District

Conference Room E

19. Motivating Desires and Engagement During Problem Solving

Teacher Educators (6 - 8, 9 - 12, College Teachers, Pre-Service Teachers, Supervisors, School Administrators)

Research with students and prospective teachers, regarding engagement, reveals great diversity in the motivating desires that occur during problem solving. We will share these motivating desires and collectively discuss the implications for students and educators involved in K-16 education.

Lisa Warner
William Paterson University

Conference Room F

Thursday, October 25, 2018

11:00 AM - 12:00 PM

20. Rethinking High School Math: Teaching and Learning Algebra
9 - 12 (6 - 8, Pre-Service Teachers,Department Chairs and Coaches, School Administrators)
NCTM's Catalyzing Change calls for the shifts in what we teach in high school. Let's have a conversation about what algebra content is really essential for all students no matter their intended goals, including the role of technology in this vision.
Gail Burrill
Michigan State University
Auditorium

21. Let's Ask Good Questions of ALL Our Students!
General (3 - 5, 6 - 8, 9 - 12, Pre-Service Teachers, Supervisors, School Administrators)
In this dynamic session participants will actively share questioning strategies addressing formative assessment of both regular and special needs students.
James Clayton & Michael Finetti
Saint Peter's University
Amphitheater

22. Basic Skills Instruction in the Classroom
6 - 8 (9 - 12)
All students can benefit from basic skills instruction that takes place in the mathematics classroom. Whether it is complete reteaching, completion of unfinished learning or just a refresher, students can get a new perspective on concepts and skills.
Natalie Perez & Michael Smulewicz
Boonton Public Schools
Conference Room B

11:00 AM - 12:00 PM

23. Sense-Making Smash 3-5
3 - 5 (Supervisors, Department Chairs and Coaches, Teacher Educators, School Administrators)
Are you looking for ways to help students be sense-makers rather than answer getters? Get ready to explore a rapid-fire selection of engaging tasks designed to ignite mathematical curiosity and promote rich math discourse. Used individually or smashed together...activities from Fetter, Fletcher, Stadel, Danielson, Wyborney, Stevens, Bushart and more!
Nan Evans and LeighAnn Layto
Brick Township Public School District
Conference Room D

11:00 AM - 12:30 PM

24. Math Treats for Inquiring Minds: Engage and Challenge All Students
6 - 8 (3 - 5, 9 - 12, College Teachers, Pre-Service Teachers, Supervisors)
We will share engaging problems that can provide students at many grade levels with a learning environment based on inquiry. These challenging problems connect to a broad math set of math topics from counting to algebraic reasoning and (easily) lead to students asking their own questions.
Jim Matthews
Siena College
Conference Room A

Thursday, October 25, 2018

11:30 AM - 1:00 PM

25. How I Use Desmos

9 - 12 (6 - 8, 9 - 12, Pre-Service Teachers, Supervisors, Department Chairs and Coaches, Teacher Educators)

Session will start off with an exploration of the graphing calculator and geometry tool. We will then move into using the Desmos activity website, the teacher dashboard, and teacher pacing tools. We will then finish up with starting to build a custom activity.

Nickolas Corley
Desmos Fellow

Gallery

26. Using Statistics to Understand Investments

9 - 12 (6 - 8, General Interest)

Even our most accomplished students lack the basic financial skills crucial to success in life, yet they all take math and are all interested in money. I will demonstrate how to infuse investments with basic concepts in statistics.

Paul Westbrook
Rutgers University

Conference Room C

12:00 pM - 1:30 PM

27. Who's Asking?

6 - 8 (9 - 12, Supervisors, Department Chairs and Coaches)

Teachers ask students an average of 200 questions during the school day. Students ask teachers an average of two questions day. Why does this happen? How we can we change it? Can we change the questions we ask? Can we revise the tasks we give? What inspires curiosity? Bring your questions.

Andrea Bean
West Windsor-Plainsboro Regional School District

Conference Room E

12:00 PM - 1:30 PM

28. Meeting Environmental Challenges with Mathematics

6 - 8 (9 - 12, Pre-Service Teachers, Teacher Educators)

Discover hands-on activities that use real-world data to create mathematical models to understand trends in land use, population growth, climate change and more. Build students' environmental I.Q. while developing skills in measurement, data analysis, modeling and problem solving.

Althea Hylton-Lindsey
William Paterson University

Conference Room F

12:30 PM - 1:30 PM

29. One and Done … Now Teaching is Fun!

General Interest (PK - 12, Pre-Service Teachers, Teacher Educators, School Administrators)

20% of your students take up 80% of your time. Often disruptive classroom behavior dominates that 80%. Just Imagine speaking to your troublesome student(s) just once, and it ends there. It can happen and it does. Administrator, veteran teacher or not, this is the session you need to attend.

David Frongillo
Retired Teacher

Auditorium

30. Pathways to Model Visible Thinking in Fraction Operations

3 - 5 (6 - 8, College Teachers, Pre-Service Teachers, Supervisors, Department Chairs and Coaches)

Participants think through concepts, choose strategies, articulate ideas involving Fraction Operations in 3 part lessons involving..build–draw–talk-write– OWN IT! The learning environments offer small to large group activities. Participants receive access to online resources & lessons for classes.

Rudy Neufeld
Neufeld Learning Systems Inc.
Scott Donadio
Elizabeth Public Schools

Amphitheater

Thursday, October 25, 2018

12:30 PM - 1:30 PM

31. The Teacher/Coach Relationship: Exploring Teaching Moves

Supervisors, Department Chairs and Coaches (PK - 8, School Administrators)

The teacher/coach relationship offers teachers a safe space to develop and reflect on their intentional moves in the classroom. Learn about the questioning techniques that were modeled and practiced to support third graders as they persevered through engaging, rich tasks.

MaryJo Wieland
Pascack Valley Regional School District
Lindsey Jachens
Montvale Public Schools

Conference Room B

32. Moana the Navigator: How We Find Our Way in the South Pacific

General Interest (3 - 12, College Teachers, Pre-Service Teachers, Supervisors, Teacher Educators)

In this workshop, we will explore the ways in which Polynesian wayfinders were able to navigate the vast waters of Oceana (South Pacific). We'll also consider the Celestial navigation of the European explorers.

Tom Walsh
President, AMTNJ; Kane University
Stephanie Cooperman
President-Elect, AMTNJ

Conference Room D

1:00 PM - 2:00 PM

33. Unpacking K-2 Standards & Learning through Rich Tasks!

PK - 2

This session will focus on analyzing K-2 New Jersey Student Learning Standards. Participants will interpret standards, and learn strategies to teach the content and develop a number sense. Lastly, the session will highlight rich tasks that are sure to engage students!

Dominique Paladino
Hillsdale Public Schools

Conference Room A

1:30 PM - 2:30 PM

34. Conquer Fractions with Adaptive Storytelling

3 - 5 (6 - 8)

See what happens when quirky stories provide instruction with purpose AND humor, all while adapting to individual student need via a digital tutor. The result: students are "super-engaged" with an increased understanding of fractions.

MaryAnn Hartel
Amplify

Gallery

1:30 PM - 3:00 PM

35. Let's Just Be REAL About Classroom Management

9 - 12 (6 - 8, Supervisors, Department Chairs and Coaches, Teacher Educators, School Administrators)

A current and relevant approach to classroom management designed to reach students of all types in a positive way. Included in the presentation are nearly 2 hours of video reenactments demonstrating the right and wrong way to deal with classroom issues bringing life to strategies discussed.

Ricky Maucione
On a Roll Workshops

Conference Room C

2:00 PM - 3:00 PM

36. Implementing Tasks with High Cognitive Demand in Algebra 2

9 - 12 (College Teachers, Pre-Service Teachers, Supervisors, Department Chairs and Coaches)

The speaker will present on her experience implementing tasks in algebra 2 that have a high cognitive demand. Discussion will include accessibility of tasks, implementation strategies, alignment with math disciplinary practices, and examples of tasks.

Kara Teehan
Middletown High School North

Amphitheater

Thursday, October 25, 2018

2:00 PM - 3:00 PM

37. Learning Linear Equations through Kinematics

9 - 12

How did we conclude that we need to teach physics with algebra to establish solid pre-calculus background?

Ahmed Salama

Passaic High School

Conference Room B

38. Engaging All Students in Rigor

6 - 8 (9 - 12, Pre-Service Teachers)

Teachers will learn strategies for increasing student engagement that can be easily inserted into the daily classroom routine. Participants will be provided with structures to engage ALL levels of students in a classroom in addressing conceptual understanding, procedural skills and application.

Shannon McCaw

EdGems Math LLC

Conference Room D

39. Practical Pointers to Support Your at Risk Students

General Interest (3 - 12, Supervisors, Department Chairs and Coaches, School Administrators)

In this session math teachers can get 7 strategies to identify and remedy their students learning gaps. We will explore new innovations in RTI that leverage standards coherence map and technology tools.

Mukunda Krishnaswamy

Lumos Learning

Conference Room E

2:00 PM - 3:30 PM

40. Kinesthetic Strategies to Improve Math Outcomes

PK - 2 (PK - 2, 3 - 5, Pre-Service Teachers, Supervisors, Department Chairs and Coaches, School Administrators)

Turn your students' love of movement into rigorous math practice. Learn how kinesthetic teaching strategies improve engagement and rapidly increase achievement. Participants will engage in movement-based learning, giving them a personal experience of the power and impact of active learning.

Suzy Koontz

Learn Thru Movement/Math & Movement

Auditorium

41. Modeling Operations With Fractions

3 - 5 (6 - 8)

In this session, we will investigate the meaning of fractions and operations involving fractions. We will model operations involving fractions through drawings and manipulatives to give meaning to fraction operations and enhance student's understanding.

Hugh Green

West Windsor-Plainsboro Regional School District

Conference Room F

2:30 PM - 3:30 PM

42. Music in the Math: Periodic Patterns and Sequences

9 - 12 (9 - 12, Supervisors, Department Chairs and Coaches, Teacher Educators, School Administrators)

Music in the math classroom is an effective and engaging way to teach math concepts such as the behavior of trigonometric functions and sequences. In this presentation, I will introduce basic rhythmic games and patterns that can be used to teach these ideas in the math classroom.

Andrew Bleckner

Princeton International School of Math and Science

Conference Room A

2:15 PM - 3:15 PM

43. Past-President's Reception
By invitation only

JT's Restaurant & Pub

3:00 PM - 4:30 PM

44. President's Reception
Open to all

Lobby

4:45 PM - 6:15 PM

45. Annual Business Meeting
Open to all

Conference Room A

6:30 PM - 8:30 PM

46. Annual Banquet
Ticket required. Cost of ticket: $25.

Conference Room C/D

Friday, October 26, 2018

7:00 AM - 7:30 AM

47. First Timers' Session
An orientation for the program booklet and the conference.
Tom Walsh
AMTNJ President
Kean University

Conference Room B

8:00 AM - 9:00 AM

48. Catalyzing Change and a Reframing of the Common Core
9 - 12 (9 - 12, Supervisors, Department Chairs and Coaches, Teacher Educators, School Administrators)
This session will highlight the similarities and differences between the Essential Concepts for Focus in NCTM's Catalyzing Change for High School Mathematics and the Common Core, and it will describe how districts can reframe their courses through the lens of the Essential Concepts.
Mark Russo
Pascack Valley Regional High School District

Auditorium

49. The Beauty and Necessity of Good Mathematical Writing
Supervisors, Department Chairs and Coaches (9 - 12, College Teachers, Supervisors, Teacher Educators)
A writing rubric to assess and guide students in correct mathematical writing and notation will be discussed.This is greatly emphasized on all PARCC and AP assessments. The rubric can be used when grading assessments and can be used to establish a writing SGO in any math class.
Paula Gray
Bernards High School

Amphitheater

8:00 AM - 9:00 AM

50. Using the Web, to Motivate Algebra Students
9 - 12 (General Interest)
I will discuss intermediate algebra application exercises I wrote using data from business/economic websites. The topics range from Percent Change to Average Rate of Change to Linear Modeling to Exponential Modeling. Technology illustrated can be done using both graphing calculators and Excel.
Cathleen Zucco-Teveloff
Rider University
Jeffrey Teveloff
Business Consultant

Gallery

51. How to Capitalize the M in STEM
6 - 8 (3 - 5, Pre-Service Teachers, Supervisors, Teacher Educators, School Administrators)
During this hands on workshop, we will discuss and partake in engaging STEM-based mathematics lessons. These activities are directly linked to grade level standards and have been student approved! You will leave with STEM project ideas that can be implemented in your math class on Monday.
Sarah Kolonia & Dawn Boyer
Byram Intermediate School

Conference Room A

52. Connections Across the Grades
3 - 5 (6 - 8, Pre-Service Teachers, Supervisors, Department Chairs and Coaches, Teacher Educators)
Ever wonder how the content you teach builds from previous years and lays the groundwork for future work? Participants will engage in an activity and discussion designed by Student Achievement Partners to illustrate the progressions and coherence in K-8 mathematics.
Kristin DeLorenzo & Elizabeth Gardner
Flemington-Raritan School Distric

Conference Room D

Friday, October 26, 2018

8:00 AM - 9:30 AM

53. Keep Calm & Teach On

General Interest (PK - 12, Supervisors, Teacher Educators, School Administrators)

Common sense, research based classroom management techniques that can be implemented into the classroom and school-wide, with positive and observable results. This presentation is designed to present some of the most common mistakes educators make, followed by suggestions as to what we should do.

Susan Lovato
Delran Township School District

Conference Room B

54. Free Online Practice + Data = Individualized Instruction

General Interest (PK - 12, College Teachers, Pre-Service Teachers, Supervisors, School Administrators)

Khan Academy is not just videos. Teachers can assign exercises and obtain meaningful data to drive instructional decisions. Increase student understanding and personalize instruction by reviewing student data. Learn how Khan Academy's mastery-based design can help students learn at every age level.

Shalom Labkovski
Township of Ocean School District

Conference Room C

55. Assessing Progress with Student Math Journals

3 - 5 (PK - 2, Pre-Service Teachers, Supervisors, Department Chairs and Coaches, Teacher Educators)

Math Journals are an excellent formative and summative assessment. They provide insight into student thinking on a daily basis and are a long-term record of progress and development. We will look at student examples and write a lesson plan to get started with a journal-based math class.

Kathleen Wallace
Madison Public Schools

Conference Room E

8:00 AM - 9:30 AM

56. Effective Planning of Math & Science to Improve Achievement

General Interest (PK - 12, Supervisors, Department Chairs and Coaches, School Administrator)

The NJ Center for Teaching & Learning has free digital course materials that seamlessly integrate technology and assessment into K-12 mathematics and science. During this session learn strategies for cross curricular planning. All resources are posted at www.njctl.org.

Melissa Axelsson & Ian Fallstich
NJ Center for Teaching and Learning

Conference Room F

9:30 AM - 10:30 AM

57. Multiplication Running Records - No More Timed Tests

3 - 5 (3 - 5, Pre-Service Teachers, Supervisors, Department Chairs and Coaches)

This session provides an overview of Running Records for Multiplication. Learn how to administer a running record and use the results to support students as they learn the multiplication facts. Resources to extend your learning and activities to use with students will also be provided.

Denise Rawding
Newark Public Schools

Auditorium

58. Use Paint Shop and a Stylus to Improve Instruction

General Interest (6 - 12, College Teachers, Pre-Service Teachers, Supervisors, School Administrators)

Paint Shop and a tablet can't be beat:

- *To create and post colorful, CLEAR, DAILY, class notes.*
- *To move images, screen capture, and store in notes.*
- *To prepare for tomorrow's work.*
- *To repeat favorite lessons.*
- *To review.*
- *TO MAXIMIZE THE TIME YOU SPEND LOOKING AT STUDENTS!*

Agnes Azzolino
mathnstuff.com

Amphitheater

Friday, October 26, 2018

9:30 AM - 10:30 AM

59. Creating Flow & Learning Opportunitiesby Varying Instruction

General Interest (3 - 12, Supervisors, Department Chairs and Coaches, Teacher Educators)

Adding modules or activities as needed improves classroom management and learning (such as Kahoot or Blind Voting). While teachers may have specific lesson plan requirements, having additional ideas can help create flow in your classroom and enrich the environment for instructors and students.

Robin Schwartz
College of Mt St Vincent

Gallery

60. Flipping your Classroom with EdPuzzle

Teacher Educators (PK - 12)

Learn how to make videos and flip your classroom with ease! EdPuzzle provides teachers an opportunity to front load content, engage students, assess student understanding with short response and multiple choice questions, and provide individualized feedback.

Kristy Braschi
Livingston Public Schools

Conference Room A

61. Developing Reasoning Skills by Algebrafying Patterns

6 - 8 (9 - 12, Pre-Service Teachers, Supervisors, Department Chairs and Coaches, Teacher Educators)

Participants will be provided with classroom-ready hands-on lessons that enable students to connect recursive rules to quantitative models and functions. Emphasis will be placed on connecting concrete, pictorial, and abstract representations to help students analyze change in various contexts.

Tom Beatini
Union City Public Schools

Conference Room D

10:00 AM - 11:30 AM

62. Advanced Algebra with Finance: A 3rd/4th Year Math Course

9 - 12

Selected topics from Algebra 2, Precalc, prob & stat, trig and geometry are used to cover credit, banking, income taxes, insurance, mortgages, investing and more. Free textbook to all attendees!

Robert Gerver
North Shore Schools

Conference Room B

63. Just Let Me Survive Today

General Interest (6 - 12, College Teachers, Pre-Service Teachers, Supervisors, School Administrators)

Through a unique combination of games, puzzles, "brain – based" strategies, rewards and incentives, lots of humor and some traditional techniques, you will learn how to motivate your students so that they will greatly look forward to coming to your class to learn.

Mark Richman
Columbia HS Maplewood

Conference Room C

64. Finding and Keeping Your Passion for Teaching

Pre-Service Teachers (3 - 5, 6 - 8, Teacher Educators)

A teacher's career change from Business to education and her journey from elementary to middle schools over 18 years in an Urban School District in Baltimore, in an effort to find home.

Renee Tengella
???

Conference Room E

65. 5-minute Formative Assessments

9 - 12 (6 - 8, College Teachers)

Participants will engage in hands-on demonstrations showing how to use several formative assessments while taking no more than 5 minutes of class time. Every assessment demonstrated is able to be used for a grade or for informing the next day's activity, and take only a few minutes to plan.

Ana Woolsoncroft
Mercer County Community College

Conference Room F

Friday, October 26, 2018

11:00 AM - 12:00 PM

66. Functions: What Makes Them so Difficult?
9 - 12 (Pre-Service Teachers, Supervisors, Department Chairs and Coaches, Teacher Educators)
Students struggle with functions. How can we restructure our approach so they connect different representations of functions, think about functions in general terms and develop the understanding needed to progress in mathematics? What is the role of interactive dynamic technology in the process?
Gail Burrill
Michigan State University
Auditorium

67. Desmos for the K-5 Classroom: Engaging Digital Assessments
3 - 5 (PK - 2)
Learn how to use Desmos to create unique and engaging digital assessments for your students. Explore the Desmos library of teacher-created activities appropriate for your elementary age students. Leave with several digital resources to be used as creative formative assessments in your classroom.
Danielle Seibert & Valerie DeMatteo
Middletown Township Public Schools
Amphitheater

68. The Basics and More for SMART Board's Notebook Software
9 - 12 (3 - 8)
New tools in the later additions of Notebook including an Equation Editor for Mac and Window users. SMART Labs. Good (and easy) tools and ideas to use in your classroom to enhance instruction, increase engagement, motivation and understanding. (grades 6- 12)
Linda Treilman
Mercer County Community College
Gallery

11:00 AM - 12:00 PM

69. Exploring Parabolas through Project Based Learning
6 - 8 (9 - 12, College Teachers, Pre-Service Teachers, Supervisors, School Administrators)
In this session you will learn ways to engage your Algebra students in learning about parabolas and modeling parabolas with equations. You will also learn to utilize a Desmos activity to engage your students in understanding parabolas.
Nicole Ealey
Rutherford Public Schools
Conference Room A

70. Blended Learning to Promote Mathematical Discourse
9 - 12 (Pre-Service Teachers, Supervisors, Department Chairs and Coaches, Teacher Educators)
Blended learning offers structures that can help students own their learning. This session will offer strategies that engage students in conversations to promote their ability to connect mathematical ideas, share insights, plan solutions, and find convincing arguments for or against proposed ideas.
Arpi Lajinian
Northern Valley Regional HS at Old Tappan
Conference Room D

12:00 PM - 1:30 PM

71. The Power of a Math Coach
Supervisors, Department Chairs and Coaches (PK - 12, Pre-Service Teachers, School Administrators)
What can a math coach do for your district? Join me for a lively discussion on the lessons learned after the first year of being a new Math Coach! Take away ideas & strategies for use in your school.
Ann Marie VanSickle
Green Hills School, Green Twp
Conference Room B

Friday, October 26, 2018

12:00 PM - 1:30 PM

72. Visual Fractions: An Alternative to Bar Models

3 - 5 (Teacher Educators)

Presentation will be of an alternative method to solve all operations with fractions utilizing visual models. Although bar models are great, not every student is able to effectively utilize them. This method gives teachers alternatives to bar models when teaching visual representations of fractions.

Louis Cuomo
Rutherford Schools

Conference Room C

73. Fun High School Mathematics Assessments

9 - 12

I like to make learning math fun using math basketball, final jeopardy, plickers, whiteboards, the graphing calculator, and partner games, etc.

Deirdre Brown
Trenton Central High School

Conference Room E

74 Making Math Open

School Administrators (PK - 8, Pre-Service Teachers, Supervisors, Teacher Educators)

What are open math tasks? How can we open up closed tasks? What does an open math classroom look like, and how do we get there? We will target these questions and more as we explore open tasks that allow for multiple pathways of strategic problem-solving and encourage continued growth.

Nicole Hreno & Stefanie Marsich
Woodcliff Lake School District

Conference Room F

12:30 PM - 1:30 PM

75. Maximized Math: A Workshop Model of Instruction

6 - 8 (3 - 5, Pre-Service Teachers, Supervisors, School Administrators)

Learn how to use a differentiated, self-paced model for math instruction designed to meet the needs of all learners in a general education, special education, or inclusion classroom, utilize stations to deliver math content in a multitude of ways, and incorporate key habits of successful students.

Courtney Hammell & Morgan Maclearie
Bradley Beach School

Auditorium

76. Rethinking Traditional Grading Methods: Using Earn Backs

9 - 12 (3 - 5, 9 - 12, General Interest)

This workshop is designed to challenge the conventional thought process of using partial credit to grade math exams in favor of using a system of second chances known as Earn Backs. The instructor will introduce you to a grading system which fosters a growth mindset for students.

Dean Rayside
Northern Highlands

Amphitheater

77. Active Learning Strategies for the Mathematics Classroom

College Teachers (3 - 12, Pre-Service Teachers, Supervisors, Department Chairs and Coaches)

An in-depth look at how to implement active learning strategies in all aspects of a math class, ranging from course introductions, to class activities and assessments.

John Kerrigan
Middletown Twp. Public Schools

Gallery

Friday, October 26, 2018

12:30 PM - 1:30 PM

78. What Do Your Kids REALLY Know?

9 - 12 (3 - 5, 6 - 8, Supervisors, Department Chairs and Coaches)

Looking for different ways to assess kids' understanding? Watch your students create instructional videos, complete partner assessments, students teach each other, correct each other's work and more! Here are rich alternatives to truly determine student's conceptual understanding.

Charleen Schwartzman

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Conference Room A

79. Deepening Multiplication and Division Content Knowledge

3 - 5

Do your students rely on standard algorithms for multiplication and division? Explore practical implementation options and a progression of models to strengthen conceptual understanding. Participants will be actively involved in a series of tasks using manipulatives. .

Alison Nass

West Windsor Plainsboro School District

Conference Room D

2:00 PM - 3:00 PM

80. Goldilocks Math: Exploring the Practice Standards

General Interest (PK - 8, Supervisors, Department Chairs and Coaches)

Learn how our Mathematical Practice and Mindset unit allows students and teachers to explore the heart of mathematics in creative and flexible ways that don't feel too "math-y"; instead they're "just right"!

Kristen Emmel

Franklin Lakes School District

Auditorium

2:00 PM - 3:00 PM

81. The Rubik's Cube: A Missing Link to Engaging Math Education

General Interest (3 - 12, School Administrators)

Many students have anxiety around math, often convinced they lack the intelligence to perform well on such assessments. Through two consecutive elective courses, Dan Van der Vieren established an environment which invited students back into the math classroom using the Rubik's Cube.

Dan Van der Vieren

Chinook West Alternative High School

Amphitheater

82. Real World Mathematics For All

6 - 8 (9 - 12, Pre-Service Teachers, Supervisors, Department Chairs and Coaches, Teacher Educators)

This presentation will inspire math educators to create their own real-world activities and assessments that promote conceptual understanding based upon the classes that they teach. Educators will be provided with samples of project/ performance based assessments that can be used for various topics.

Susan Wolff

Randolph Middle School

Gallery

83. What Do We Do about Algebra 1?

Pre-Service Teachers (6 - 12, Pre-Service Teachers, Supervisors, School Administrators)

We will look at some of the stumbling blocks to success in Algebra 1 and how they can be overcome. Attendees will analyze student responses to Algebra 1 problems and discuss possible interventions through the lens of learning progressions.

Liz Marquez

ETS

Conference Room A

Friday, October 26, 2018

2:00 PM - 3:00 PM

84. Cultivating a Culture of Collaboration

Supervisors, Department Chairs and Coaches (6 - 12, Supervisors, School Administrators)

In this session, school leaders will explore ways to promote and sustain a culture of collaboration within their math department. We will discuss why cultivating this culture is so important and how it has a direct impact on teacher leadership and student learning.

Rosemarie Malloy
Northern Highlands Regional High School

Conference Room D

2:00 PM - 3:30 PM

85. Creating Positive Math Mindsets in the Elementary Classroom

3 - 5 (PK - 2, Pre-Service Teachers, Teacher Educators)

Elementary teachers often are not aware that much of the work and language they use in their math class remains with students for years to come. We will discuss ways in which elementary teachers can create positive feelings toward math among their students and keep them from developing math anxiety

Elissa Scillieri
Pequannock Township School District

Conference Room B

86. Cardan's Formulas for Solving Cubic Equation

College Teachers (9 - 12, Supervisors, Department Chairs and Coaches)

This presentation will develop the Cardan's formulas to solve the cubic equation. The formulas will be derived from the first principle using some basic concepts from Calculus. Some cubic equations will be solved using the Cardan's formulas

Afroze Naqvi
Sakatcheawn Polytechnic

Gallery

2:00 PM - 3:30 PM

87. A Stress-Free Approach to Enhancing Assessment Strategies

9 - 12 (6 - 8, Supervisors, Department Chairs and Coaches, Teacher Educators, School Administrators)

The session will include a wide variety of strategies that implement assessments within the math classroom. Assessments to be discussed include student-centered formative assessment questions, discovery-based virtual labs, and summative assessments aligned to NJSLS-M, PARCC, AP, etc.

Maria Surace & Audra Crist
NJ Center for Teaching and Learning (NJCTL)

Conference Room E

88. Students at the Center of Math

3 - 5 (PK - 2, Supervisors, Department Chairs and Coaches, Teacher Educators, School Administrators)

In this session, elementary teachers will explore how to increase accountable talk, improve student confidence, enhance student focus, and create a student-centered math classroom. Discussion will include mathematical mindsets, guided math, formative assessment, and the standards of math practice.

Michelle Hawley
Oradell Public School

Conference Room C