

BUILDING YOUR MATH SUPERPOWER: TAKING ACTION

PRELIMINARY MATH CONFERENCE

PLANNING SCHEDULE



Planning Highlights

- Wednesday: Registration 4:15 pm – 6:45 pm
- Thursday: Registration 7:30 am – 12:30 pm
- Thursday: Exhibit Hall 8:00 am – 4:30 pm
- Thursday: Business Meeting, Awards, Reception, and Door Prizes 5:00 pm
- Friday: Registration 7:30 am – 9:30 am

Early Bird Fee Deadline: October 15, 2019
Pay by PO, Check, or Online

Registration may be done on-site, but it is suggested that each person set up their account on-line at sctm.org prior to getting in line at the conference.

A detailed, updated, and complete conference program in flipbook and pdf formats will be available on-line prior to the conference.

Please print out any pages provided in this document that will be pertinent to your conference planning experience.

First Time SCCTM
Conference Attendees'
Session, 8:30 am Atrium

Exhibit Hall Opens
and First Sessions
Thursday & Friday

8:00 am

Pre-register and
make payment prior
to the conference via
check, card, or send
a Purchase Order in
before the
conference and pick
up your conference
materials in the Fast
Track Line

November 14 – 15, 2019

Greenville, S.C.

South Carolina
Council of Teachers
of Mathematics

Conference t-shirts will
be available as a pre-
paid order. Check
SCCTM.org in October
for ordering
information.

Your Personal Planning Sheet for Thursday, November 14

Registration 7:30 am to 12:30 pm

Exhibits 8:00 am to 4:00 pm

Time	Activity/Session Title	Session No.	Location
	Visit the Exhibits		<i>Exhibit Hall</i>
8:00			
9:45	Keynote Address		<i>202 C</i>
1:15	Keynote Address		<i>202 C</i>
5:00	43 rd Annual SCCTM Business Meeting & Awards Ceremony		<i>202 C</i>

Your Personal Planning Sheet for Friday, November 15

Registration 7:30 am to 9:30 am

Exhibits 8:00 am to 2:00 pm

Time	Activity/Session Title	Session No.	Location
	Visiting the Exhibits		<i>Exhibit Hall</i>
8:00			
9:45	Keynote Address		<i>202 C</i>
2:15	Closing Keynote Address		<i>202 C</i>

South Carolina Council of Teachers of Mathematics

Fall Math Conference

November 14 - 15, 2019

Greenville Convention Center, Greenville, South Carolina



BUILDING YOUR MATH SUPERPOWER: TAKING ACTION

Credit Renewal Planner

General South Carolina Guidelines:

1. Renewal credits must be related to the educator's professional growth plan and/or support the goals of the employing educational entity, and therefore, are subject to the approval of the educational entity. A pre-approval for this professional activity may be required. SCCTM Conference credits will be issued under Option #10 of the SC Certificate Renewal Plan.
2. An educator may earn renewal credits only through activities for which all eligibility criteria have been met.
3. The educator is responsible for maintaining all required renewal credit verification and documentation.

Personal Planning:

1. Review the list of sessions available for each time period and select the sessions you would like to attend.
2. Write the session topic or title and room number in the space provided. Refer to this form throughout the conference.
3. Before you leave a session, plan where you will go for your next session. Plan an alternate choice.

Certificate Renewal Credits:

1. At the end of each session, the presenter or facilitator will inform attendees of the Certificate Renewal Credit (CRC) Code for that session. If the presenter does not provide this code, please ask for this information before you leave the session. You must have the correct code numbers as proof of your attendance.
2. Sessions and workshops are of varying lengths and are counted according to the number of minutes involved.
3. You may count up to 60 minutes for reviewing the instructional materials in the exhibit area. The CRC Code for this may be found in the SCCTM booth.
4. Each hour of attendance in sessions or workshops is equal to one (1) certificate renewal point. To calculate the total number of points earned, you will need to add your total session and workshop minutes and divide by 60 to determine the credit points you earned.
5. Retain this completed form in your Certificate Renewal File for submission according to your district's procedures.
6. As an alternate to this form, a link will be provided for you to obtain certificates as proof of your attendance. You must use the CRC code provided at the end of a session to obtain the certificate.



**South Carolina Council of Teachers of Mathematics 2019
Conference Renewal Credit Certification Form**



Name _____

Complete this table to document your participation in conference sessions and workshops for certificate renewal credit points. CRC Codes will be provided at the end of each session. It is the attendee's responsibility to keep up with their attendance and to obtain and document the session CRC codes to use as proof of attendance.

Scheduled Time	Session #	Title/Topic	Room	CRC Code	Minutes
Thursday, November					
Friday, November 16					
Total all session and workshop minutes.			Total Minutes:		
To calculate your CRC points, divide minutes by 60.			Total Points:		

Assurance of Accuracy:

Only this Official Document in your Program Book is signed. Please only use and sign this form to affirm the accuracy of your participation and the renewal credits accrued.

Educator's Signature Date

Marc Drews

**Nov. 14 and 15, 2019
 Marc Drews, President
 SC Council of Teachers of Mathematics**

8:30 - 9:00

Session 1

General

Atrium

First Time Conference Attendees Meet and Greet

Meet and greet with the SCCTM President and President-Elect as they share with you ideas and suggestions to make the best use of your SCCTM conference experience.

Marc Drews & Ryan Higgins, SCCTM Board Members



8:00 - 9:00

Session 2

9th - College

100B

Mathematics: History, Trivia, and Interesting and Fun Problems

What is a trillion?; Where did the word "radian" come from?; How far is the horizon? Stimulating your teaching.

NCTM Principles to Actions: Implementing Tasks that Promote Reasoning and Problem Solving, Facilitating Meaningful Mathematical Discourse, Posing Purposeful Questions, Eliciting and Using Evidence of Student Thinking

George Schnibben, Francis Marion University



8:00 - 9:00

Session 3

9th - College

101A

Make Integration Easy For Beginners

Discover how to do integration without using calculators by applying techniques and results. For example, apply results and techniques at BY PARTS (ILATEC); SUBSTITUTION (without t); and FUNCTIONS involving partial fractions, exponential, and trigonometric functions. Find out how to make it easy to evaluate definite integrals involving absolute functions, step functions, etc.

NCTM Principles to Actions: Establishing Mathematics Goals to Focus Learning, Implementing Tasks that Promote Reasoning and Problem Solving, Using and Connecting Mathematical Representations, Building Procedural Fluency from Conceptual Understanding, Eliciting and Using Evidence of Student Thinking

Dr. Subbaiah Chowdary Valluru, Marlboro County High School

Ms. Kandace Cannon

8:00 - 9:00

Session 4

6th - 8th

101B

Using Computational Thinking in Mathematics through Projects

During this session, participants will look at several math projects that use computational, global thinking to teach math concepts.

NCTM Principles to Actions: Implementing Tasks that Promote Reasoning and Problem Solving, Posing Purposeful Questions, Eliciting and Using Evidence of Student Thinking

Emily Strickland, Beck Academy



8:00 - 9:00

Session 5

9th - 12th

104A

Mathematics + History + Social Justice = Global Mathematics

Learn how one school created an elective course, Global Mathematics, that helps students understand and critique the world while also experiencing wonder, joy, and beauty.

NCTM Principles to Actions: Access, Identity, and Equity

David Ebert, Oregon High School / NCTM Board of Directors



8:00 - 9:00

Session 6

3rd - 5th

104B

Elementary Latinx Students' Strategies for Extending a Visual Growth Pattern

This session explores the strategies students in grades 3-5 use to extend a growing pattern problem. We discuss how their strategies impact their abilities to generalize the pattern.

NCTM Principles to Actions: Implementing Tasks that Promote Reasoning and Problem Solving, Eliciting and Using Evidence of Student Thinking

Hilary Tanck, Stacy R. Jones, Carlos Nicolas Gomez

Clemson University Students

8:00 - 9:00

Session 7

PreK - 5th

201

Elements of High Quality Math Tasks within SCCCR Math Support Documents

The mathematics support documents have been created by teachers for teachers. This is a working document. Based on feedback from classroom application, revisions will continue. This presentation will be an overview of the process the team of South Carolina educators participated in to create the instructional math tasks that were added to the K-5 SCCCR Math Support Documents

NCTM Principles to Actions: Implementing Tasks that Promote Reasoning and Problem Solving

Vanessa Burgos-Kelly, South Carolina Department of Education



8:00 - 9:00

Session 8

PreK - 8th

202B

Growth Mindset: Preparing Today's Students for Tomorrow

The purpose of the session is to discuss the changing dialog around how to develop and cultivate a culture of growth mindset.

NCTM Principles to Actions: Supporting Productive Struggle in Learning Mathematics

Danna Fox, Houghton Mifflin Harcourt



8:00 - 9:00

Session 9

General

Exhibit Hall 1

Tools, Tools and More Tools (Math Tech Tools, That Is!)

I'll share my top 10 favorite Math webtools. Maybe more if we have time! Some old, some new and some with a twist on how to integrate them into your lessons.

NCTM Principles to Actions: Supporting Productive Struggle in Learning Mathematics

Debbie Jarrett, SCETV



8:00 - 9:00

Session 10

General

Exhibit Hall 2

Promethean Escape Room Experience

The Promethean Escape Room Experience challenges attendees with a series of puzzles and riddles that must be solved in order to escape. The goal? Escaping the room before time runs out. The escape room experience helps students build essential collaboration and critical thinking skills. Attendees can expect to work as a group to solve puzzles on Promethean's immersive classroom solutions, including the ActivPanel, ActivConnect and ClassFlow. The Promethean Escape room is limited to 10 attendees per session.

NCTM Principles to Actions: Posing Purposeful Questions, Supporting Productive Struggle in Learning Mathematics

Ernie Faulkenberry & Matt Barfield

Promethean



8:00 - 9:00

Session 11

6th - 12th

Exhibit Hall 3

Erasing FEARS in Mathematics Through the Super Powers of Engagement, Relevancy, Rigor, and Collaboration.

In this session, participants will walk away with multiple strategies that promote engagement in the math class. The strategies are based on the mathematical process standards.

NCTM Principles to Actions: Implementing Tasks that Promote Reasoning and Problem Solving, Using and Connecting Mathematical Representations, Supporting Productive Struggle in Learning Mathematics

Alvin Allen & Dominique Bennett

Richland School District 1



8:30 - 9:30

Session 12

9th - 12th

Atrium Alcove

Inquiry in a Desmos Kind of Way

Desmos is an awesome tool to implement inquiry in your lessons. We will use Desmos to improve your lessons by using inquiry and conceptual exploration of math concepts.

NCTM Principles to Actions: Implementing Tasks that Promote Reasoning and Problem Solving, Using and Connecting Mathematical Representations, Facilitating Meaningful Mathematical Discourse, Building Procedural Fluency from Conceptual Understanding, Supporting Productive Struggle in Learning Mathematics, Eliciting and Using Evidence of Student Thinking

Joanna Myles, Easley High School



8:00 - 9:30

Session 13

3rd - 8th

102A

Enhancing Your SC READY Superpowers

The South Carolina Office of Assessment will share with participants the aspects of essential elements of Universal Design in summative assessments. Attendees will learn how these guide the development of SC READY. Additionally, we will provide any updates for the 2019-2020 SC READY assessment.

NCTM Principles to Actions: Using and Connecting Mathematical Representations, Facilitating Meaningful Mathematical Discourse, Posing Purposeful Questions, Eliciting and Using Evidence of Student Thinking

Daniel Cammisa & Marquita Blaylock

South Carolina Department of Education



8:00 - 9:30

Session 14

6th -8th

102B

Making Moments Mathematical

Math is all around us! How can you take what you see every day and make it mathematical? Come find out how to use the world around us to implement the Mathematical Process Standards into the classroom.

NCTM Principles to Actions: Using and Connecting Mathematical Representations, Facilitating Meaningful Mathematical Discourse, Posing Purposeful Questions, Eliciting and Using Evidence of Student Thinking

Sandra Ammons, South Carolina Department of Education & SCCTM Board

8:00 - 9:30

Session 15

3rd - 8th

102C

What's Your Angle on Angles?

Do your students struggle to “see” angle relationships? Are protractors perplexing? This session will provide lessons and hands-on activities to illuminate angle measurement understanding, explore application of angle relationships in middle school, and connect this understanding to transformational geometry and high school trigonometry.

NCTM Principles to Actions: Using and Connecting Mathematical Representations, Building Procedural Fluency from Conceptual Understanding, Exploring coherence of geometry across grades

Elizabeth Peyser, Curriculum Associates



8:00 - 9:30

Session 16

9th - 12th

103

Creative Inquiry Prompts

Incorporate more inquiry-based learning into your secondary math classroom through inquiry prompts. In this session, discover how to turn everyday items and traditional practice problems into entry points for student inquiry.

NCTM Principles to Actions: Using and Connecting Mathematical Representations, Facilitating Meaningful Mathematical Discourse, Posing Purposeful Questions, Eliciting and Using Evidence of Student Thinking

Amber Hedgpath, James F. Byrnes High School, Spartanburg District 5



8:00 - 9:30

Session 17

K-2nd

202A

Data about us!

Help students understand the power of collecting, organizing, and representing data through favorite lunch choices. Connections will be made to social studies and ELA standards

NCTM Principles to Actions: Implementing Tasks that Promote Reasoning and Problem Solving

Margaret Lorimer & Terrie Dew



8:00 -9:30

Session 18

K-8th

202C

Let's get Messy! Mathematical Modeling: Engage Your Reluctant Learners

Waiting for description.

NCTM Principles to Actions: Further your understanding of the research behind and the meaning of Mathematical Modeling. By analyzing the modeling cycle and examining research found in the GAIMME report, you will walk away with more insight of what truly constitutes Mathematical Modeling. And, of course, you will have the opportunity to experience several highly engaging modeling lessons. By the conclusion of this workshop, you will have ideas that can be used immediately in your classroom to meet required modeling standards!

Pearson Math Team, Pearson



8:00 -9:30

Session 19

6th - 12th

203

Engaging Students in Productive Struggle

This workshop will focus on key Mathematics Teaching Practices from NCTM's Principles to Actions to support productive struggle in learning mathematics. Discussions and activities will focus on how activities that provide for visualization and conceptual development of mathematics help students think deeply about mathematical ideas and relationships.

NCTM Principles to Actions: Implementing Tasks that Promote Reasoning and Problem Solving, Using and Connecting Mathematical Representations, Facilitating Meaningful Mathematical Discourse, Posing Purposeful Questions, Building Procedural Fluency from Conceptual Understanding, Supporting Productive Struggle in Learning Mathematics, Eliciting and Using Evidence of Student Thinking

Sherri Abel, Charleston County Schools



9:15 - 11:45

Session 20

Field Trip

General

Meet in Atrium

Paris Mountain Math Trail

Experience the fresh air and hike a Paris Mountain State Park trail while answering while using your Super Powers to solve math problem. Wear your walking shoes. Be advised that the trail is uneven in some places and may be challenging for some. Space is limited, so participants must preregister on the SCCTM website.

NCTM Principles to Actions: Implementing Tasks that Promote Reasoning and Problem Solving, Using and Connecting Mathematical Representations, Facilitating Meaningful Mathematical Discourse, Posing Purposeful Questions, Building Procedural Fluency from Conceptual Understanding, Supporting Productive Struggle in Learning Mathematics, Eliciting and Using Evidence of Student Thinking

TBD



9:15 - 10:15

Session 21

PreK - 5th

100B

No Numbers, No Problem!

Do your students know how to think like problem solvers? They need much more than computational skills. You will learn about different strategies to develop problem solvers.

NCTM Principles to Actions: Implementing Tasks that Promote Reasoning and Problem Solving

Dawn Jacobs & Heather Price

Forts Pond Elementary Lexington School District One



9:15 - 10:15

Session 22

3rd - 8th

101A

Embracing Student Thinking in the Math Classroom

With respect to the potential power learning has for all our students, we will take a deeper look into the thinking process and applications we have tried with our students in the math classroom to help them share their thinking and embrace their SUPER POWERS.

NCTM Principles to Actions: Establishing Mathematics Goals to Focus Learning, Implementing Tasks that Promote Reasoning and Problem Solving, Facilitating Meaningful Mathematical Discourse, Posing Purposeful Questions, Supporting Productive Struggle in Learning Mathematics, Eliciting and Using Evidence of Student Thinking

Patricia Smith, Clover School District

9:15 - 10:15

Session 23

3rd - 8th

101B

SmART Math - Integrating ART into Your Math Lessons

From Kandinsky to Mondrian, mathematics can be found across a variety of artistic mediums and genres. Join this session to learn how an integration of the arts can excite and invigorate your mathematics classroom. Participants will leave with links to a variety of Google Slides which lead to easy to implement lessons and activities.

NCTM Principles to Actions: Establishing Mathematics Goals to Focus Learning, Using and Connecting Mathematical Representations, Posing Purposeful Questions, Eliciting and Using Evidence of Student Thinking

Melody Powell, Stone Academy of Communication Arts



9:15 - 10:15

Session 24

9th - College

104A

Exploring Topics in Recreational Math

The speakers will provide some ideas and examples related to the use of recreational math topics as areas of investigation for students.

NCTM Principles to Actions: Implementing Tasks that Promote Reasoning and Problem Solving, Facilitating Meaningful Mathematical Discourse, Posing Purposeful Questions

John Harris, Furman University

Lori Alvin, Courtney Brown



9:15 - 10:15

Session 25

PreK - 2nd

104B

Build Their Way Through Math and Play

Teachers will be able to help k -2 students realize their strength of learning through play. Teachers will be given tools to engage their students through partner games, manipulatives, and math read alouds.

NCTM Principles to Actions: Implementing Tasks that Promote Reasoning and Problem Solving

Lisa Daniels, Joseph Keels Elementary

9:15 - 10:15

Session 26

6th - 12th

201

Using Carnegie Learning in the Classroom

This session will be a resource to teachers currently using or considering the use of Carnegie Learning as a classroom resource. Detailed demonstration, hands-on activities, and strategies for learning will be shared throughout this session.

NCTM Principles to Actions: Establishing Mathematics Goals to Focus Learning, Implementing Tasks that Promote Reasoning and Problem Solving, Using and Connecting Mathematical Representations, Facilitating Meaningful Mathematical Discourse, Posing Purposeful Questions, Building Procedural Fluency from Conceptual Understanding, Supporting Productive Struggle in Learning Mathematics, Eliciting and Using Evidence of Student Thinking

Jennifer Pickens, Jenna Burdette, Courtney Lamb

Greenville Middle Academy



9:15 - 10:15

Session 27

202B

Opening in schedule

NCTM Principles to Actions:



9:15 - 10:15

Session 28

PreK - 5th

Exhibit Hall 1

Hands-On and Self-Correcting Math Centers

This is your opportunity to play with, and KEEP, hands-on and self-correcting materials that help K-5 students with Numeration, Algebra, Geometry & Measurement, and Probability and Statistics.

NCTM Principles to Actions: Implementing Tasks that Promote Reasoning and Problem Solving, Building Procedural Fluency from Conceptual Understanding

Rich Stuart, Learning Wrap-ups, Inc.

9:15 - 10:15

Session 29

General

Exhibit Hall 2

Promethean Escape Room Experience

The Promethean Escape Room Experience challenges attendees with a series of puzzles and riddles that must be solved in order to escape. The goal? Escaping the room before time runs out. The escape room experience helps students build essential collaboration and critical thinking skills. Attendees can expect to work as a group to solve puzzles on Promethean's immersive classroom solutions, including the ActivPanel, ActivConnect and ClassFlow. The Promethean Escape room is limited to 10 attendees per session.

NCTM Principles to Actions: Posing Purposeful Questions, Supporting Productive Struggle in Learning Mathematics

Ernie Faulkenberry & Matt Barfield

Promethean



9:15 - 10:15

Session 30

3rd - 8th

Exhibit Hall 3

Get me 1/2 way there...

Fraction Sense, Simplifying Fractions, Equivalent Fractions, Adding Fractions, Improper Fractions are all concepts that elementary students need to master. Use simulations to teach fraction literacy. Join us and receive access to online simulations to try out!

NCTM Principles to Actions: Implementing Tasks that Promote Reasoning and Problem Solving, Posing Purposeful Questions

Thom O'Brien, Explorelearning



9:45 - 11:15

Session 31

9th - 12th

Atrium Alcove

OMG! Math Graphic Organizers

OMG will transform your classroom and help you introduce or review material in a way that is fun and exciting for students! You must see it to believe it! This is a make and take session.

NCTM Principles to Actions: Using and Connecting Mathematical Representations, Building Procedural Fluency from Conceptual Understanding, Supporting Productive Struggle in Learning Mathematics

Rhonda Davis, The Outstanding Guides

9:45 - 11:15

Session 32

PreK - 5th

102A

The Power of Persevering: Teaching Students to be Mathematical Powerhouses

Learn to help students build their math superpowers through positive mathematical messages. Take away easy to implement strategies for teaching students to persevere and reason.

NCTM Principles to Actions: Implementing Tasks that Promote Reasoning and Problem Solving, Facilitating Meaningful Mathematical Discourse, Supporting Productive Struggle in Learning Mathematics

Jennifer Jolly Ledbetter & Casey Davis

Riverview Elementary School, Fort Mill School District



9:45 - 11:15

Session 33

3rd - 12th

102B

Building Reasoning Using Addition Structures from Kindergarten to High School

Explore tasks from K to HS you can use with your students that build upon their prior experiences and conceptual understandings. Let's quit leaving their prior knowledge at the door.

NCTM Principles to Actions: Implementing Tasks that Promote Reasoning and Problem Solving, Using and Connecting Mathematical Representations, Facilitating Meaningful Mathematical Discourse

Janet Tomlinson, Carnegie Learning



9:45 - 11:15

Session 34

6th - 8th

102C

Talk Moves To Promote Student Discourse

Whoever does the talking, does the learning! There are five basic talk moves that can help increase student discourse in the classroom. Armed with these moves, teachers will create opportunities for all students to get in on the mathematical conversation. Teachers will be ready for all situations with ideas for troubleshooting common challenges with student discourse.

This fast-paced, no nonsense session focuses on meaningful student discourse and how teachers can elicit accountable dialogue from students. Participants will leave with a new perspective on why students should be given opportunities to discuss, explain, question and justify, and some easy ways to get them to start talking!

NCTM Principles to Actions: Facilitating Meaningful Mathematical Discourse

Katie Ruff, Carnegie Learning



9:45 - 11:15

Session 35

9th - 12th

103

The Struggle is Real: Formative Assessments Addressing Quadratic Functions

Teaching Quadratic Functions in Algebra 1 and 2 is a difficult process. In this presentation, you will gain resources for formally assessing students on concepts of Quadratic Functions.

NCTM Principles to Actions: Implementing Tasks that Promote Reasoning and Problem Solving, Using and Connecting Mathematical Representations, Facilitating Meaningful Mathematical Discourse, Posing Purposeful Questions, Building Procedural Fluency from Conceptual Understanding, Supporting Productive Struggle in Learning Mathematics, Eliciting and Using Evidence of Student Thinking

Joanna Myles, Easley High School



9:45 - 11:15

Session 36

9th -12th

202A

Tinkering in the Mathematics Classroom

Learn to use invention and design to connect mathematics concepts to future careers. Engage your students in thinking, problem solving, and mathematical modeling with tinkering.

NCTM Principles to Actions: Implementing Tasks that Promote Reasoning and Problem

Terrie Dew & Rhett Nettles



9:45 - 11:15

Session 37

General

202C

Taking Action Together in Mathematical Teaching and Learning: Empowering Teachers to Empower Students

What does it mean to combine our math superpowers to work together to impact student learning and empower students mathematically? We will look at individual and collective responsibilities and opportunities and what our role is in taking action to effect student mathematical learning along with engaging in mathematical tasks and exploring resources available and needed to do this. Let's empower teachers' math superpower through action that can then empower students in learning mathematics. Let's do this!

NCTM Principles to Actions: Facilitating Meaningful Mathematical Discourse, Posing Purposeful Questions, Supporting Productive Struggle in Learning Mathematics, Eliciting and Using Evidence of Student Thinking

Trena Wilkerson, NCTM President



KEYNOTE



9:45 - 11:15

Session 38

6th - 12th

203

Red Rover! Red Rover! Send Coding Right Over!

Participants will be engaged in using coding to explore various problems. Code Rover to solve systems of equation, shepherd sheep, and other engaging activities! Come prepared to work hard and to have fun!

NCTM Principles to Actions: Implementing Tasks that Promote Reasoning and Problem Solving, Using and Connecting Mathematical Representations, Facilitating Meaningful Mathematical Discourse, Posing Purposeful Questions, Supporting Productive Struggle in Learning Mathematics, Eliciting and Using Evidence of Student Thinking

Sherri Abel, Charleston County Schools



10:30 - 11:30

Session 39

6th - 8th

100B

Work Your Formula for Class

In this session, you will learn time-tested research-based strategies and techniques designed to: Improve student focus, Drastically reduce problem behavior, Increase instruction time

NCTM Principles to Actions: Establishing Mathematics Goals to Focus Learning

Michael T Crosby, Sr, Charleston County School Dist



10:30 - 11:30

Session 40

6th - 12th

101A

Mathman's "WAM" Power

Mathman's super power is WAMs – Writing About Math. Explore how classroom questions can be turned into writing opportunities with Mathman's WAM Power!!

NCTM Principles to Actions: Implementing Tasks that Promote Reasoning and Problem Solving, Eliciting and Using Evidence of Student Thinking

Ann Sanderson & Amanda Myers

Dorchester School District Two

10:30 - 11:30

Session 41

3rd - 5th

101B

Gamifying your Math Classroom

Imagine having an arsenal of interactive, engaging and easy to prep math games that can accommodate any math concept. This session will share a variety of collaborative math games that have proven to be highly effective in mastering and reviewing any mathematical concept. Participants will walk away with strategies to easily immediately implement.

During this session we will share a variety of collaborative math games that have proven to be highly effective in mastering and reviewing any mathematical concept. Participants will leave knowing how to implement Stinky Feet, Trio, Connect Four, Tic Tac Booyah, Breakout, and Flipgrid.

NCTM Principles to Actions: Establishing Mathematics Goals to Focus Learning, Implementing Tasks that Promote Reasoning and Problem Solving, Using and Connecting Mathematical Representations, Facilitating Meaningful Mathematical Discourse, Posing Purposeful Questions, Building Procedural Fluency from Conceptual Understanding, Supporting Productive Struggle in Learning Mathematics, Eliciting and Using Evidence of Student Thinking

Tora Burton & Stephanie Castro

Buena Vista, Greenville County



10:30 - 11:30

Session 42

9th - 12th

104A

Redefining Relevance: Seeing Mathematics in the World Around Us

Participants will reconsider the definition of relevance as finding connections in mathematics to the world around us and how this approach can refocus mathematics lessons.

NCTM Principles to Actions: Implementing Tasks that Promote Reasoning and Problem Solving

Sharon K. O'Kelley, Francis Marion University



10:30 - 11:30

Session 43

PreK - 2nd

104B

Powering Up with Seesaw

Through this session you will learn how to use the Seesaw application to engage all learners within your classroom and widen communication with parents.

NCTM Principles to Actions: Implementing Tasks that Promote Reasoning and Problem Solving, Using and Connecting Mathematical Representations, Facilitating Meaningful Mathematical Discourse, Eliciting and Using Evidence of Student Thinking

Taneka Bouknight & Lisa Daniels

Richland District 2



10:30 - 11:30

Session 44

3rd - 5th

201

Developing Mathematical Mindsets Through Conceptual Learning

In this session, teachers will learn how to effectively use inquiry-based tasks and hands-on manipulatives with students as a way to help them develop their conceptual understanding of math. Join in for engaging lessons to take back to your classroom as well as a teacher favorite...door prizes!

NCTM Principles to Actions: Building Procedural Fluency from Conceptual Understanding

Janet Stuckey, Johnsonville Middle School Florence School District 5



10:30 - 11:30

Session 45

3rd - 8th

202B

Experiential Play: Experience Math's Relevance

Participants will engage in some mock play and challenges to get them thinking about how to use and apply mathematical knowledge.

NCTM Principles to Actions: Implementing Tasks that Promote Reasoning and Problem Solving

Matt Wicker, Director of Education, Edventure



10:30 - 11:30

Session 46

3rd - 5th

Exhibit Hall 1

Experience Math's Relevance

Participants will engage in some mock play and challenges to get them thinking about how to use and apply mathematical knowledge.

NCTM Principles to Actions: Implementing Tasks that Promote Reasoning and Problem Solving

Dennis Mulhearn, Valley Stream South High School, NY, (39 years) retired



10:30 - 11:30

Session 47

General

Exhibit Hall 2

Promethean Escape Room Experience

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NCTM Principles to Actions: Posing Purposeful Questions, Supporting Productive Struggle in Learning Mathematics

Ernie Faulkenberry & Matt Barfield

Promethean



10:30 - 11:30

Session 48

6th - 12th

Exhibit Hall 3

Modulo Art

NCTM Principles to Actions: Establishing Mathematics Goals to Focus Learning, Implementing Tasks that Promote Reasoning and Problem Solving, Using and Connecting Mathematical Representations, Facilitating Meaningful Mathematical Discourse, Posing Purposeful Questions, Building Procedural Fluency from Conceptual Understanding, Supporting Productive Struggle in Learning Mathematics, Eliciting and Using Evidence of Student Thinking

Mario M. Ramon, CA Johnson High School

11:30 - 1:00

Session 49

3rd - 8th

Atrium Alcove

OMG! Math Graphic Organizers

OMG will transform your classroom and help you introduce or review material in a way that is fun and exciting for students! You must see it to believe it! This is a make and take session.

NCTM Principles to Actions: Using and Connecting Mathematical Representations, Building Procedural Fluency from Conceptual Understanding, Supporting Productive Struggle in Learning Mathematics

Rhonda Davis, The Outstanding Guides



11:30 - 1:00

Session 50

3rd - 5th

102A

Roll On Fact Fluency Grades 3-5

Who knew math could be this much fun. Come learn fun hands-on math games that teach operational fluency, place value, mental math and more. Student samples, journal ideas and gameboards will be provided.

NCTM Principles to Actions: Establishing Mathematics Goals to Focus Learning, Implementing Tasks that Promote Reasoning and Problem Solving, Building Procedural Fluency from Conceptual Understanding, Eliciting and Using Evidence of Student Thinking

Stephanie Bainbridge, Box Car and One Eyed Jacks



11:30 - 1:00

Session 51

PreK - 5th

102B

Powering Up Your Math Workstations

Maximize your math workstations by infusing accountability and differentiation. You will participate in a station rotation and leave with ideas to take to your classroom.

NCTM Principles to Actions: Implementing Tasks that Promote Reasoning and Problem Solving

Austin Greene, Kristen Griffin, Stephanie Burdette

Greenville County Schools

11:30 - 1:00

Session 52

6th - 12th

102C

Collaborative Ideas for Developing Productive Perseverance

Come learn and collaborate with colleagues to glean some great ideas for helping students develop metacognitive strategies and strengthen productive perseverance.

NCTM Principles to Actions: Implementing Tasks that Promote Reasoning and Problem Solving, Using and Connecting Mathematical Representations, Facilitating Meaningful Mathematical Discourse, Posing Purposeful Questions, Supporting Productive Struggle in Learning Mathematics, Eliciting and Using Evidence of Student Thinking

Kaley Douglas, Houghton Mifflin Harcourt



11:30 - 1:00

Session 53

3rd - 5th

103

To Proficiency and Beyond: Strategic Approach to Multiplication and Division

This session models the use of conceptually-based thinking games and innovative visual models focused on using the multiplication and division strategies to solve problems with basic facts and beyond. The learning outcome will be that multiplication and division facts can be taught through strategies instead of memorization leading to more flexible thinking beyond the basic facts.

NCTM Principles to Actions: Building Procedural Fluency from Conceptual Understanding

Sandy Szako, ORIGO Education



11:30 - 1:00

Session 54

6th-8th

202A

Nix the Tricks

Learn to develop conceptual understanding of mathematics by eliminating misconception causing tricks from your repertoire. Support student understanding with mathematically sound strategies instead of “tricks.”

NCTM Principles to Actions: Building Procedural Fluency from Conceptual Understanding

Margaret Lorimer & Sue Pietrusza



11:45 - 1:00

Session 55

K - 6th

202B

EdVenture's Math Games

Participants will engage in some of EdVenture's most popular math programs can be brought to your school. This session will focus on how our educators present STEM based, hands-on learning in a way that is sure to make an impact in your classroom.

NCTM Principles to Actions: Implementing Tasks that Promote Reasoning and Problem Solving, Using and Connecting Mathematical Representations, Facilitating Meaningful Mathematical Discourse, Posing Purposeful Questions, Supporting Productive Struggle in Learning Mathematics, Eliciting and Using Evidence of Student Thinking

Elena Tudor, Museum Educator

Edventure



11:30 - 1:00

Session 56

PreK - 8th

202C

Let's Help Students Release their Inner Discourse Superpower!

We will focus on strategies for facilitating and enhancing mathematical discussions in the classroom that will encourage students to own their learning, build a growth mindset, and develop deeper conceptual understanding.

NCTM Principles to Actions: Implementing Tasks that Promote Reasoning and Problem Solving, Facilitating Meaningful Mathematical Discourse, Posing Purposeful Questions

Lloyd Jones, Curriculum Associates



11:30 - 1:00

Session 57

9th - 12th

203

Increasing Student Engagement In Algebra Through Project-Based Learning

In this interactive session, participants will learn about and take part in algebra-infused projects that support active learning.

NCTM Principles to Actions: Implementing Tasks that Promote Reasoning and Problem Solving, Using and Connecting Mathematical Representations, Facilitating Meaningful Mathematical Discourse

Ryan Van Omen, Brookland Cayce High School

11:45 - 12:45

Session 58

PreK - 8th

100B

Teaching Math through Trade Books

Join us to learn engaging ways to integrate literacy in your math lessons, including hands-on activities using picture books to teach real world math. These activities will increase mathematical thinking and demonstrate to children that math is all around us!

NCTM Principles to Actions: Establishing Mathematics Goals to Focus Learning, Implementing Tasks that Promote Reasoning and Problem Solving, Using and Connecting Mathematical Representations, Facilitating Meaningful Mathematical Discourse, Posing Purposeful Questions, Building Procedural Fluency from Conceptual Understanding

Christy Papala & Brandi Huckaby

High Point Academy



11:45 - 12:45

Session 59

6th - 12th

101A

Encouraging Inquiry

How do we encourage our students to wonder about mathematics? This session will present methods for problems, projects and inquiry in the math classroom.

NCTM Principles to Actions: Implementing Tasks that Promote Reasoning and Problem Solving, Posing Purposeful Questions

Charlotte Ihme, Greenville Technical Charter High School



11:45 - 12:45

Session 60

3rd - 8th

101B

Developing Critical Thinking Skills in Math

Do your students give up when trying to solve math problems? Discover the best sites for improving critical thinking skills while developing student perseverance. You'll leave with resources you can use the next day.

NCTM Principles to Actions: Implementing Tasks that Promote Reasoning and Problem Solving, Posing Purposeful Questions

Ruth Howell & Mary Camp

Lyman Elementary School

11:45 - 12:45

Session 61

3rd - College

104A

Homework for Learning

Grading homework is a conundrum. Do you give a 100 when they have something on their paper, even if you know they copied it from their buddy? How about a new plan? Differentiate the homework assignment and get an accurate picture of what your students actually know.

NCTM Principles to Actions: Establishing Mathematics Goals to Focus Learning, Facilitating Meaningful Mathematical Discourse, Posing Purposeful Questions, Eliciting and Using Evidence of Student Thinking

Lee Gosnell, D. R. Hill Middle School



11:45 - 12:45

Session 62

PreK - 5th

104B

The Power of Student Work

Have you collected student work and not known what to do next? Join us to look at student work to determine misconceptions and next steps.

NCTM Principles to Actions: Eliciting and Using Evidence of Student Thinking

Stephanie Burdette, Austin Greene, Kristen Griffin

Greenville County Schools



11:45 - 12:45

Session 63

9th - 12th

201

This Test Does Not Define You!

Testing anxiety is a growing problem everywhere. This session provides useful tools that teachers can share with students to help with math and test-taking anxiety.

NCTM Principles to Actions: Establishing Mathematics Goals to Focus Learning

Kim Neal, Newberry High School

11:45 - 12:45

Session 64

3rd - College

Exhibit Hall 1

Increasing student math performance and confidence using data-driven adaptive Learning technologies

Participants will learn how artificial intelligence and adaptive learning works, and will be exposed to how instructors can make data driven decisions, facilitate small group instruction, and informed data conferencing efficiently to meet the needs of all learners.

NCTM Principles to Actions: Establishing Mathematics Goals to Focus Learning, Implementing Tasks that Promote Reasoning and Problem Solving, Using and Connecting Mathematical Representations, Facilitating Meaningful Mathematical Discourse, Posing Purposeful Questions, Building Procedural Fluency from Conceptual Understanding, Supporting Productive Struggle in Learning Mathematics, Eliciting and Using Evidence of Student Thinking

John Miller & Dennie Williams

McGraw-Hill



11:45 - 12:45

Session 65

9th - 12th

Exhibit Hall 3

Quadratics Exploration of Surface Area using Rockin' Rubix Cubes

Finding a quadratic representation of the surface area of a cube using a task based approach and technology such as Geogebra and Google Sheets.

NCTM Principles to Actions: Implementing Tasks that Promote Reasoning and Problem Solving, Using and Connecting Mathematical Representations, Supporting Productive Struggle in Learning Mathematics

Alleson (AJ) Lynn, Taylor Barkley, Dylan Hunter

Clemson Students



1:00 - 2:00

Session 66

3rd - College

100B

Getting started with ALEKS to personalize learning:

This session will provide an overview of how this adaptive digital content can personalize learning for all students and differentiate at all levels. Making progress monitoring effortless by accessing real time data. How ALEKS can meet the needs of all learners at all levels.

NCTM Principles to Actions: Establishing Mathematics Goals to Focus Learning, Implementing Tasks that Promote Reasoning and Problem Solving, Using and Connecting Mathematical Representations, Facilitating Meaningful Mathematical Discourse, Posing Purposeful Questions, Building Procedural Fluency from Conceptual Understanding, Supporting Productive Struggle in Learning Mathematics, Eliciting and Using Evidence of Student Thinking

John Miller, McGraw-Hill

Dennie Williams



1:00 - 2:00

Session 67

PreK - 8th

101A

Challenges and Opportunities in 21st Century Mathematics Education

During this session, we will discuss the current challenges facing today's educators including standards, teacher education, the culture of math anxiety, and how technology has presents opportunities and challenges to for helping children access math.

NCTM Principles to Actions: Implementing Tasks that Promote Reasoning and Problem Solving, Using and Connecting Mathematical Representations, Facilitating Meaningful Mathematical Discourse, Posing Purposeful Questions, Supporting Productive Struggle in Learning Mathematics

Lawrence Korchnak, Matific



1:00 - 2:00

Session 68

6th - 12th

101B

Making Math Matter

You will walk away with activities that are easy to implement and that produce high involvement for students focused on the importance of math in the classroom and in their future careers.

NCTM Principles to Actions: Establishing Mathematics Goals to Focus Learning, Implementing Tasks that Promote Reasoning and Problem Solving, Facilitating Meaningful Mathematical Discourse

Savannah Roberts, Beck International Academy



1:00 - 2:00

Session 69

PreK - 12th

104A

PBL Scenarios, DOK 3-4 Strategies, & the SC Math Standards

FREE BOOKS! This session examines how PBL Scenarios and Critical/Creative Thinking Exercises can be used to promote 21st Century Skills, while covering the SC Math Standards. Attendees receive free strategy guides.

NCTM Principles to Actions: Implementing Tasks that Promote Reasoning and Problem Solving, Posing Purposeful Questions, Building Procedural Fluency from Conceptual Understanding, Supporting Productive Struggle in Learning Mathematics, Eliciting and Using Evidence of Student Thinking

Ben Bache, PBL Project



1:00 - 2:00

Session 70

6th - 8th

104B

TECHFIT: Find Your Super Power

This session gives you information about a STEM program that integrates mathematical Super Powers with computer programming and fitness. Students can compete to go to a Showcase where they present and demonstrate their fitness game. With Techfit, students learn to program and work together in order to create a game. You will come away with information about a STEM grant that teachers across South Carolina can be a part of.

NCTM Principles to Actions: Implementing Tasks that Promote Reasoning and Problem Solving, Posing Purposeful Questions, Eliciting and Using Evidence of Student Thinking

Caitlin Dabkowski, Alice Drive Middle School Sumter School District

1:00 - 2:00

Session 71

6th - 12th

201

Blow Off STEAM: Building a Successful STEAM Event For Your School

Planning a STEAM night for your school and feel intimidated? In this presentation, you will be given resources and strategies for building a STEAM night students and parents will talk about for months.

NCTM Principles to Actions: Implementing Tasks that Promote Reasoning and Problem Solving, Supporting Productive Struggle in Learning Mathematics

Joanna Myles, Easley High School

1:00 - 2:00

Session 72

3rd - 5th

Exhibit Hall 1

Multiplication Without Memorization: Increase Your Fluency Superpower

Are you looking to increase fact fluency superpowers in your classroom? Push your students beyond flashcards and memorization by using math running records. This session highlights the stages of multiplication fact fluency along with ways you can support and assess students throughout each developmental stage.

NCTM Principles to Actions: Using and Connecting Mathematical Representations, Facilitating Meaningful Mathematical Discourse, Building Procedural Fluency from Conceptual Understanding, Eliciting and Using Evidence of Student Thinking

Corey Prentiss & Liz Ball

Berkeley County School District



1:00 - 2:00

Session 73

General

Exhibit Hall 2

Promethean Escape Room Experience

The Promethean Escape Room Experience challenges attendees with a series of puzzles and riddles that must be solved in order to escape. The goal? Escaping the room before time runs out. The escape room experience helps students build essential collaboration and critical thinking skills. Attendees can expect to work as a group to solve puzzles on Promethean's immersive classroom solutions, including the ActivPanel, ActivConnect and ClassFlow. The Promethean Escape room is limited to 10 attendees per session.

NCTM Principles to Actions: Posing Purposeful Questions, Supporting Productive Struggle in Learning Mathematics

Ernie Faulkenberry & Matt Barfield

Promethean



1:00 - 2:00

Session 74

9th - 12th

Exhibit Hall 3

Using Desmos to Explore Ellipses

In this lesson we will be exploring the similarities between circles and ellipses (both in their equations and their appearances). Students will utilize Demos graphing technology to aid them in their discoveries.

NCTM Principles to Actions: Implementing Tasks that Promote Reasoning and Problem Solving, Using and Connecting Mathematical Representations, Facilitating Meaningful Mathematical Discourse, Posing Purposeful Questions, Supporting Productive Struggle in Learning Mathematics, Eliciting and Using Evidence of Student Thinking

Timothy J Parker, Clemson University Student



1:15 - 2:15

Session 75

3rd - 8th

Atrium Alcove

Making the Most of Small Group Instruction

Use small group instruction to make math enjoyable to all students. Build your small group environment and fill your teacher toolbox with hands-on activities, math games, projects, and group discussion. Never teach math the same way again.

NCTM Principles to Actions: Implementing Tasks that Promote Reasoning and Problem Solving, Using and Connecting Mathematical Representations, Supporting Productive Struggle in Learning Mathematics

Tanika Johnson, Irmo Middle School

1:15 - 2:45

Session 76

9th - 12th

102A

Enhancing Your EOCEP Algebra 1 Assessment Superpowers

The South Carolina Office of Assessment will share with participants the aspects of essential elements of Universal Design in summative assessments. Attendees will learn how these guide the development of EOCEP Algebra 1. Additionally, we will provide any updates for the 2019-2020 EOCEP Algebra 1 assessment.

NCTM Principles to Actions: Using and Connecting Mathematical Representations, Facilitating Meaningful Mathematical Discourse, Posing Purposeful Questions, Supporting Productive Struggle in Learning Mathematics

Daniel Cammisa & Marquita Blaylock

South Carolina Department of Education



1:15 - 2:45

Session 77

PreK - College

102B

Turning your Students into Superman/Superwoman: The 4E Lesson Model and the 5 Practices

In order for your students to be supermen or superwomen, they need to explore first before you or anyone else explains. Come experience it!

NCTM Principles to Actions: Implementing Tasks that Promote Reasoning and Problem Solving, Facilitating Meaningful Mathematical Discourse, Building Procedural Fluency from Conceptual Understanding, Supporting Productive Struggle in Learning Mathematics, Eliciting and Using Evidence of Student Thinking

Dr. Karen L. Fonkert, Charleston Southern University



1:15 - 2:45

Session 78

PreK - 5th

102C

Numbers Aren't Letters

As with reading, if students do not master key foundational skills and concepts in mathematics by end of grade 3, they will be at risk in subsequent grades. But how we learn math is not the same as how we learn to read. This presentation will focus on the critical components and effective best practices for K-3 math education and how these connect to grades 4-5.

NCTM Principles to Actions: Establishing Mathematics Goals to Focus Learning, Implementing Tasks that Promote Reasoning and Problem Solving, Using and Connecting Mathematical Representations

Jan Scott, Houghton-Mifflin-Harcourt

1:15 - 2:45

Session 79

9th - 12th

103

Using Math to Create Android-Based Apps

Participants will use mathematical principles and problem solving to create a guessing game app. Participants will need a laptop with wi-fi access.

NCTM Principles to Actions: Using and Connecting Mathematical Representations, Facilitating Meaningful Mathematical Discourse, Building Procedural Fluency from Conceptual Understanding

Brenna Abrams, Clinton High School



1:15 - 2:45

Session 80

6th - 8th

202A

STE(A)M by Design

NCTM Principles to Actions: Explore ways to design lessons around complex, real world challenges, integrating mathematics with other disciplines. Participants will engage in a design challenge to design a safer football helmet.

Kenna Alewine & Pam Brice



1:15 - 2:45

Session 81

PreK-6th

202B

The Best of EdVenture

Participants will engage in a series of activities designed inspire the joy of learning mathematical used at the museum. From making and creations to flying and aviation, this presentation will share the highlights of our most popular programs.

NCTM Principles to Actions:

Taylor Bates and Kendal Turner, Program Educators

Edventure



1:15 - 2:45

Session 82

K - 5th

202C

Super Power: Developing Fact Fluency from Conceptual Understanding – Rather than Gimmicks!

Fact fluency is more than the memorization of isolated facts. Students need to see connections among facts. They need visual representations to help form a 'mind picture' that connects to a thinking strategy. This session will model appropriate visual aids that help students to master the basic facts – with understanding!

NCTM Principles to Actions: Using and Connecting Mathematical Representations, Facilitating Meaningful Mathematical Discourse, Building Procedural Fluency from Conceptual Understanding

James Burnett, ORIGO Education



KEYNOTE



1:15 - 2:45

Session 83

6th - 12th

203

POW!!! Students Use Their Superpowers to Create PowToon Videos in Math

Find out how your students can create PowToon videos to show math concepts as part of an assessment or unit review. You will have a chance to learn how students can make the videos and you will make your own video.

NCTM Principles to Actions: Implementing Tasks that Promote Reasoning and Problem Solving, Using and Connecting Mathematical Representations, Building Procedural Fluency from Conceptual Understanding, Supporting Productive Struggle in Learning Mathematics, Eliciting and Using Evidence of Student Thinking

Marsha Neal, Hardeeville-Ridgeland Middle School



2:15 - 3:15

Session 84

6th - 8th

100B

Differentiation Superheros

Participants will gain a greater understanding of the components of the workshop model. Learn how to structure lessons, establish routines, and create materials to support this type of differentiated instruction.

NCTM Principles to Actions: Establishing Mathematics Goals to Focus Learning, Implementing Tasks that Promote Reasoning and Problem Solving, Using and Connecting Mathematical Representations, Facilitating Meaningful Mathematical Discourse, Posing Purposeful Questions, Building Procedural Fluency from Conceptual Understanding, Supporting Productive Struggle in Learning Mathematics, Eliciting and Using Evidence of Student Thinking

Nichole Criminger & Hilary Morgan

Carolina Springs Middle School



2:15 - 3:15

Session 85

PreK - 2nd

101A

Building Your Kahoot

Through this session you will learn how to use the Kahoot website to actively engage students while reviewing & collecting data.

NCTM Principles to Actions: Establishing Mathematics Goals to Focus Learning, Implementing Tasks that Promote Reasoning and Problem Solving, Posing Purposeful Questions, Eliciting and Using Evidence of Student Thinking

LaTasha Gantt, Annie Burnside Elementary School



2:15 - 3:15

Session 86

3rd - 8th

101B

STOP MAKING MATH LESSONS BORING!

We will show several ways that you can make math engaging and fun for your kids. We will energize your inner bunny as you become a student today. We will give you the tools to make your classroom... literacy-rich, interactive, a place to encourage mathematical discourse, challenging with weekly problem solvers that make it real world, integrate science and social studies with blogs and projects, integrate writing about mathematical thinking, and teach concepts with Ozobots.

NCTM Principles to Actions: Establishing Mathematics Goals to Focus Learning, Implementing Tasks that Promote Reasoning and Problem Solving, Using and Connecting Mathematical Representations, Facilitating Meaningful Mathematical Discourse, Posing Purposeful Questions, Building Procedural Fluency from Conceptual Understanding, Supporting Productive Struggle in Learning Mathematics, Eliciting and Using Evidence of Student Thinking

Julie Scott & Ava Cogdill

River Ridge Elementary Spartanburg

2:15 - 3:15

Session 87

9th - 12th

104A

Practical Formative Assessment Strategies to Use with High School Students

Learn about and practice formative assessment strategies that can be implemented immediately in your classroom that you can use to determine students' knowledge and adjust your instruction.

NCTM Principles to Actions: Facilitating Meaningful Mathematical Discourse, Posing Purposeful Questions, Eliciting and Using Evidence of Student Thinking

David Ebert, Oregon High School / NCTM Board of Directors



2:15 - 3:15

Session 88

6th - 12th

104B

Magic + Mystery + Math = A Winning Formula

Experience how students can use mathematics to explain seemingly impossible odds in card tricks, counterintuitive results with dice, and mind reading with numbers. These engaging activities get students excited about mathematics and require them to think about the how and why of mathematics instead of just the what and when.

NCTM Principles to Actions: Implementing Tasks that Promote Reasoning and Problem Solving, Facilitating Meaningful Mathematical Discourse, Building Procedural Fluency from Conceptual Understanding, Supporting Productive Struggle in Learning Mathematics, Eliciting and Using Evidence of Student Thinking

Brad Fountain, Discovery Education



2:15 - 3:15

Session 89

PreK - 2nd

201

Building Conceptual Understanding of Number Lines

Learn how to introduce and utilize number lines in the primary classroom to provide students with strong concrete and visual models that will encourage flexibility in mathematical reasoning and deepen conceptual understanding of numbers.

NCTM Principles to Actions: Using and Connecting Mathematical Representations, Building Procedural Fluency from Conceptual Understanding

Elizabeth Ball & Corey Prentiss

Cane Bay Elementary School

2:15 - 3:15

Session 90

6th - 12th

Exhibit Hall 1

Discovering the Super Power of Purposeful Questioning

We will discover how asking the right questions can transform any lesson into an opportunity for meaningful mathematical discourse that builds your students' mathematical power.

NCTM Principles to Actions: Posing Purposeful Questions

Paula Adams, Clemson University



2:15 - 3:15

Session 91

General

Exhibit Hall 2

Promethean Escape Room Experience

The Promethean Escape Room Experience challenges attendees with a series of puzzles and riddles that must be solved in order to escape. The goal? Escaping the room before time runs out. The escape room experience helps students build essential collaboration and critical thinking skills. Attendees can expect to work as a group to solve puzzles on Promethean's immersive classroom solutions, including the ActivPanel, ActivConnect and ClassFlow. The Promethean Escape room is limited to 10 attendees per session.

NCTM Principles to Actions: Posing Purposeful Questions, Supporting Productive Struggle in Learning Mathematics

Ernie Faulkenberry & Matt Barfield

Promethean



2:15 - 3:15

Session 92

PreK - College

Exhibit Hall 3

Give me an hour...I'll give you the super power.....

Imagine a classroom where students respond to your request the first time. Where the non-complaint student learns to self-correct inappropriate behavior. Wouldn't it be great if you could stop spending so much time on correcting low-level behaviors and more time doing what you love...teaching?

NCTM Principles to Actions: Effective Researched-based Classroom Management Strategies

Dr. Alicia McCree, YWCA of the Central Carolinas

2:30 - 4:45

Session 93

6th - 12th

Atrium Alcove

Effectively Using Algebra Tiles in Middle Level and Secondary Mathematics Classes

This interactive session will allow participants to engage with algebra tiles and highlight uses designed to help develop deeper conceptual understanding among students.

NCTM Principles to Actions: Implementing Tasks that Promote Reasoning and Problem Solving, Using and Connecting Mathematical Representations, Building Procedural Fluency from Conceptual Understanding

Jennifer Wise, Lexington School District Two



3:00 - 4:30

Session 94

PreK - 5th

102A

Math Shakers - There's A Whole Lot of Shaking going On!

Shake it up with the Super Powers of fund in math class. During this session concepts covered will include: fact fluency, and basic operations, patterns doubles, make 10's, place value, fractions, and more. Journal masters and student samples will be shared. Come prepared to play, move and learn!

NCTM Principles to Actions: Implementing Tasks that Promote Reasoning and Problem Solving, Using and Connecting Mathematical Representations, Building Procedural Fluency from Conceptual Understanding, Supporting Productive Struggle in Learning Mathematics, Eliciting and Using Evidence of Student Thinking

Lori Triplett, Richland 2 School District, Columbia S.C.

Box Cars and One-Eyed Jacks consultant



3:00 - 4:30

Session 95

3rd - 5th

102B

Elementary Latinx Students' Interpretation of Their Mathematics Teachers' Expectations

This study investigates grades 3-5 students' interpretation of their mathematics teacher's goals. We discuss themes among our participants and implications for constructing more meaningful goals.

NCTM Principles to Actions: Establishing Mathematics Goals to Focus Learning

Stacy R. Jones, Carlos Nicolas Gome, Hilary Tanck

Clemson University Students

3:00 - 4:30

Session 96

3rd - 8th

102C

Making Algebra Child's Play

Learn how and visual and kinesthetic approach to teaching algebraic concepts enables students to grasp "sophisticated" looking concepts of linear algebra.

Get a taste of the newest program, Hands-On Equations Fractions.

NCTM Principles to Actions: Implementing Tasks that Promote Reasoning and Problem Solving, Using and Connecting Mathematical Representations

Darlene Williford, Borenson and Associates, Inc.



3:00 - 4:30

Session 97

PreK - 5th

103

Play Counts: Early Childhood Math

What does Math play mean? Come play with us and learn how to make math fun and foster an early love for math.

NCTM Principles to Actions: Implementing Tasks that Promote Reasoning and Problem Solving, Using and Connecting Mathematical Representations, Facilitating Meaningful Mathematical Discourse, Building Procedural Fluency from Conceptual Understanding, Supporting Productive Struggle in Learning Mathematics

Ashley Peay-Bettini & Robin Mangum

Marbles Kids Museum, North Carolina



3:00 - 4:30

Session 98

K-12th

202A

Inspiring the Future Workforce to be Confident, Innovative Problem Solvers

Explore a tool that provides clarity, focus and direction for schools seeking to support students as creative designers of solutions to complex, real-world challenges. Participants will gain ideas for getting started and sustaining their practice.

NCTM Principles to Actions: Implementing Tasks that Promote Reasoning and Problem Solving, Using and Connecting Mathematical Representations, Facilitating Meaningful Mathematical Discourse, Supporting Productive Struggle in Learning Mathematics

Terrie Dew & Margaret Lorimer



3:00 - 4:30

Session 99

3rd - 5th

202B

Math Centers in Action

Small group instruction paired with math centers is a part of a balanced math program. Learn how to use small groups and centers as an effective practice for differentiating to meet the needs of all students. Experience a small group lesson and learn new strategies to make center learning meaningful for students and realistic for the teacher.

NCTM Principles to Actions: Implementing Tasks that Promote Reasoning and Problem Solving, Facilitating Meaningful Mathematical Discourse, Eliciting and Using Evidence of Student Thinking

Brittany Goerig, hand2mind



3:00 - 4:30

Session 100

6th - 12th

202C

Fun Functions

Participants will experience several eighth grade and algebra activities concerning functions. These will include function machines and silent board games, and will end with a Function Treasure Hunt. Math practices will be processed throughout the session.

NCTM Principles to Actions: Implementing Tasks that Promote Reasoning and Problem Solving, Using and Connecting Mathematical Representations, Facilitating Meaningful Mathematical Discourse, Building Procedural Fluency from Conceptual Understanding, Eliciting and Using Evidence of Student Thinking

(Mrs.) Gerry Long, CPM Educational Program



3:00 - 4:30

Session 101

6th - 8th

203

Train Your Problem Solving Superpower with These Problems

Work alone or team up to solve problems from international math contests. Multiple solution questions are effective both for investigating and reinforcing many topics. Multi-approach allows students to draw on their own talents and insights. The strengths and abilities of each student are exercised and sharpened as different approaches are tried.

NCTM Principles to Actions: Implementing Tasks that Promote Reasoning and Problem Solving

Dennis Mulhearn, Valley Stream South HS, NY (39 years) retired

3:30 - 4:30

Session 102

3rd - 8th

Atrium

Powerful Cross-Curricular Connections

Use the power of cross-curricular connections to actively engage students in adventures promoting critical thinking. Explore interactive learning centers incorporating multiple disciplines.

NCTM Principles to Actions: Establishing Mathematics Goals to Focus Learning, Implementing Tasks that Promote Reasoning and Problem Solving, Using and Connecting Mathematical Representations, Facilitating Meaningful Mathematical Discourse

Pre-Service Teachers, University of South Carolina Aiken



3:30 - 4:30

Session 103

9th - College

100B

Adding and Subtracting Rational Expressions – A Venn Diagram Approach

Explore a systematic way to assist students with finding the least common denominator using Venn Diagrams. Ready to use classroom resources will be provided!

NCTM Principles to Actions: Building Procedural Fluency from Conceptual Understanding

Jenny Van Buren, Powdersville High School



3:30 - 4:30

Session 104

3rd - 5th

101A

Let's Give Them Something to Talk About

Learn fun strategies to increase the level of student talk and mathematical discourse in your classroom. Activities presented can be modified for most concepts and grade levels. Participants will learn about and engage in a variety of activities that will promote reasoning, sense making, and student collaboration while speaking, listening, and writing. Time will be allotted to allow for participants to engage in the activities as well as discuss how to modify for their learners, grade level, and upcoming content.

NCTM Principles to Actions: Facilitating Meaningful Mathematical Discourse

Andrea Wood, Big Ideas Learning

3:30 - 4:30

Session 105

6th - 8th

101B

Paint My Ratio - STEAM in the Middle School Math Classroom

Learn to implement a STEAM project involving all 4 Core subjects and Art with an emphasis in Math. Students will create a mural of Van Gogh's Starry Night or Wheat Field with Crows from a poster using ratios, proportions, measurement and operations with fractions.

NCTM Principles to Actions: Establishing Mathematics Goals to Focus Learning, Implementing Tasks that Promote Reasoning and Problem Solving, Supporting Productive Struggle in Learning Mathematics, STEAM in the classroom

Terra Johns & Monica Fite

Sevier Middle School



3:30 - 4:30

Session 106

9th - 12th

104A

2019 AP Calculus Exam and Grading

This session will review the questions and solutions to the 2019 AP Calculus exam. We will discuss how to prepare your students for the 2020 exam.

NCTM Principles to Actions: Establishing Mathematics Goals to Focus Learning, Implementing Tasks that Promote Reasoning and Problem Solving, Building Procedural Fluency from Conceptual Understanding

Ken Collins, Charlotte Latin School



3:30 - 4:30

Session 107

PreK - 5th

104B

Watson we have found the missing link! Let me draw you a picture!

$74-48=34$? Why does this happen? Come discover the missing link between conceptual to procedural fluency. This interactive session will investigate ways to help students connect mathematical drawings and models to build procedural fluency.

NCTM Principles to Actions: Establishing Mathematics Goals to Focus Learning, Facilitating Meaningful Mathematical Discourse, Building Procedural Fluency from Conceptual Understanding, Eliciting and Using Evidence of Student Thinking

Pamela Richards, Houghton Mifflin Harcourt

3:30 - 4:30

Session 108

PreK - 8th

201

Unlock Learning Potential with a Strong Math Culture

In a study conducted by the Raytheon Company, 56% of students surveyed indicated they would rather eat broccoli than do math homework. David Woods, Director of Curriculum and Reporting, will share strategies for fostering a school-wide culture that provides students with the mathematical freedom to engage in big ideas and develop skillsets that encourage them to persist and grow, and ultimately reach their potential.

NCTM Principles to Actions: Establishing Mathematics Goals to Focus Learning, Facilitating Meaningful Mathematical Discourse, Eliciting and Using Evidence of Student Thinking

David Woods & Elizabeth Venn

DreamBox Learning



3:30 - 4:30

Session 109

9th - 12th

Exhibit Hall 1

Math in Motion

Say goodbye to boring seatwork and get your students moving! Activities are geared toward algebra and geometry but can be adapted to most classes.

NCTM Principles to Actions: Implementing Tasks that Promote Reasoning and Problem Solving, Using and Connecting Mathematical Representations

Jill Woodruff, Math By Woodruff



3:30 - 4:30

Session 110

General

Exhibit Hall 2

Promethean Escape Room Experience

The Promethean Escape Room Experience challenges attendees with a series of puzzles and riddles that must be solved in order to escape. The goal? Escaping the room before time runs out. The escape room experience helps students build essential collaboration and critical thinking skills. Attendees can expect to work as a group to solve puzzles on Promethean's immersive classroom solutions, including the ActivPanel, ActivConnect and ClassFlow. The Promethean Escape room is limited to 10 attendees per session.

NCTM Principles to Actions: Posing Purposeful Questions, Supporting Productive Struggle in Learning Mathematics

Ernie Faulkenberry & Matt Barfield

Promethean

3:30 - 4:30

Session 111

3rd - College

Exhibit Hall 3

Getting started with ALEKS to personalize learning:

This session will provide an overview of how this adaptive digital content can personalize learning for all students and differentiate at all levels. Making progress monitoring effortless by accessing real time data. How ALEKS can meet the needs of all learners at all levels.

NCTM Principles to Actions: Establishing Mathematics Goals to Focus Learning, Implementing Tasks that Promote Reasoning and Problem Solving, Using and Connecting Mathematical Representations, Facilitating Meaningful Mathematical Discourse, Posing Purposeful Questions, Building Procedural Fluency from Conceptual Understanding, Supporting Productive Struggle in Learning Mathematics, Eliciting and Using Evidence of Student Thinking

John Miller & Dennie Williams

McGraw-Hill



5:00 - 6:30

Session 112

General

202 BC

43rd SCCTM Annual Business Meeting and Awards Ceremony

Reception & Door Prizes

Join in to celebrate our presenters, volunteers, Ambassadors, scholarship winners, awards winners, the hard-working SCCTM board members, and others. Come early and bring your food and drink into the meeting room. Enter the drawing for fabulous door prizes by depositing the door ticket with your membership number on it as you enter the meeting. You must be an SCCTM member to enter and you must be present to win.

Marc Drews, SCCTM President



8:00 - 9:00

Session 113

6th - 8th

100B

Get Out of the Way! Shifting from Teacher to Facilitator in Your Classroom

Ready to make the shift? This session will provide you with practical strategies and tips you need to begin this process...now. Come explore the possibilities!

NCTM Principles to Actions: Implementing Tasks that Promote Reasoning and Problem Solving, Facilitating Meaningful Mathematical Discourse, Posing Purposeful Questions, Supporting Productive Struggle in Learning Mathematics, This session will focus (in general) on the selected practices above from the perspective of a teacher's mindset and approach.

Genia Webb N/A

The Next Level Educational Group



8:00 - 9:00

Session 114

6th - 12th

101A

Polynomial DaMath

A mathematical manipulative game that involves operations on polynomials using the rules of playing checkers.

NCTM Principles to Actions: Establishing Mathematics Goals to Focus Learning, Implementing Tasks that Promote Reasoning and Problem Solving, Using and Connecting Mathematical Representations, Facilitating Meaningful Mathematical Discourse, Posing Purposeful Questions, Building Procedural Fluency from Conceptual Understanding, Supporting Productive Struggle in Learning Mathematics, Eliciting and Using Evidence of Student Thinking

Mario M. Ramon

CA Johnson High School



8:00 - 9:00

Session 115

PreK - 5th

101B

Ready, Set, Build that Conceptual Understanding!

Are your lessons fun and engaging? Are you able to reach those reluctant students who struggle? Discover how using Legos can transform those lessons and increase understanding.

NCTM Principles to Actions: Using and Connecting Mathematical Representations, Building Procedural Fluency from Conceptual Understanding, Supporting Productive Struggle in Learning Mathematics

Ruth Howell Mary Camp, Charley Goode

Lyman Elementary School

8:00 - 9:00

Session 116

3rd - College

104A

Numerical Sequences and Polynomials

Look at various numerical sequences as a representation of polynomials. Examine sequences without the need of algebraic representations. Also, we will talk about how the learning of sequences in elementary school can benefit students in understanding algebra and mathematical modeling in higher grade levels.

NCTM Principles to Actions: Using and Connecting Mathematical Representations

Dr. Kevin LoPresto

Francis Marion University



8:00 - 9:00

Session 117

3rd - College

104B

Using ALEKS to target instruction, build student ownership and reflection, to support personalize learning:

Participants will take a deep dive in the reliable data and reports within ALEKS. Take the heavy lift off of the instructor by providing rich reliable data that supports 1:1 student conferencing, goal setting, station rotation, and promotes student agency, motivation, relevance, and self-direction.

NCTM Principles to Actions: Establishing Mathematics Goals to Focus Learning, Implementing Tasks that Promote Reasoning and Problem Solving, Using and Connecting Mathematical Representations, Facilitating Meaningful Mathematical Discourse, Posing Purposeful Questions, Building Procedural Fluency from Conceptual Understanding, Supporting Productive Struggle in Learning Mathematics, Eliciting and Using Evidence of Student Thinking

John Miller Dennie Williams

McGraw-Hill

8:00 - 9:00

Session 118

3rd - 8th

201

What PART of Fraction Don't You Understand?

Would you rather have $\frac{2}{3}$'s or $\frac{3}{5}$'s of a candy bar? Simplifying Fractions, Equivalent Fractions, Adding Fractions, are all concepts that students need to master. Using technology-based simulations to support student mastery of these foundational concepts will benefit next level math conceptual understanding.

NCTM Principles to Actions: Implementing Tasks that Promote Reasoning and Problem Solving, Facilitating Meaningful Mathematical Discourse, Posing Purposeful Questions, Supporting Productive Struggle in Learning Mathematics

Thom O'Brien

ExploreLearning



8:00 - 9:00

Session 119

9th - 12th

Exhibit Hall 1

Tips, Tricks & Tools for Teachers

In this session, you will be provided with resources that will make a great impact on your teaching and with tools that will increase your effectiveness and save you hours every week.

NCTM Principles to Actions: Posing Purposeful Questions, Supporting Productive Struggle in Learning Mathematics

Jill Woodruff

Math By Woodruff



8:00 - 9:00

Session 120

General

Exhibit Hall 2

Promethean Escape Room Experience

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NCTM Principles to Actions: Posing Purposeful Questions, Supporting Productive Struggle in Learning Mathematics

Ernie Faulkenberry & Matt Barfield

Promethean

8:00 -9:30

Session 121

6th - 8th

Atrium Alcove

Do You Know The Muffin Man? Exploring Ratios and Double Number Lines

The exciting arc from ratios to linear relationships is waiting to be explored! Using symbols, tables, double number lines, and graphs, ratios will be our tool to solve problems and make comparisons. With a deeper understanding of ratios and proportions, participants be ready to dig into the world proportionality and come out with a stronger connection to linear relationships.

NCTM Principles to Actions: Implementing Tasks that Promote Reasoning and Problem Solving, Using and Connecting Mathematical Representations, Supporting Productive Struggle in Learning Mathematics

Katie Ruff

Carnegie Learning



8:00 -9:30

Session 122

PreK - 2nd

102A

Shuffling into Math - Primary Card Games

This strategy based workshop will provide you with many easy to implement games and strategies for both addition and subtraction. Activities are easily adapted to meet the needs of regular, special ED, ELL and afterschool programs. The games would also be great for hosting a family math night, math game buddy classrooms and math clubs.

NCTM Principles to Actions: Implementing Tasks that Promote Reasoning and Problem Solving, Using and Connecting Mathematical Representations, Building Procedural Fluency from Conceptual Understanding, Supporting Productive Struggle in Learning Mathematics, Eliciting and Using Evidence of Student Thinking

Lori Triplett

Richland 2 Columbia SC/Box Cars and One-Eyed Jacks consultant



8:00 -9:30

Session 123

3rd - 5th

102B

Number Line to 10,000,000 and Other Math Manipulatives

View a variety of math manipulatives that address the standards of fractions, decimals, elapsed time, weight, and money. Learn tips and differentiation of instruction strategies that are applicable to all students, including students with visual impairments.

NCTM Principles to Actions: Implementing Tasks that Promote Reasoning and Problem Solving, Using and Connecting Mathematical Representations, Facilitating Meaningful Mathematical Discourse, Posing Purposeful Questions, Building Procedural Fluency from Conceptual Understanding, Supporting Productive Struggle in Learning Mathematics

Jim Franklin & Susan Franklin

Elm Street Elementary



8:00 -9:30

Session 124

3rd - 12th

102C

Breakout Rooms- Bridging Math with Virtual Engagement

During this session we will investigate digital breakout rooms in the classroom. This will include where to begin, how to design them, and how to implement them. Bring your technology device with you to this session. A laptop, iPad, or tablet is needed.

NCTM Principles to Actions: Implementing Tasks that Promote Reasoning and Problem Solving

Jennifer Zakrzewski

Charleston Southern University



8:00 -9:30

Session 125

PreK - 8th

103

"How to Design a Student Focused Math Classroom"

Participants will participate in activities designed to promote effective student engagement and higher order thinking via a variety of grade level specific math stations. Participants will also be provided suggestions on how AVID strategies can be incorporated in math lessons to enhance content mastery, creativity, and fluency.

NCTM Principles to Actions: Establishing Mathematics Goals to Focus Learning, Implementing Tasks that Promote Reasoning and Problem Solving, Facilitating Meaningful Mathematical Discourse, Posing Purposeful Questions, Building Procedural Fluency from Conceptual Understanding, Supporting Productive Struggle in Learning Mathematics, Eliciting and Using Evidence of Student Thinking

Damian Williams

Center For Achievement in Richland District 2

8:00 -9:30

Session 126

6th - 12th

202A

Coding: The Super Power of Mathematical Thinking

Learn to use coding to connect Mathematical Process Standards, core content, and world class skills.

NCTM Principles to Actions:

Rhett Nettles & Liz Alvarez



8:00 -9:30

Session 127

3rd - 5th, 6th - 8th

202B

Geometry: Let's See, Do, and Understand It!

Please join this fun, engaging session where you'll learn how to teach your students the basic concepts of geometry in an interactive way that builds conceptual understanding and promotes higher-level thinking and problem solving. Be sure to bring your laptop to participate in the session.

NCTM Principles to Actions: Implementing Tasks that Promote Reasoning and Problem Solving, Using and Connecting Mathematical Representations

Jennifer E. Wilson

McCants Middle School and Casio



8:00 -9:30

Session 128

K - 8th

202C

The Desired “F” in Math: Fluency

Waiting for description and presenter names.

NCTM Principles to Actions: Building procedural fluency from conceptual understanding is one of the eight NCTM Effective Teaching Practices. Build flexible thinkers through exploring instructional strategies that engage students and focus on fluency. Walk away with ready to use ideas to develop true fluency with your students.

Pearson Math Team

Pearson



8:00 -10:15

Session 129

9th - 12th

203

Leveraging TI-Nspire for ACT Success

Participants will learn the different topic and types of questions on the ACT and how to teach students test taking strategies both on the TI-Nspire and other methods to help leverage success on the test.

NCTM Principles to Actions: Implementing Tasks that Promote Reasoning and Problem Solving

Rachael Smilowitz

Charleston County



8:00 - 9:30

Session 130

6th - 8th

Exhibit Hall 3

STEM-ulating Activities for People and the Planet

Engage in simulations, mathematical modeling, measurement and data analysis using real-world data on global environmental and demographic trends.

NCTM Principles to Actions: Implementing Tasks that Promote Reasoning and Problem Solving, Using and Connecting Mathematical Representations, Posing Purposeful Questions, Building Procedural Fluency from Conceptual Understanding

Michella Kippes

Hughes Academy of Science and Technology

Greenville County Schools

9:15 - 10:15

Session 131

6th - 12th

100B

Going Live to Support Learners

A class period isn't always enough time to support our math students. Come check out how I connect with my students beyond the classroom.

NCTM Principles to Actions: Posing Purposeful Questions, ISTE Standard: Digital Age Learning Environments- Use digital communication and collaboration tools to communicate locally and globally with students, parents, peers and the larger community. For Educators: Designer- Use technology to create, adapt and personalize learning experiences that foster independent learning and accommodate learner differences and needs.

Charlotte Ihme

Greenville Technical Charter High School



9:15 - 10:15

Session 132

PreK - 5th

101A

Math in Motion PK-5

How do we keep children engaged and active participants in their own learning? We elicit mathematical discourse and get them moving! We take the math that is represented on the page and lift it up into motion. Come learn about how to have an effective Math Night where the community, families and students come together to practice math content while moving and having fun. Learn, also, about some unique ways to have students put Math into Motion during your regular Math Block AND how you can involve your families in day-time Math events.

NCTM Principles to Actions: Establishing Mathematics Goals to Focus Learning, Implementing Tasks that Promote Reasoning and Problem Solving, Using and Connecting Mathematical Representations, Facilitating Meaningful Mathematical Discourse, Supporting Productive Struggle in Learning Mathematics

Michelle Eanes Johnson Rebecca Holmes, Jackie Jackson, Codie Revis

Leaphart Elementary STEAM Magnet School, Columbia, S.C.



9:15 - 10:15

Session 133

6th - 12th

101B

Algebra Nation

Fantastic Features of Algebra Nation will be revealed to the teachers to use with their students! The session will be an opportunity to collaborate amongst teachers across the Palmetto State.

NCTM Principles to Actions: Establishing Mathematics Goals to Focus Learning, Implementing Tasks that Promote Reasoning and Problem Solving, Using and Connecting Mathematical Representations, Facilitating Meaningful Mathematical Discourse, Posing Purposeful Questions, Building Procedural Fluency from Conceptual Understanding, Supporting Productive Struggle in Learning Mathematics, Eliciting and Using Evidence of Student Thinking

Michael Nelson

Algebra Nation



9:15 - 10:15

Session 134

3rd - 5th

104A

Using number talks and other weekly instructional activities to develop number fluency.

We report on our implementation of weekly number talks and other instructional activities in a grade 5 classroom and the effect on students' improved fluency.

NCTM Principles to Actions: Implementing Tasks that Promote Reasoning and Problem Solving, Facilitating Meaningful Mathematical Discourse, Eliciting and Using Evidence of Student Thinking

Casey Hawthorne Antonio Scott

Furman University



9:15 - 10:15

Session 135

6th - 8th

104B

Stop Motion Movie and Math

Participants will learn about Stop motion movies and how to create them in their math classrooms using Google Slides. Participants will need to bring a laptop to the sessions

NCTM Principles to Actions: Eliciting and Using Evidence of Student Thinking

Sarah Crowe

CE. Williams

9:15 - 10:15

Session 136

3rd - 5th

201

Just the Facts!

For students to be successful in mathematics, it's paramount that students can add, subtract, multiply and divide with ease and accuracy. Methods involving flash cards, mad minutes and relying on parental help can have a wide variance of success. What if there was a better way?

NCTM Principles to Actions: Supporting Productive Struggle in Learning Mathematics

Thom O'Brien

ExploreLearning



9:15 - 10:15

Session 137

6th - 8th

Exhibit Hall 1

Using Computational Thinking in Mathematics through Projects

During this session, participants will look at several math projects that use computational, global thinking to teach math concepts.

NCTM Principles to Actions: Implementing Tasks that Promote Reasoning and Problem Solving, Posing Purposeful Questions, Eliciting and Using Evidence of Student Thinking

Emily Strickland

Beck Academy



9:15 - 10:15

Session 138

Exhibit Hall 2

Promethean Escape Room Experience

The Promethean Escape Room Experience challenges attendees with a series of puzzles and riddles that must be solved in order to escape. The goal? Escaping the room before time runs out. The escape room experience helps students build essential collaboration and critical thinking skills. Attendees can expect to work as a group to solve puzzles on Promethean's immersive classroom solutions, including the ActivPanel, ActivConnect and ClassFlow. The Promethean Escape room is limited to 10 attendees per session.

NCTM Principles to Actions: Posing Purposeful Questions, Supporting Productive Struggle in Learning Mathematics

Ernie Faulkenberry & Matt Barfield

Promethean

9:45 - 11:15

Session 139

3rd - 8th

Atrium Alcove

Become a Guided Math Super Hero

Are the aspects of leveled group planning, data gathering, and creating differentiating lessons your kryptonite in Guided Math? Technology integration and Out-of-the-box resources will help you power up your Math lessons. Explore websites and easy to make resources to help you create engaging differentiated lessons, providing student accountability and data for grades and the RTI process..

NCTM Principles to Actions: Establishing Mathematics Goals to Focus Learning, Implementing Tasks that Promote Reasoning and Problem Solving, Using and Connecting Mathematical Representations, Facilitating Meaningful Mathematical Discourse, Building Procedural Fluency from Conceptual Understanding, Eliciting and Using Evidence of Student Thinking

Angelia Cargill

High Point Academy



9:45 - 11:15

Session 140

3rd - 8th

102A

Fraction Action

Turn that frown upside down with easy to differentiate fraction games for students in grades 4-8. Participants will learn how to help students understand and enjoy fractions. Student samples and gameboards will be provided.

NCTM Principles to Actions: Implementing Tasks that Promote Reasoning and Problem Solving, Using and Connecting Mathematical Representations, Building Procedural Fluency from Conceptual Understanding, Supporting Productive Struggle in Learning Mathematics

Stephanie Bainbridge

Box Cars and One Eyed Jacks



9:45 - 11:15

Session 141

3rd - 5th

102B

Building Fraction Superpowers

Use the power of hands-on learning to actively engage students in building conceptual understanding of fractions. Explore multiple activities, including fraction bars, to help students discover fundamental fraction concepts.

NCTM Principles to Actions: Implementing Tasks that Promote Reasoning and Problem Solving, Using and Connecting Mathematical Representations, Facilitating Meaningful Mathematical Discourse, Posing Purposeful Questions, Building Procedural Fluency from Conceptual Understanding, Supporting Productive Struggle in Learning Mathematics

Dawn Bryant, Bridget Coleman, & USC Aiken Students

J.D. Lever Elementary School

USC Aiken



9:45 - 11:15

Session 142

3rd - 12th

102C

QR Codes in the Mathematics Classroom- Start with a Worksheet and End with an Adventure

With the use of QR codes enhance student independence and movement in the classroom allowing you more time and freedom to aid your struggling students. Learn how QR codes can be used in the mathematics classroom, how to develop QR codes, and investigate how to implement them in your own classroom. Bring your technology device with you to this session. A laptop, iPad, or tablet is needed.

NCTM Principles to Actions: Technology in the Mathematics Classroom

Jennifer Zakrzewski

Charleston Southern University



9:45 - 11:15

Session 143

PreK - 8th

103

Arc of Arithmetic to Algebra

How is “subitizing” connected to algebra? Join us to investigate the coherence in the K- HS progression that links decomposition of number with area models and algebraic expressions. Participants will use a variety of manipulatives and tools (including algebra tiles), and receive math lessons showcasing the connections.

NCTM Principles to Actions: Using and Connecting Mathematical Representations, Building Procedural Fluency from Conceptual Understanding, Exploring coherence in number sense development across grades

Elizabeth Peyser

Curriculum Associates



9:45 - 11:15

Session 144

3rd-8th

202A

Breakout! Connecting Math and Computational Thinking

Escape the monotony of drill and skill by trying your hand at digital escape rooms. Learn basic skills for creating your own digital breakout rooms.

NCTM Principles to Actions:

Rhett Nettles & Pam Brice



9:45 - 10:15

Session 145

202B

SCCTM Ambassadors Meeting

SCCTM Ambassadors will meet with SCCTM Board members to discuss their role in the South Carolina Council of Teachers of Mathematics.

Alva White

9:45 - 11:15

Session 146

General

202C

Strengthen your Teaching Superpowers using Math Strategies that Promote Engagement

Teachers have the power to engage and take action. This session will strengthen teachers' superpower of engagement by exploring multiple ways to implement lessons with fun and innovative activities that will get students involved in the learning process. Teachers will be provided multiple activities to engage ALL students, promote academic discourse, and assist students with developing a conceptual understanding of each lesson.

NCTM Principles to Actions: Using and Connecting Mathematical Representations, Building Procedural Fluency from Conceptual Understanding, Exploring coherence in number sense development across grades

Bernard Frost, Ph.D.

Spartanburg District 2



KEYNOTE



9:45 - 11:15

Session 147

PreK - 8th

Exhibit Hall 3

The Power of Multi-day Instructional Lessons

Students need a glance of on grade level instruction and remediation and recent studies show increased remediation instruction at the expense of grade level instruction. In this session, participants will actively participate in 3-5 activities followed by discussion on how a multi-day approach provides great opportunity for student gains.

NCTM Principles to Actions: Establishing Mathematics Goals to Focus Learning, Implementing Tasks that Promote Reasoning and Problem Solving, Using and Connecting Mathematical Representations, Facilitating Meaningful Mathematical Discourse, Posing Purposeful Questions, Building Procedural Fluency from Conceptual Understanding, Supporting Productive Struggle in Learning Mathematics, Eliciting and Using Evidence of Student Thinking

Gary Miller

Curriculum Associates

10:30 - 11:30

Session 148

3rd - 8th

100B

Math Fact SWAG --- Students With A Goal

Session Description: Using a fact fluency game-based system, students experience individualized instruction and targeted practice while having fun. As students build fluency and enjoy a game-based environment, teachers have data that can be used to refine instruction, inform parents of student progress and open up more rigorous math instruction.

NCTM Principles to Actions: Establishing Mathematics Goals to Focus Learning

Thom O'Brien

Explorelearning



10:30 - 11:30

Session 149

3rd - 8th

101A

Digital Math Interactive Notebook

Learn how to build and design your own digital math interactive notebook step-by-step using Google Slides. Learn all the tricks and tips to spice up note-taking in your classroom.

NCTM Principles to Actions: Using and Connecting Mathematical Representations

Tanika Johnson

Irmo Middle School



10:30 - 11:30

Session 150

9th - 12th

101B

Linear transformation of functions - a simpler approach.

We will learn a simpler technique for transforming graphs of functions.

NCTM Principles to Actions: Implementing Tasks that Promote Reasoning and Problem Solving, Using and Connecting Mathematical Representations, Facilitating Meaningful Mathematical Discourse, Posing Purposeful Questions, Building Procedural Fluency from Conceptual Understanding

Dr. Sam Narimetla

Tennessee Technological University

10:30 - 11:30

Session 151

9th - 12th

104A

Using Mathematical Modeling to Engage All Learners

Learn how modeling is implemented as part of a successful mathematics class, and how to engage students in their learning to make meaning of mathematics.

NCTM Principles to Actions: Implementing Tasks that Promote Reasoning and Problem Solving, Facilitating Meaningful Mathematical Discourse, Posing Purposeful Questions

David Ebert

Oregon High School / NCTM Board of Directors



10:30 - 11:30

Session 152

PreK - 2nd

104B

Writing in the Elementary Math Classroom

There will be a focus on mathematical writing that offers students opportunities to reason mathematically, use mathematical vocabulary, show levels of understanding, and make sense of a variety of mathematical situations.

NCTM Principles to Actions: Using and Connecting Mathematical Representations, Facilitating Meaningful Mathematical Discourse, Posing Purposeful Questions, Supporting Productive Struggle in Learning Mathematics, Eliciting and Using Evidence of Student Thinking

Jennie Ebert

Prairie View Elementary in Oregon School District



10:30 - 11:30

Session 153

3rd - 12th

201

Let Students Play: Math is Sports

Many of the students we struggle to reach in the classroom will spend hours debating who is the best basketball, football, or soccer player and use statistics and data to support their argument. Learn how we can channel that passion to engage students in everyday math skills that not only address our curriculum, but also excite our students. In this session we will look at practical ways to use data from the NBA/WNBA and MLB as well as other sports to teach math concepts.

NCTM Principles to Actions: Implementing Tasks that Promote Reasoning and Problem Solving, Using and Connecting Mathematical Representations, Facilitating Meaningful Mathematical Discourse, Posing Purposeful Questions, Building Procedural Fluency from Conceptual Understanding

Brad Fountain

Discovery Education

10:30 -11:30

Session 154

General

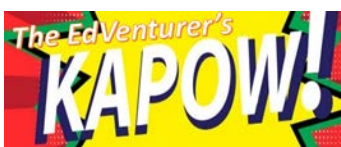
202B

Putting the T in STEAM

This session will be focused on the integration of curriculum areas and how computer science can serve as a platform to enhance learning outcomes. Teachers will be exposed to technology designed as a tool to support learning in the collaborative math classroom and learn to use inexpensive tools to enhance students programming, coding, creativity, and more.

NCTM Principles to Actions:

Dakota DeLuca



10:30 - 11:45

Session 155

K-8th

203

Building Student Excitement for Math Through Basketball: Martin's Math Club Season 4

Season 4 of Martin's Math is here! Blake Edmunds, from the University of South Carolina Athletic Department and Dana Yow from the EOC will talk about how the Martin's Math Club program benefits schools and students and they will discuss the NEW lessons for Season 4. For four years, South Carolina students and teachers have been participating in this program, using standards-based lessons that incorporate math and basketball! The brain-child of University of South Carolina Head Men's Basketball Coach Frank Martin, this program joins other programs that USC offers to schools which are designed to help students with academics and create fans of college athletics! Get your Math Super Powers going with Coach Martin's program.

NCTM Principles to Actions: Solving, Using and Connecting Mathematical Representations, Facilitating Meaningful Mathematical Discourse, Posing Purposeful Questions, Building Procedural Fluency from Conceptual Understanding

Blake Edmunds

Assistant Athletic Director, Marketing and Fan Experience, University of South Carolina

Dana Yow

Director of Public Engagement and Communications, S.C. Education Oversight Committee

10:30 - 11:30

Session 156

3rd - 5th

Exhibit Hall 1

10 Days to Multiplication Mastery

Help your students master Multiplication facts in 10 days by emphasizing the power of commutative properties along with fun methods of practice.

NCTM Principles to Actions: Building Procedural Fluency from Conceptual Understanding

Rich Stuart

Learning Wrap-ups, Inc.



10:30 - 11:30

Session 157

General

Exhibit Hall 2

Promethean Escape Room Experience

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NCTM Principles to Actions: Posing Purposeful Questions, Supporting Productive Struggle in Learning Mathematics

Ernie Faulkenberry & Matt Barfield

Promethean



11:30 - 1:00

Session 158

6th - 12th

Atrium Alcove

Crafting Mathematical Tasks for Middle and High

Are mundane exercises the villains in your classroom? Learn how we can take mild-mannered, not-so-rigorous problems and transform them into Superhero tasks that are rich, engaging for students, and utilize the Mathematical Process Standards.

NCTM Principles to Actions: Implementing Tasks that Promote Reasoning and Problem Solving, Facilitating Meaningful Mathematical Discourse, Posing Purposeful Questions, Supporting Productive Struggle in Learning Mathematics

Jennifer Thorsten & Cathy DeMers

Berkeley County School District



11:30 - 1:00

Session 159

6th - 8th

102A

Creating Math Stations That Work!

Learn how to create math stations in the middle level math class that work! You will become a part of a stations activity to learn how to implement various strategies within the classroom!

NCTM Principles to Actions: Establishing Mathematics Goals to Focus Learning, Implementing Tasks that Promote Reasoning and Problem Solving, Using and Connecting Mathematical Representations, Facilitating Meaningful Mathematical Discourse, Posing Purposeful Questions, Building Procedural Fluency from Conceptual Understanding, Supporting Productive Struggle in Learning Mathematics, Eliciting and Using Evidence of Student Thinking

Carrie Simpson Heather Sutton

Robert Anderson Middle School



11:30 - 1:00

Session 160

6th - 8th

102B

End The "I Can't Do Math" Stigma

Many students enter middle school with a "bad taste in their mouths" when it comes to Math. This session will focus on engaging students in learning process and helping them understand that math can be fun. Come learn strategies, activities, and games that will help end the "I Can't Do Math" stigma.

NCTM Principles to Actions: Facilitating Meaningful Mathematical Discourse, Posing Purposeful Questions, Building Procedural Fluency from Conceptual Understanding, Student Engagement

Erica Aiken

Mauldin Middle School

11:30 - 1:00

Session 161

6th - 8th

102C

Transforming Instruction on Transformations

Participants will take part in an interactive session which incorporates graphic organizers, Geogebra, and extension activities to increase student engagement and achievement.

NCTM Principles to Actions: Implementing Tasks that Promote Reasoning and Problem Solving, Using and Connecting Mathematical Representations, Posing Purposeful Questions

Jennifer Wise

Lexington County School District Two



11:30 - 1:00

Session 162

3rd - 5th

103

Strategies to Support English Language Learners in the Mathematics Classroom

Explore the Language Stages as a powerful tool needed to support the English Language Learners in the math classroom. This session will use Big Books, games, manipulatives, and more to promote conceptual understanding through discourse.

NCTM Principles to Actions: Facilitating Meaningful Mathematical Discourse

Sandy Szako

ORIGO Education



11:30 - 1:00

Session 163

3rd - 5th

202A

Math in the Real World

Capitalize on students' interests to develop engaging and rigorous lessons integrating mathematics and science standards with engineering and technology concepts.

Participants will engage in a design challenge and design a hurricane proof animal shelter.

NCTM Principles to Actions:

Pam Brice & Kenna Alewine



11:30 - 1:00

Session 164

3rd - 5th

202C

Modeling Your Way Through Problem Solving

Learn how to create visual models through a hands-on-approach that help students first see the context of the problem and then focus on mathematical relationships. Cuisenaire rods will be used to represent a variety of problem-solving situations to build a deeper understanding of mathematical concepts for students.

NCTM Principles to Actions: Implementing Tasks that Promote Reasoning and Problem Solving, Using and Connecting Mathematical Representations, Facilitating Meaningful Mathematical Discourse

Empowerment Strategies Group

hand2mind



12:00- 1:00

Session 165

3rd - 5th

203

Fraction Interaction

Travel through several different math stations to learn and share fun, new ways to engage your students as they explore the tough topic of fractions.

NCTM Principles to Actions: Building Procedural Fluency from Conceptual Understanding, Supporting Productive Struggle in Learning Mathematics

Kelly Moulton April Layfield

Millbrook Elementary/Aiken County School District



11:30- 1:00

Session 166

6th - 12th

Exhibit Hall 3

What's the Probability I Can Draw That?

Come explore probability problems by focusing on determining sample spaces for a given context. Drawings and diagrams help students describe probability as fractions and percentages leading to a more intuitive and deeper conceptual understanding of probability.

NCTM Principles to Actions: Implementing Tasks that Promote Reasoning and Problem Solving, Using and Connecting Mathematical Representations, Facilitating Meaningful Mathematical Discourse

Janet Tomlinson

Carnegie Learnin

11:45 - 12:45

Session 167

6th - 8th

100B

MathCounts - More than Competition

Fear Math - Love Math: MathCounts is more than a competition. Learn how to enhance your students' Math SuperPowers through MathCounts.

NCTM Principles to Actions: Implementing Tasks that Promote Reasoning and Problem Solving, Building Procedural Fluency from Conceptual Understanding, Supporting Productive Struggle in Learning Mathematics

Marguerite McClam, PE

Palmetto Consulting Engineering Group, Inc.



11:45 - 12:45

Session 168

6th - 12th

101A

Just Drop the Ball and Avoid Misconceptions

We often "toss a ball" to model quadratics. Participants will explore how this could lead to misconceptions and explore better alternatives for modeling.

NCTM Principles to Actions: Implementing Tasks that Promote Reasoning and Problem Solving, Using and Connecting Mathematical Representations, Facilitating Meaningful Mathematical Discourse, Posing Purposeful Questions, Supporting Productive Struggle in Learning Mathematics, Eliciting and Using Evidence of Student Thinking

Amy Adams Amy S Adams

Algebra Nation



11:45 - 12:45

Session 169

6th - 12th

101B

Regular Polygons and Their Angles

Join us in exploring regular polygons and their angles through the use of an online coding program "Blocky Games". This is an interactive student lead lesson plan.

NCTM Principles to Actions: Establishing Mathematics Goals to Focus Learning, Implementing Tasks that Promote Reasoning and Problem Solving, Using and Connecting Mathematical Representations, Posing Purposeful Questions, Supporting Productive Struggle in Learning Mathematics, Eliciting and Using Evidence of Student Thinking

Maggie Inman & Helena Peterson

Clemson University Students

11:45 - 12:45

Session 170

104A

It's Not Right, But It's Okay: Errors as Opportunities for Learning in Math

Use student errors and misconceptions as opportunities for learning. The use of student thinking—even erroneous thinking—is critical in high-quality instruction. Learn how to create a culture to appreciate productive struggle in math classrooms and the meaningful learning that comes from the process.

NCTM Principles to Actions:

Brad Fountain

Discovery Education



11:45 - 12:45

Session 171

PreK - 5th

104B

Harnessing the Power of Teacher Collaboration Through Unit Planning

Join us as we model how to use unit planning to encourage teacher collaboration. You'll walk away ready to replicate this process with your peers.

NCTM Principles to Actions: Establishing Mathematics Goals to Focus Learning

Kristen Griffin Stephanie Burdette and Austin Greene

Greenville County Schools



11:45 - 12:45

Session 172

PreK - 8th

201

Dirty Words of Mathematics: Are you using them?

There are multiple words and phrases we use in our math classrooms that make a mess of learning. Do you know them? Sometimes we use them, knowing they are wrong, but what can we use instead?

NCTM Principles to Actions: Using and Connecting Mathematical Representations

Ryan M Higgins & Chris Higgins

Coker University & South Carolina Virtual Schools

11:45 - 12:45

Session 173

9th - 12th

202B

Math Appreciation 101: Developing the Mind of a Mathematician

Lower participation in STEM-based curricula by girls is not based on access and aptitude. It is generally steeped in a lack of confidence, which is significant in many girls by the time they reach adolescence. This session addresses strategies for incorporating confidence building into math and science curricula

NCTM Principles to Actions: Facilitating Meaningful Mathematical Discourse, Building Procedural Fluency from Conceptual Understanding, Supporting Productive Struggle in Learning Mathematics, Eliciting and Using Evidence of Student Thinking

Dr. Jamelle Ellis



11:45 - 12:45

Session 174

PreK - 2nd

Exhibit Hall 1

Building Fluency Through Number Strings and Math Talks

Mathematical fluency refers to having efficient and accurate methods to compute. This session will provide participants opportunities to experience two routines to help students build their fluency. See how number strings and math talks work together to help students become flexible, efficient, and accurate.

NCTM Principles to Actions: Using and Connecting Mathematical Representations, Facilitating Meaningful Mathematical Discourse, Building Procedural Fluency from Conceptual Understanding, Supporting Productive Struggle in Learning Mathematics, Eliciting and Using Evidence of Student Thinking

Brittany Goerig

hand2mind



1:00 Meet Up

Session 175

PreK - 12th

Atrium

Trail Walk S.C.A.L.E.

S.C.A.L.E. is a six-acre proportional map of South Carolina on the property of Spartanburg District 5. Trails represent the border of the state as well as interstate highways that cross the state. Rivers, lakes, cities, historical markers, nature sites, activity areas, and native plants are all integrated into this trail system. Meet in the Atrium for instructions and drive to the trail.

NCTM Principles to Actions: Implementing Tasks that Promote Reasoning and Problem Solving, Using and Connecting Mathematical Representations, Facilitating Meaningful Mathematical Discourse, Posing Purposeful Questions, Supporting Productive Struggle in Learning Mathematics, Eliciting and Using Evidence of Student Thinking

Lee Gosnell

D. R. Hill Middle School

1:00 - 2:00

Session 176

PreK - College

100B

Creating Instructional Videos

There are thousands of pre-made instructional videos out there but nothing is more effective than videos created by the teacher. Don't think you have time for that? Discover some easy ways to create instructional math videos with no editing involved using your phone, iPad, Google apps and webtools.

NCTM Principles to Actions: Establishing Mathematics Goals to Focus Learning, Building Procedural Fluency from Conceptual Understanding

Debbie Jarrett

SCETV



1:00 - 2:00

Session 177

PreK - College

101A

Reading to Succeed in the Math Classroom

We will go over various techniques on incorporating literacy strategies in the mathematics classroom and we'll share examples of resources and techniques that educators can take back to their classroom and incorporate easily.

NCTM Principles to Actions: Implementing Tasks that Promote Reasoning and Problem Solving, Using and Connecting Mathematical Representations, Facilitating Meaningful Mathematical Discourse, Posing Purposeful Questions, Building Procedural Fluency from Conceptual Understanding, Supporting Productive Struggle in Learning Mathematics, Eliciting and Using Evidence of Student Thinking, incorporating literacy skills in the classroom

Tonya Todd Chandler Irvin, Andrea Morris, & Lisa Archer

Georgetown High School



1:00 - 2:00

Session 178

9th - 12th

101B

Explorative Approach to degrees and Radians

This lesson is an inquiry based approach to having students explore the relationship between radians and degrees, through the use of Geogebra.

NCTM Principles to Actions: Establishing Mathematics Goals to Focus Learning, Implementing Tasks that Promote Reasoning and Problem Solving, Using and Connecting Mathematical Representations, Facilitating Meaningful Mathematical Discourse, Posing Purposeful Questions, Building Procedural Fluency from Conceptual Understanding, Supporting Productive Struggle in Learning Mathematics, Eliciting and Using Evidence of Student Thinking

Madison M Sherriff & Hunter Gladson



1:00 - 2:00

Session 179

3rd - 5th

104A

Moving beyond “x” to define algebra. What is algebraic thinking in grade 4 and how do we develop it?

We provide a collection of algebraic tasks and report how they develop algebraic thinking and how their implementation was received by our grade 4 students.

NCTM Principles to Actions: Implementing Tasks that Promote Reasoning and Problem Solving, Using and Connecting Mathematical Representations, Facilitating Meaningful Mathematical Discourse, Posing Purposeful Questions

Mirna Hawthorne & Casey Hawthorne

AJ Whittenberg



1:00 - 2:00

Session 180

PreK - 8th

104B

Continuing the Conversation Beyond the First Raised Hand!

Learning is a social experience. Come experience strategies for facilitating math conversations through using Talk Moves, questioning and sequencing of student explanations all while promoting perseverance and a growth mindset.

NCTM Principles to Actions: Establishing Mathematics Goals to Focus Learning, Implementing Tasks that Promote Reasoning and Problem Solving, Facilitating Meaningful Mathematical Discourse, Supporting Productive Struggle in Learning Mathematics

Pamela Richards

Houghton Mifflin Harcourt



1:00 - 2:00

Session 181

201

Open Room

NCTM Principles to Actions:



1:00 - 2:00

Session 182

9th - 12th

202B

Getting Businesses Connected to Your Business of Teaching and Learning

This session will be an opportunity to learn about the many businesses that are willing to partner with teachers to help them bring more meaning and authenticity to the classroom.

NCTM Principles to Actions:

Lisa Call

Midlands Education and Business Alliance



1:00- 2:00

Session 183

Exhibit Hall 1

Open Room

NCTM Principles to Actions:



2:15 - 3:45

Session 184

General

202C

Teacher Superpowers: Fact or Fiction?

Whether you are a veteran of the classroom or in your first year, there are things you just know to be true. For instance, your bladder control is far superior to any of your friends, unless of course they too are a classroom teacher. That's a superpower! You also know the importance formative assessment as a means to receive student feedback and improve student achievement. That's a superpower! This session is a lighthearted ... and serious look at teacher superpowers.

NCTM Principles to Actions: Implementing Tasks that Promote Reasoning and Problem Solving, Using and Connecting Mathematical Representations, Facilitating Meaningful Mathematical Discourse, Posing Purposeful Questions

Laurie Boswell, Ph.D.

Big Ideas Learning



KEYNOTE

