NCTM 2021 Virtual Conference

Reimagining Mathematics Education: Learning from the Past in Order to Move Forward

FEBRUARY 1–6
Monday, February 1

1  Hidden Figures in Mathematics Education
   2/1/2021 | 6:30 PM – 8:00 PM EST
   🔴 LIVE  Session

Tuesday, February 2

All OnDemand presentations for the day will be released at 8:00 AM EST

1.01  Key Imagery for Building Fact and Computational Fluency in K-Grade 2
   Workshop

2  Using Design Thinking Principles to Partner with Black and Latinx Parents for Their Increased Engagement
   Session

5  Strategies to Support English Language Learners in the Mathematics Classroom
   Workshop

8  Shifting from Math Talk to Math Discourse with Student Debriefs
   Session

9  Using Labels as Building Blocks Instead of Boxing Them In
   Session

10  Writing Their Own Way: Getting Your Students to Explore Their Mathematical Ideas
    Workshop

11  The Progression of the Area Model: How It Benefits All Students
    Session

12  Math Is Not My Thing: Closing the Achievement Gap and Creating Equity Through Self-Efficacy
    Session

13  If the Rules Expire, You Must Inquire: Teaching Mathematics for an Unknown Tomorrow
    Session

14  Building Bridges Across the Gaps: From Prior Knowledge to Grade-Level Content
    Session

17  Unlocking the Potential of Literacy Practices in Mathematics Learning
    Burst

18  Building Mathematical Confidence in Your Students
    Workshop

20  Concrete Practices to Support Equity and Access in the Mathematics Classroom
    Burst

304  Preservice Teachers’ Experience on Three Act Math Task Project
    Burst

23  S3D: Fostering and Improving Small-Group, Student-to-Student Discourse
    Session

24  Dyslexia and the Math Learner
    Burst

25.1  Designing Innovation and Engineering Creativity with Grants for Mathematics Educators
    Session

29  Planning for Equity
    Session
30 Promoting Social Change: Implementing a Service-Learning Project in a Statistics Class
   
   Session

31 The Right Questions: Empowering Teachers Through Coaching Conversations
   
   Session

32 Using an Analysis of Common Error Patterns to Support Learners’ Posing of Multi-step Word Problems
   
   Session

35 Playing the Long Game
   
   2/2/2021 | 3:30 PM – 4:30 PM EST
   
   \(\text{LIVE}\) Session

36 Strategic Use of Games to Support Basic Fact Fluency
   
   2/2/2021 | 3:30 PM – 4:30 PM EST
   
   \(\text{LIVE}\) Session

38 Creating a Classroom Where Timely Assessments Inform Instructional Decisions
   
   2/2/2021 | 3:30 PM – 4:30 PM EST
   
   \(\text{LIVE}\) Workshop

39 Start Big, Start Small, Just Start: Building Competencies for Mathematical Modeling
   
   2/2/2021 | 3:30 PM – 4:30 PM EST
   
   \(\text{LIVE}\) Workshop

40 Supporting Exemplary Mathematics Teaching and Learning in Schools
   
   2/2/2021 | 3:30 PM – 4:30 PM EST
   
   \(\text{LIVE}\) Session

41 Math Running Records in Action: Assessing Basic Fact Fluency
   
   2/2/2021 | 5:00 PM – 6:00 PM EST
   
   \(\text{LIVE}\) Session

45 The Status Quo in High School Mathematics Is Unacceptable
   
   2/2/2021 | 5:00 PM – 6:00 PM EST
   
   \(\text{LIVE}\) Session

46 The I’m W.O.K.E. Project: Widening Options Through Knowledge and Empowerment
   
   2/2/2021 | 5:00 PM – 6:00 PM EST
   
   \(\text{LIVE}\) Workshop

47 Six Actions for Productive Struggle
   
   2/2/2021 | 6:30 PM – 7:30 PM EST
   
   \(\text{LIVE}\) Workshop

48 We Notice and Wonder What? Using Notice and Wonder as a Tool for Critical Reflection and Engagement
   
   2/2/2021 | 6:30 PM – 7:30 PM EST
   
   \(\text{LIVE}\) Session

49 Developing Mathematicians with Identity and Agency
   
   2/2/2021 | 6:30 PM – 7:30 PM EST
   
   \(\text{LIVE}\) Workshop

50 Six Secrets of Highly Effective Mathematics Instruction
   
   2/2/2021 | 6:30 PM – 7:30 PM EST
   
   \(\text{LIVE}\) Session
Tuesday, February 2 continued

51 Integrate Problem Solving, Math Modeling, Technology, and Relevant Data with Important Social Issues
2/2/2021 | 6:30 PM – 7:30 PM EST
LIVE Workshop

52 Improving Student Achievement Through Engaging and Equitable Lesson Design and Collaboration
2/2/2021 | 6:30 PM – 7:30 PM EST
LIVE Session

313 Catalyzing Change Through Lesson Study Discussion: Implementing Equitable Mathematics Instruction
2/2/2021 | 6:30 PM – 7:30 PM EST
LIVE Session

42 Doing the Math: Tasks to Engage and Challenge
2/2/2021 | 8:00 PM – 9:00 PM EST
LIVE Session

55 Six Strategies for Developing Understanding in the Middle Grades
2/2/2021 | 8:00 PM – 9:00 PM EST
LIVE Session

56 Three Habits to Eliminate the Phrase ‘Math Is Boring!’
2/2/2021 | 8:00 PM – 9:00 PM EST
LIVE Workshop

57 Basic Group Theory for All Students
2/2/2021 | 8:00 PM – 9:00 PM EST
LIVE Session

58 Reimagining Family Involvement with Family Math Game Nights
2/2/2021 | 8:00 PM – 9:00 PM EST
LIVE Session

Wednesday, February 3

All OnDemand presentations for the day will be released at 8:00 AM EST

59 The Problem with Word Problems
LIVE Session

60 The Decomposition of Number Sense
LIVE Workshop

62 Developing Mathematical Practices Through Computational Thinking
LIVE Workshop

63 Developing Justification in ALL Students Through the Decide and Defend Instructional Routine
LIVE Workshop

64 Fractions: From Misunderstanding to Deep Understanding
LIVE Workshop

65 #makemathstick (Conceptual Understanding and Reasoning with Fractions 3-5)
LIVE Workshop

66 Measures of Center
LIVE Session

67 Using Desmos in Elementary Grades
LIVE Session

68 Jump-start Your Lessons with High-yield Routines
LIVE Session

69 Math for ELLs: As Easy as Uno, Dos, Tres
LIVE Session

70 Sense Making: Aren't We Already Doing That in Literacy?
LIVE Session
Where Are We, and Where Do We Want to Go? Assessing Students' Level of Geometric Reasoning
Burst

Scaffolding Instruction for All Learners with Desmos Activity Builder
Session

Deep Learning Through Effective Collaborative Classroom Structures
Burst

Who Do You Think You’re Talking To? Using Mathematical Discourse in the Classroom
Workshop

Rich Tasks + Optimism + Perseverance = Growth Mindset in the Mathematics Classroom
Workshop

Going Viral: Getting Started with Epidemiological Modeling
Burst

Yes, We Use It: Applications of Proportional Reasoning in High School Math and Science Lessons
Workshop

Flip the Switch - Getting Students to Own Their Learning
Workshop

Algebra Task Makeover with Desmos Activity Builder
Session

Building Financial Literacy For All Learners
Session

Cultivating Teacher-leaders’ Capacity to Teach Mathematics Responsively: A Practice-based Approach
Workshop

Empowering Mathematics Leaders
Workshop

Catalyzing Change Through Lesson Study: Implementing Equitable Mathematics Instruction
Session

Helping Kids Make Sense of Addition & Subtraction Strategies
Session

Not Just Fun and Games: An Intentional Approach to Choosing Math Workstation Tasks
Workshop

Teaching Math Through a Social Justice Lens
Session

Virtual Escape Room

Feeling competitive? Register for one of three Virtual Escape Room events.
Participants will work together to solve interactive online puzzles. Work with your team by talking out loud and drawing on the screen to figure out codes. Instead of inputting them into a lock, you give the correct codes to your game master to advance to the next stage of the game. You successfully escape and win when your team correctly solves the final puzzle!

Registration is $25; choose one date.
February 1, 4:30 pm EST
February 3, 12:30 pm EST
February 5, 9:15 pm EST

To register, contact ConferencesDept@nctm.org
### Challenge Accepted! Use Project Based Learning to Finally Explore Social Justice in Algebra Class
2/3/2021 | 3:30 PM – 4:30 PM EST
> LIVE Workshop

### The Mathlexia Odyssey – Seeing Math Through Colourful Eyes
2/3/2021 | 3:30 PM – 4:30 PM EST
> LIVE Session

### The Questions Come to Mind
2/3/2021 | 3:30 PM – 4:30 PM EST
> LIVE Workshop

### Hidden in Plain Sight: Seeking Out the Brilliance of All Students in the Math Classroom
2/3/2021 | 5:00 PM – 6:00 PM EST
> LIVE Session

### The Search for Structure and Regularity: An Essential Element for Deep Learning
2/3/2021 | 5:00 PM – 6:00 PM EST
> LIVE Workshop

### A Former Math Hater’s Strategies for Combating Math Anxiety in Students
2/3/2021 | 5:00 PM – 6:00 PM EST
> LIVE Session

### A Pathway to Equitable Mathematics: Dismantling Racism in Math Instruction
2/3/2021 | 5:00 PM – 6:00 PM EST
> LIVE Session

### Curiosity-Provoking Strategies for High School Mathematics
2/3/2021 | 5:00 PM – 6:00 PM EST
> LIVE Session

### How Does Teaching Numerical Reasoning Benefit the Whole Child?
2/3/2021 | 5:00 PM – 6:00 PM EST
> LIVE Session

### President’s Address: Journey from Conversation to Action: Catalyzing Change Across Pk-12 Mathematics to Move Us Forward
2/3/2021 | 5:00 PM – 6:00 PM EST
> LIVE Session

### Unpacking Mathematical Microaggressions: #BlackKidsDoMath
2/3/2021 | 6:30 PM – 7:30 PM EST
> LIVE Session

### Strengths-Based Mathematics Teaching Turnarounds: Celebrating and Promoting Students’ Personal Power
2/3/2021 | 6:30 PM – 7:30 PM EST
> LIVE Session

### Fluency in the Upper Grades and Beyond: What It Looks Like and How to Build It
2/3/2021 | 6:30 PM – 7:30 PM EST
> LIVE Workshop

### Focusing on Relevant Contexts and Mathematical Connections Through Equitable Teaching Practices
2/3/2021 | 6:30 PM – 7:30 PM EST
> LIVE Session

### Student Exploration of Geometric Series and Further Topics in Series Using Exploding Dots
2/3/2021 | 6:30 PM – 7:30 PM EST
> LIVE Burst

### Secure Your Mask: Extreme Ownership of Identity, Agency, and Fostering Social Change
2/3/2021 | 6:30 PM – 7:30 PM EST
> LIVE Session

### “It’s Always About Race” Ability Grouping in Mathematics
2/3/2021 | 8:00 PM – 9:00 PM EST
> LIVE Session
Wednesday, February 3 continued

114 Problem Solving in a Mathematically Literate Environment: Going Beyond Surface Level
2/3/2021 | 8:00 PM – 9:00 PM EST
▶️ LIVE Session

115 Telling it From the Heart: Using Role Models to Help Foster Students’ Positive Mathematics Identity
2/3/2021 | 8:00 PM – 9:00 PM EST
▶️ LIVE Burst

116 Creating Mathematics Classrooms for ALL Learners
2/3/2021 | 8:00 PM – 9:00 PM EST
▶️ LIVE Workshop

117 Leading Students Across the Threshold
2/3/2021 | 8:00 PM – 9:00 PM EST
▶️ LIVE Session

118 Math Games Are Not Just for the Fast Finishers: Building an Inclusive Math Games Program
2/3/2021 | 8:00 PM – 9:00 PM EST
▶️ LIVE Workshop

Thursday, February 4

All OnDemand presentations for the day will be released at 8:00 AM EST

119 Becoming the Mathematics Teacher You Wish You’d Had
▶️ Burst

120 Developing Number Sense with Number Bonds
▶️ Session

121 Centers-based Instruction Without Losing Your Sanity
▶️ Session

123 Hearing All Voices: Structures to Build Language and Content Understanding of Each and Every Student
▶️ Workshop

124 Math Sheltered Instruction for ELs and All Learners
▶️ Workshop

126 Class Starters Get a Re-Start
▶️ Session

128 Modeling Strategies to Integrate Hands-on Activities That Will Create an Inclusive Environment
▶️ Burst

130 Grow Mathematicians with a Splash of Differentiation
▶️ Session

133 Supporting the Development of Number Sense for Students with Language-Based Learning Differences
▶️ Session

134 Building Mindsets for Excellent Problem Solvers
▶️ Session

135 Creating School-wide Cultures of Mathematical Sense Making
▶️ Session

137 Want to Develop Fluency with Functions? Algebrafy Patterns!
▶️ Session

138 Four Inspiring Stories: Teachers Harness ASSISTments from WPI to Drive Their Teaching with Data
▶️ Session

139 Tackling Ratio Reasoning with Real Tasks
▶️ Workshop
140 Word Problems Made Easy  
   Workshop

142 Facilitating Meaningful Mathematics Discourse with NCTM’s Problems of the Week  
   Workshop

143 The Feedback Our Students Need  
   Workshop

144 Opening-up Multiple Entry points for ALL of Our Students to Engage with Mathematics on a Daily Basis  
   Burst

308 I Know, You Know, We All Know—Access for All  
   Session

148 Beyond Providing Access: A Framework for Trusting Our Students to Do the Math  
   Session

149 Building Collective Responsibility for Students’ Mathematics Learning  
   Workshop

152 Hooks, Lines, and Thinkers  
   Session

   Session

156 Number Sense Strategies: Building the Foundation of Mathematics  
   Session

158 Three Engaging Methods to Uncover and Fix Hidden Student Misconceptions  
   Session

159 Creating Discourse Through Math Language Routines  
   Session

160 Conic Sections: Put the Power of Discovery in Your Students’ Hands  
   Workshop

161 Masterclass: How to Transform Mathematical Mindsets from Theory to Application  
   Session

104 Improving Math Literacy Through Desmos Activity Builder  
   Workshop

162 Math Is NOT a Universal Language: Access and Equity for all Mathematics Language Learners (MLLs)  
   Session

163 Five Essential Strategies for Engaging Every Student in Math Thinking and Reasoning  
   Session

164 Up for Debate! Empowering Students Through Argumentation in Math Class  
   Session

165 Mosaic Coloring Book: The Implementation of a Project Connecting Math to Social-emotional Wellness  
   Workshop

53 Responsive and Relevant to Whom?: Towards Equity by Design  
   Session
167 Humanizing Black Girls Mathematics Experience: Cultivating Their Mathematics Identity and Agency
2/4/2021 | 6:30 PM – 7:30 PM EST
LIVE Session

168 The Three Most Misused Mathematical Representations
2/4/2021 | 6:30 PM – 7:30 PM EST
LIVE Session

169 The Power of Gradual Reveal in Nearly Everything We Teach
2/4/2021 | 6:30 PM – 7:30 PM EST
LIVE Session

170 Encourage Deeper Math Conversations Through Visualization
2/4/2021 | 6:30 PM – 7:30 PM EST
LIVE Session

171 Connecting Trigonometry to Geometry
2/4/2021 | 6:30 PM – 7:30 PM EST
LIVE Burst

172 Bringing Culturally Relevant Mathematics to St. Paul Public Schools
2/4/2021 | 6:30 PM – 7:30 PM EST
LIVE Session

315 Catalyzing Change Through Lesson Study Debrief: Implementing Equitable Mathematics Instruction
2/4/2021 | 6:30 PM – 7:30 PM EST
LIVE Session

173 Morning Math Circle: Teaching Mathematics Through Culturally Relevant Literature (Grades K-3)
2/4/2021 | 8:00 PM – 9:00 PM EST
LIVE Burst

174 Math Educational Leaders Guide to Technology Integration
2/4/2021 | 8:00 PM – 9:00 PM EST
LIVE Session

175 How to Transform Your Textbook into a Curiosity Machine
2/4/2021 | 8:00 PM – 9:00 PM EST
LIVE Session
Thursday, February 4 continued

176  **Application Problems in Algebra 1 and Implications for Later Courses**
2/4/2021 | 8:00 PM – 9:00 PM EST
➡️ **LIVE**  Workshop

177  **Things You Should Know That Your Students Learned About Math in Science Class**
2/4/2021 | 8:00 PM – 9:00 PM EST
➡️ **LIVE**  Burst

178  **Optimizing Learning Opportunities for Each and Every Learner**
2/4/2021 | 8:00 PM – 9:00 PM EST
➡️ **LIVE**  Session

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179  **Algebra Isn't Just When the Letters Show Up: Exploring Variables in Elementary Grades**
➡️ Burst

180  **Using Children's Literature in Building Inclusion in the Classroom**
➡️ Session

181  **Math and Language Arts: What Can They Have in Common?**
➡️ Burst

182  **Building Number Line Concepts While Measuring**
➡️ Burst

183  **Relationships and Retakes: Helping Students Develop a Growth Mindset Through Standards Based Grades**
➡️ Session

184  **Identifying and Implementing High-Quality Math Tasks to Promote Reasoning and Sense Making**
➡️ Burst

185  **Three Keys to Increasing Meaningful Mathematical Discourse in Your Classroom**
➡️ Session

186  **How to Put the “Productive” into the “Struggle” in the Math Classroom**
➡️ Session

187  **Time’s Up on Timed Tests: Math Fact Strategies That Work**
➡️ Session

188  **Mathematize Your Classroom! Making Anchor Charts and Word Walls Accessible to All Students**
➡️ Session

189  **Teaching Fractions Without Telling: Task Sequences Based on Learning Trajectories**
➡️ Session

190  **Mooving and Grooving: Incorporating the Arts into Math**
➡️ Burst

191  **The Language of Word Problem Comprehension**
➡️ Workshop

192  **Number Lines 101: The Fundamentals**
➡️ Workshop

193  **Motivating Students to Shift from “I Can't” to “Look at Me”**
➡️ Workshop

194  **Where Am I? Formatively Assessing Student Spatial Awareness Using GeoGebra 3D with Augmented Reality**
➡️ Workshop

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**Friday, February 5**

All OnDemand presentations for the day will be released at 8:00 AM EST

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179  **Algebra Isn't Just When the Letters Show Up: Exploring Variables in Elementary Grades**
➡️ Burst

180  **Using Children's Literature in Building Inclusion in the Classroom**
➡️ Session

181  **Math and Language Arts: What Can They Have in Common?**
➡️ Burst

182  **Building Number Line Concepts While Measuring**
➡️ Burst

183  **Relationships and Retakes: Helping Students Develop a Growth Mindset Through Standards Based Grades**
➡️ Session
195 Math + LD: Teaching for Success
   Burst

197 It’s All Fun and Games Until Someone Loses A Die: Math Games for Middle Years
   Workshop

198 Beyond the Paper-Pencil Assessment: What Else Can You Do to Find Out What Your Students Know?
   Burst

200 Enhancing Mathematics with Origami: Proofs by Folding
   Burst

201 Students Own Their Learning by Using GeoGebra in the Geometry Classroom
   Workshop

202 Retro Desmos: Infusing Classroom Instruction with Multiple Representations
   Session

204 Using CODAP to Explore Social Justice Questions
   Burst

205 A Third- or Fourth-year Math Credit for Struggling Students: Advanced Algebra with Financial Applications
   Session

206 Revisiting the Traditional Warmup
   Session

208 A Hands-on Approach to Developing the Circle Equation: Connecting the Dots for Understanding
   Workshop

213 Promoting Equity for Secondary Mathematics in South Central Los Angeles
   Session

215 Implementing Culturally Responsive Mathematics Assessments
   Session

216 Assessment Leadership Actions to Monitor and Act on Evidence of Student Learning
   Workshop

217 Engaging Teachers in a Self-reflection of Their Mathematical Teaching Practices
   Session

127 Building on Black Girl’s Brilliance Through Holistic and Transformative Mathematics Learning
   2/5/2021 | 3:30 PM – 4:30 PM EST
   ★LIVE Session

218 Step Back and Let Them Think: Discovering Number Concepts Through Investigations and Math Talk
   2/5/2021 | 3:30 PM – 4:30 PM EST
   ★LIVE Session

219 Making Words Count: Writing Across the Curriculum and Beyond
   2/5/2021 | 3:30 PM – 4:30 PM EST
   ★LIVE Session

220 Mathematical Language Routines: Cultivating Conversation in High School Classrooms
   2/5/2021 | 3:30 PM – 4:30 PM EST
   ★LIVE Workshop

221 Engaging Students: Instructional Practices to Increase Student Access to Grade-level Math
   2/5/2021 | 3:30 PM – 4:30 PM EST
   ★LIVE Workshop

223 Lead, Collaborate, and Inspire: Empowering Teachers as Math Leaders to Affect Change
   2/5/2021 | 3:30 PM – 4:30 PM EST
   ★LIVE Session
NCMT Virtual Conference Special Programming

**Pre-conference Workshop**, February 1, 10:00 AM – 5:00 PM EST

**Catalyzing Change in Early Childhood and Elementary Mathematics: Dismantling Inequitable Structures, Nurturing Math Identities, and Planning Actionable Steps**

How might we ensure that each and every child is afforded opportunities to develop into a mathematically confident and capable learner? Join us for a pre-conference session where you will:

- Investigate tasks, children's work samples, and classroom vignettes that highlight exemplary mathematics teaching practices.
- Examine and reflect on the power of mathematical identities for students and teachers.
- Surface and discuss inequitable structures that inhibit children's mathematical agency and hinder access to deep mathematical understanding.
- Develop action steps to initiate needed changes in early childhood and elementary school mathematics.

**Fitness, Painting and Fun!**

The NCTM Virtual Conference offers several opportunities to take a break from your learning and have fun with your colleagues.

- Mat Pilates with Theresa Pride, February 2, 11:00 AM – 12:00 PM EST
- Zumba by Saadia, February 3, 11:00 AM – 12:00 PM EST
- Strength Training with Krista Fudge, February 4, 11:00 AM – 12:00 PM EST
- Mobility & HITT with Madison Deaton, February 5, 11:00 AM – 12:00 PM EST
- Yoga with Serena Sutter, February 6, 11:00 AM – 12:00 PM EST
- Sip & Paint: February 4, 9:15 – 10:15 PM EST

**Lunch Jamz**

Tuesday, Wednesday, Thursday, Friday 12:00 – 1:00 PM EST. Stop by the Home Lobby and jam out while DJ J-Smoov spins some tunes.
317 Mathematics for Human Flourishing – Pandemic Edition  
2/5/2021 | 5:00 PM – 6:00 PM EST  
▶️ LIVE  Session

230 Listening to and Learning with Black Teachers of Mathematics  
2/5/2021 | 6:30 PM – 7:30 PM EST  
▶️ LIVE  Session

231 Teaching Mathematics with Kindness  
2/5/2021 | 6:30 PM – 7:30 PM EST  
▶️ LIVE  Session

232 Disrupting Hierarchies of Status: Building Student Agency Through Equitable and Inclusive Teaching  
2/5/2021 | 6:30 PM – 7:30 PM EST  
▶️ LIVE  Session

233 Designing Your First Project-based Learning Unit  
2/5/2021 | 6:30 PM – 7:30 PM EST  
▶️ LIVE  Session

235 Talk Number 2 Me: Mathematics and Mindfulness  
2/5/2021 | 6:30 PM – 7:30 PM EST  
▶️ LIVE  Session

237 Visualizing for Mathematics: Using Bar Diagrams to Make Sense of Story Problems  
2/5/2021 | 8:00 PM – 9:00 PM EST  
▶️ LIVE  Workshop

238 Let Me Explain: Building Mathematical Identity Through Student Conversations  
2/5/2021 | 8:00 PM – 9:00 PM EST  
▶️ LIVE  Workshop

239 Geometry Explorations: Discovery at Your Fingertips  
▶️ LIVE  Workshop

240 Cell Phones in a Math Class: A Distraction or a Tool?  
2/5/2021 | 8:00 PM – 9:00 PM EST  
▶️ LIVE  Session

241 Early Mathematics Matters: Promoting Equity from the Start  
2/5/2021 | 8:00 PM – 9:00 PM EST  
▶️ LIVE  Session

316 IGNITE TALK  
2/5/2021 | 7:40 PM – 9:30 PM EST  
▶️ LIVE  Session

Saturday, February 6

All OnDemand presentations for the day will be released at 8:00 AM EST

242 Geometry for Early Childhood: The Important Thing Is . . . ?  
▶️ Workshop

243 How Do You Transform “Red-shirt” Freshmen Students to a Graduation Path?  
▶️ Session

244 There’s a Book for That: Connecting Young Children to Mathematics Through Children’s Literature  
▶️ Session

245 Math Running Records: How One Assessment Has Changed the Math Culture of Districts  
▶️ Session

246 The Questions Game  
▶️ Burst

247 Minion Mathematics: Make It Fair  
▶️ Session
### A Math Workshop Classroom for ALL Learners
Session

### Questions Matter: Using a Framework to Support Posing Purposeful Questions
Session

### Problem Solving Using Sheltered English in Math
Session

### Assessment Interviews: Moving Beyond Timed Tests
Session

### Secret Spells and Rainbow Bracelets: Demystifying Fraction Multiplication and Division
Workshop

### Confronting Culture: Recognizing Cultural Bias to Improve Parent Communication
Burst

### Promoting Data Literacy and Applying Math to Real-World Issues: A Hands-on Approach
Workshop

### Every Who Down in Who-ville Liked Math a Lot and Who Would Think Not?
Workshop

### Improving Practice Through Increased Collaboration via Technology
Session

### NASA Aeronautics’ Fly by Math: Solving the World’s Largest Distance-Rate-Time Problems
Workshop

### Always Play with Your Math: Developing Thinking and Reasoning Through Play
Session

### Just How Realistic Are the Real-world Word Problems in Math Class?
Burst

### Teaching High School Math as Connected to Student Career Interests
Session

### Innovative Individually Paced for Mastery High School Math Program
Session

### Lessons Learned from Teaching Math as a Language
Session

### Promoting Data Literacy and Applying Math to Real-World Issues: A Hands-on Approach
Session

### What Are Infinite Series, and Why Are They Important?
Session

### Create Assessments with Desmos
Workshop

### Build Confidence and Competence with Math in Context: Advanced Algebra with Financial Applications
Session

### A Novel Approach to Math: Using Math as a Form of Literacy to Communicate, Reflect, and Tell Stories
Workshop

### Bisquick® Can Kill You and Other Fun, but WRONG, Facts
Session
Saturday, February 6 continued

276 **Differentiating Math Instruction Using Stations**  
 Workshop

277 **Increasing Desmos Love in Your Mathematics Community**  
 Session

278 **Got Reasoning? Developing Mathematicians Through a Building-Wide Focus on Improving Reasoning Skills**  
 Session

280 **Exploring Practices to Promote Writing to Reason for All Students**  
 2/6/2021 | 12:00 PM – 1:00 PM EST  
 ★LIVE Workshop

281 **Using Problem Solving to Promote Equitable Teaching Practices**  
 2/6/2021 | 12:00 PM – 1:00 PM EST  
 ★LIVE Session

282 **Motivate and Engage Your Secondary Students with Innovative, Blended Learning Strategies**  
 2/6/2021 | 12:00 PM – 1:00 PM EST  
 ★LIVE Session

283 **Student-centered Inclusive Mathematics Strategies to Go!**  
 2/6/2021 | 12:00 PM – 1:00 PM EST  
 ★LIVE Workshop

284 **Teaching Mathematics with Intentionality**  
 2/6/2021 | 12:00 PM – 1:00 PM EST  
 ★LIVE Session

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**Save the Date!**

Join NCTM for the largest professional learning event for mathematics education this year!

600+ education sessions, scores of speakers, networking activities, exhibit showcases, and more!

The NCTM 2021 Virtual Annual Meeting is hosting speakers from around the globe to offer live presentations April 21–24 and April 28–May 1, with hundreds of on-demand and community activities available every day.

You won’t want to miss this virtual experience that will have the math education community buzzing well into the new school year.

Visit nctm.org/annual for more information and registration rates.
<table>
<thead>
<tr>
<th>Session</th>
<th>Title</th>
<th>Date</th>
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<tbody>
<tr>
<td>286</td>
<td>Empowering Students Through Culturally Responsive Worthwhile Mathematics Instruction</td>
<td>2/6/2021</td>
<td>1:30 PM – 2:30 PM EST</td>
<td>Live</td>
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<td>287</td>
<td>Step-by-Step: Creating Equitable Environments for ALL in Detracked Honors Algebra and Geometry</td>
<td>2/6/2021</td>
<td>1:30 PM – 2:30 PM EST</td>
<td>Live</td>
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<td>288</td>
<td>Alternative Strategies, Deep Thinking in Secondary Content? Yes!</td>
<td>2/6/2021</td>
<td>1:30 PM – 2:30 PM EST</td>
<td>Live</td>
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<tr>
<td>290</td>
<td>Using Lesson Study to Promote the Rights of the Learner: An Exploration into Food Desserts</td>
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<td>Set Your Sights on Student Success with Guided Math Small-group Lessons</td>
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<td>Focus on Curriculum Implementation: Measurement Tools to Support Reflection and Facilitate Change</td>
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<td>Our Grading Practices Can Drive Systemic Change: Designing Assessment Systems for Equity and Agency</td>
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<td>320 Online Teaching Should Be Different from Face-to-Face</td>
<td>322 Problem-based Learning Ideas and Strategies to Celebrate Student Thinking</td>
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<td>2/3/2021</td>
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<td>Audience: Pre-K to 2</td>
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<th>327 Let’s Get Messy! Mathematical Modeling: Engage Your Reluctant Learners Grades K-8, 6-8, and 9-12</th>
<th>331 Supercharge Your Math Instruction with SparkMath</th>
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<td>Savvas Learning Company (Formerly Pearson K-12 Learning)</td>
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<th>328 Promote fluency, Expand Equity, Engage Students and Get Results Using Game-Based Learning</th>
<th>332 Reverse Learning Loss Through Problem Solving, Strategic Thinking and Deep Engagement</th>
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<th>326 Rich Mathematics Curricula Brought to You by CPM, an Educational Non-profit!</th>
<th>323 The Impact of Algebra in the Elementary Math Curriculum</th>
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<th>334 An Exciting New Approach to PreK to 8th Grade Hands-on Math Instruction Presented by Brittany Goerig</th>
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<th>333 Cultural Competency: Providing Equitable Math Instruction through Cultural Relevance – India White</th>
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<th>325 Teaching with Manipulatives: Building Understanding of Addition Facts</th>
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Thank you to our sponsors and exhibitors!

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