

## 10 AM ET

### Session: #11 - Research Paper

*"I need to measure the base and the height": Examining Preservice Teacher's Responses to Area Conservation Tasks*

Dae Hong, University of Iowa

*Exploring PSTs' Responses to Students' Volume Misconceptions*

Dae Hong, University of Iowa

*Student Gesture & Diagram Use as Assessment Data for Units Understanding*

Cathy Kaduk, North Central College

### Session: #12 - Research Paper

*Formatively Assessing ELs in Mathematics with an Instructional Protocol*

Richard Kitchen, University of Wyoming

*Culturally Responsive Elementary Mathematics Teaching: A Multi-Case Study*

Casedy Thomas, The University of Alabama

*Latine family math: co-designing and co-constructing a math activity*

Susie Beltran Grimm, Purdue University

### Session: #13 - Research Paper

*What Foundational Skills Matter for Algebra I Success?*

Mary Klute, SRI International

Douglas Van Dine, Marzano Research

*Student-Teacher Ratio Impact on Algebra I Achievement*

Macie Baucum, Texas A&M University - College Station

*Managing students' non-canonical approaches to solving equations: Linguistic resources teachers use to respond to students' mathematical work*

Amanda Brown, University of Michigan

Sharon Strickland, Texas State University

Orly Buchbinder, University of New Hampshire

Dan Chazan, University of Maryland

Patricio Herbst, University of Michigan

## **10 AM ET**

### **Session: #14 - Research Paper**

*Confronting Pedagogical Inequities in Math Classrooms with Case-Based Instruction*

Alesia Moldavan, Fordham University

Monica Gonzalez, East Carolina University

*Using Case Studies to Assess Pre-Service Teachers' use of Visual Representations to Solve Mathematics Problems*

Amy Scheuermann, MNSU, Manakto

*Connecting Preservice and Inservice Teacher Learning: Communities of practice*

Damon Bahr, Brigham Young University

### **Session: #15 - Research Paper**

*Mathematics Textbooks Content Development at the Primary Stage: A Proposed Vision*

Ibrahim Khalil, UNIVERSITY OF BISHA

Mohamed Alnatheer, King Saud University

*How Elementary School Teachers Tackle Fraction Word Problems: A Study of Teachers' Strategies and Errors*

Yasemin Copur\_Gencurk, University of Southern California

## **11:30 AM ET**

### **Session: #21 - Interactive Session**

*An Explorative Study on the Implementation of Go Game in Third-Grade Mathematics Classrooms*

Xiuwen Wu, National Louis University

Xiuwen Wu, National Louis University

Xinming Guo, Go and Math Academy

## **11:30 AM ET**

**Session: #22 - Research Paper**

*Improving Student Understanding of Symbolic Numerical Magnitude*

Delinda van Garderen, University of Missouri - Columbia

*Building a Mathematics Education Evidence Base: Fraction Intervention*

Jessica Hunt, North Carolina State University

*Fifth Grade Students' Conceptions of Number Lines: The Meaning of Tick Marks*

Rebecca Borowski, Western Washington University

**Session: #23 - Research Paper**

*Noticing student ideas in writing: How do students articulate the effects of scale factor?*

James Bywater, James Madison University

Sarah Lilly, University of Virginia

Jennifer Chiu, University of Virginia

*Coordinating Co-Occurrence and Same Extent When Modeling Proportions*

Andrew Izsak, Tufts University

*Analyzing Student Use of Number Sense Strategies*

Patrick Kirkland, University of Notre Dame

**Session: #24 - Research Paper**

*Research, Researchers, and the Mathematics Classroom: What Relationships? What Impacts?*

Silvanio De Andrade, UEPB

*Developing Mathematics Teachers' Cultural Awareness Through Education Abroad*

Blair Izard, University of Northern Iowa

*Math Course-taking and Postsecondary Outcomes: Results from a national survey*

Burhan Ogut, American Institutes for Research

**11:30 AM ET**

**Session: #25 - Research Paper**

*Balancing Tensions between Research Fidelity and Math Instructional Improvement at Scale*

Craig De Voto, University of Illinois at Chicago

Benjamin Superfine, University of Illinois at Chicago

Alison Castro Superfine, University of Illinois at Chicago

*Evaluating the Efficacy of a Learning Trajectories for Early Mathematics*

Douglas Clements, University of Denver

*Validity Study of the Numerically Leveled Performance Assessment Framework*

Eula Monroe, Brigham Young University (Emerita)

## **1 PM ET**

### **Session: #31 - Posters**

*Exploring Mathematical Concepts through Quilt Design: An Instructional Intervention*

Clare Bell, University of Missouri-Kansas City

*Creative Insubordination and Appropriation of Tools for Teaching Elementary Math*

Nii Tackie, University of Louisiana at Lafayette

*Mathematical Perceptions of Self Among First-time College Freshmen*

Katrina Rothrock, University of Wisconsin-Eau Claire

*A Proposed Model to Teach Mathematical Knowledge in the Primary Stage*

Ibrahim Khalil, UNIVERSITY OF BISHA

*Employing the flipped classroom strategy in primary mathematics classes*

Ibrahim Khalil, ministry of education

*Teacher Usage of Performance Data from Open Educational Resources Predicts Student Achievement*

Hannah Hausman, University of California, Santa Cruz

*Heuristics from teachers for game-based math learning design and implementation*

Chih-Pu Dai, Florida State university

*Investigating Urban HS Students' Math Attitudes Using Equitable Practices*

Brian Dossey, Baylor University

*Bob's Engagement in Fraction Multiplication Tasks*

Jessica Hunt, North Carolina State University

*Are Pre-Pandemic Programs Enough? A Review of Early Math Interventions*

Robyn Pinilla, Southern Methodist University

*Elementary teachers' reports of their mathematics instruction before and during the COVID-19 pandemic*

Babette Moeller, Education Development Center

*Obstacles in learning Horizontal Transformation of Functions*

Yuriko Brown, The Pennsylvania State University

*Enacting Tutoring Best Practices in a University-School System Partnership Model*

Tyreeka Williams, North Carolina AT State University

Thomas Coleman, North Carolina A&T State University

Faith Freeman, Guilford County Schools

*Building an Anti-deficit Framework for Valuing Thinking About  $.999... = 1$*

Josh Hertel, University of Wisconsin - La Crosse

*Examining the Intentionality and Purposefulness in Building and Sustaining Educational Partnerships*

Trena Wilkerson, Baylor University

Colleen Eddy, University of North Texas

Megan Che, Clemson University

Jamaal Young, Texas A & M University

*Exploring a Student's Self-Regulatory Activities in Tasks of Varying Cognitive Demands*

T. Royce Olarte, University of California, Santa Barbara

**2 PM ET**

**Session: #41 - Interactive Session**

*Funding Opportunities for Mathematics Education Research at the National Science Foundation*

Margret Hjalmarson, National Science Foundation

Deena Khalil, National Science Foundation

Eric Knuth, National Science Foundation

**Session: #42 - Research Paper**

*A Case Study of Reform Efforts to Improve Math Instruction Through Coordinated PD*

Astin Sarrell, Jacksonville State University

*Using and Transforming Mathematics Education Pedagogy in a Broadcast Setting*

Jessica Hunt, North Carolina State University

*Acts towards Entry, Engagement and Empowerment for/with Emergent Bilinguals*

Ricardo Martinez, University of Nebraska-Lincoln

**Session: #43 - Research Paper**

*Exploration of Visual Art and 3D Geometry Approaching Mathematical Modeling*

Rose Mary Zbiek, The Pennsylvania State University

Gina Foletta, The Pennsylvania State University

*Persistence of playing school: Examining an immersive 90-day semester-program for shaping students' mathematical perceptions and practices*

Amanda Brown, University of Michigan

Justin Dimmel, University of Maine

Carolyn Hetrick, University of Michigan

Ed Silver, University of Michigan

Chandler Brown, University of Michigan

*Investigating Possibilities for Aesthetics of Inquiry in Math Education*

Alesia Moldavan, Fordham University

**Session: #44 - Research Paper**

*Using Community Funds of Knowledge to Write Mathematical Problems*

Ricela Feliciano-Semidei, Northern Illinois University

MARIANA RICKLEFS, Northern Illinois University

*Personalization of College Precalculus Tasks: Impacts of Task Construction*

Lauretta Garrett, Tuskegee University

Li Huang, Tuskegee University

Kelly Guest, Tuskegee University

Byunghoon Lee, Tuskegee University

*Task Design Cycle and Preservice Elementary Teachers' Understanding of Properties of Quadrilaterals*

Seyedekhadijeh Azimi Asmaroud, Illinois State University

Jeffrey Barrett, Illinois State University

**Session: #45 - Interactive Session**

*Leveraging Coaches to Close Middle School Math Teachers' Knowing-Doing Gap*

Jennifer Gonzales, Baylor

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**3:30 PM ET**

**Session: #51 - Interactive Session**

*Art and technology in online teaching and learning of middle school geometry:  
Deepening geometrical thinking of preservice and in-service teachers*

Irina Lyublinskaya, Teachers College, Columbia University

Marta Cabral, CUNY College of Staten Island

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Marta Cabral, CUNY College of Staten Island

**Session: #52 - Research Paper**

*Challenges in Assessing Teachers' Pedagogical Representation Competence*

Jinqing Liu, Indiana University Bloomington

Erik Jacobson, Indiana University Bloomington

PAVNEET BHARAJ, Indiana University Bloomington

Theodore Savich, Indiana University Bloomington

*An Examination of Elements of Effectiveness of Experienced Elementary Mathematics Teachers Entering Professional Development*

Kayla Myers, Georgia State University

Susan Auslander, Georgia State University

Jedonia Cooper, Gwinnett County Public Schools

Angela Turner, Gwinnett County Public Schools

Abriel Moore, Gwinnett County Public Schools

*Investigating Inservice Elementary Teachers' Mathematics Efficacy*

Baye Ballew, Saint Leo University

Giang-Nguyen T. Nguyen, University of West Florida

**Session: #53 - Research Paper**

*“Quiero Llegar a Ser Alguien”: Community Cultural Wealth in Math Classrooms*

Kevin Pelaez, San Diego State University

Ernesto Calleros, San Diego State University

Jose Parra, San Diego State University

William Zahner, San Diego State University

*Self-Determination Theory and Middle School Mathematics Teachers*

Amy Crawford, Ashland University

*Transforming Prognostic Framing as Evidence of Mathematics Teacher Learning in a Collegial Community of Practice*

Joseph DiNapoli, Montclair State University

**Session: #54 - Research Paper**

*Developing Preservice Teachers' Noticing of Knowledge Bases and Productive Struggle*

Shawnda Smith, Texas Woman's University

*What do AP Calculus teachers believe leads students to be successful in their course?*

Veronica Faraci, St. John's University

*Pedagogical Content Knowledge of Statistics: It's Not Just for Teacher Preparation Programs Anymore*

Randall Groth, Salisbury University

**Session: #55 - Research Paper**

*Online Homework Support Changes Mathematics Teaching Practices*

Mingyu Feng, Wested

*Middle School Students' Use of Literacy Strategies in Solving Mathematical Word Problems*

JANE WILBURNE, Penn State Harrisburg

**5 PM ET**

**Session: #61 - Interactive Session**

*A study involving diagnostic competence and virtual-reality simulations*

Enrique Ortiz, University of Central Florida

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**Session: #62 - Research Paper**

*Zearn Math Curriculum Efficacy During Quarantine and a Typical Year*

Katherine Pettrey, Louisiana State University (Unable to Present Live).

*Impact of Online Professional Learning on Early Math Teacher's Perspectives of Practice*

Jessica Hunt, North Carolina State University

*Using a Tablet App to Foster Data Collection and Analysis Learning with Preschoolers*

Ashley Lewis Presser, EDC

Jessica Young, EDC

**Session: #63 - Research Paper**

*A Case Study of Teachers' Use of an Online Homework Tool During In-Person and Remote Instruction*

Jamie Gillespie, The Friday Institute for Educational Innovation, NC State

Kevin Winn, The Friday Institute for Educational Innovation, NC State

Malinda Faber, The Friday Institute for Educational Innovation, NC State

*A Longitudinal Analysis of Perceived Teacher and Peer Support on Motivation and Achievement in High School Mathematics*

James Middleton, Arizona State University

*Relational Tenacity in Teacher-Student Relationships during COVID*

Drew Nucci, University of Washington

**Session: #64 - Research Paper**

*Synthesizing Research to Elevate Mathematics Specialist Positioning*

Courtney Baker, George Mason University

Katherine Edwards, George Mason University

Kristin Harbour, University of South Carolina

Evthokia Saclarides, University of Cincinnati

Margret Hjalmarson, George Mason University

*Understanding Mirroring Effects in Coaching on Mathematics Teaching Practice*

Hillary Henry, The University of Pittsburgh

*Exploratory analysis on research in mathematics teachers knowledge*

Eunhye Cho, Stonehill College

**Session: #65 - Interactive**

*Getting published in JRME and MTE, and more.*

Patricio Herbst, University of Michigan, JRME Editor

Michael Steele, National Science Foundation, MTE Editor

**6:30 PM ET**

**Session: #71 - Keynote Session**

*Keynote - Can research care about people?: Research roles and methods for community building.*

Theodore Chao, The Ohio State University

Melissa Adams Corral, California State University—Stanislaus