

49th Annual Conference of the Research Council on Mathematics Learning (RCML)

Event Schedule

Thu, Mar 03, 2022

3:30pm

Registration

🕒 3:30pm - 8:30pm, Mar 3

📍 Meritage Lobby

4:00pm

Poster Sessions

🕒 4:00pm - 5:00pm, Mar 3

📍 International I

The RCML professional poster session will include the work of numerous researchers. This session will take place in one large room. Participants are encouraged to walk by each poster and participate in scholarly discourse related to the research presented on each poster. You should set aside about ten or fifteen minutes per poster to review all of the participants work.

9 Subsessions

● Pre-service Teachers' and Mathematics Disciplinary Literacy

🕒 4:00pm - 5:00pm, Mar 3

📍 International I

● Leveraging Coaches to Close Middle School Math Teachers, The Knowing-Doing Gap

🕒 4:00pm - 5:00pm, Mar 3

📍 International I

● Problem-Solving Strategies Used by Students with Learning Disabilities

🕒 4:00pm - 5:00pm, Mar 3

📍 International I

● Investigating Urban HS Students' Math Attitudes Using Equitable Practices

🕒 4:00pm - 5:00pm, Mar 3

📍 International I

● Understanding Epistemological Frames of Statistics Students in Psychology

🕒 4:00pm - 5:00pm, Mar 3

📍 International I

● Evaluating the Mathematical Self-Efficacy of Children during Assessments Drafts

🕒 4:00pm - 5:00pm, Mar 3

📍 International I

● Examining Diversity in Problem-Solving Strategies between Experts & Pupils

🕒 4:00pm - 5:00pm, Mar 3

📍 International I

● Can Student Connect Slope to Context?

🕒 4:00pm - 5:00pm, Mar 3

📍 International I

● Understanding Teachers' Knowledge: from PCK to MTSK

🕒 4:00pm - 5:00pm, Mar 3

📍 International I

5:30pm

Wilson Lecture: My Life with Numbers: The Good, the Bad, and the Ugly

🕒 5:30pm - 6:30pm, Mar 3

📍 International II-III

Dr. Tilton will present on her experiences with mathematics, statistics, and math educators over her lifetime (she will be brief!) She will highlight how overcoming her fear of mathematics (statistics in particular) with the help of dedicated and caring math educators led her to where she is today.

🗣️ Speaker



Abigail Tilton Dean of the College of Arts and Sciences, Texas Woman's University

6:30pm

Welcome Reception

🕒 6:30pm - 8:30pm, Mar 3

📍 Bonnie & Clyde's Pavilion (combined w/ Meritage)

Reception

Fri, Mar 04, 2022

8:00am

Co-Teaching in Middle School Mathematics

🕒 8:00am - 8:55am, Mar 4

📍 Cross Timbers I

Authors: Rachel Bower

In fall 2021 two mathematics teachers co-taught in a sixth-grade mathematics classroom. Their purpose was to document the experience and begin an investigation into what makes such a relationship possible and potential benefits to students. Considerations for the future of this research will be discussed.

🗣️ Speaker



Rachel Bower Assistant Professor of Mathematics Education, Nevada State College

What We Continue to Learn

🕒 8:00am - 8:55am, Mar 4

📍 Haak

Authors: Ryan Fox; Huntir Bass

We continue our previous work to develop and refine content and pedagogical knowledge useful for teaching university-level pre-calculus math classes.

🗣️ Speakers



Ryan Fox Associate Professor of Mathematics Education, Belmont University



Huntir Bass Graduate Student, University of Central Florida

Guides for Math Vocabulary: Examining the Trajectory for Elementary PSTs

🕒 8:00am - 8:55am, Mar 4

📍 Becker I

Authors: Amy Ray; Julie Herron; Emma Bullock; Beth Cory; Mary Swarthout

This presentation focuses on the trajectory of vocabulary for PSTs from an undergraduate mathematics course to the assessments their students will take.

🗣️ Speakers



Amy Ray Assistant Professor, Sam Houston State University



Julie Herron Augusta University



Emma Bullock Assistant Professor, Sam Houston State University



Beth Cory Associate Professor, Sam Houston State University



Mary Swarthout Sam Houston State University

Assessment standard setting: What, How, and Why?

🕒 8:00am - 8:55am, Mar 4

📍 Becker II

This presentation describes a standard setting process used with a validated problem-solving series. Attendees will learn a replicable, efficient process for setting standards for evidence-based assessments.

🗣️ Speakers



Jonathan Bostic Associate Professor of Mathematics Education, Bowling Green State University



Gabriel Matney Professor, Bowling Green State University



Timothy Folger Bowling Green State University

I Notice, I Wonder: Mathematizing among Alternately Certified Teachers

🕒 8:00am - 8:25am, Mar 4

📍 Cross Timbers II

Authors: Karen Zwanch

This study examined novice teachers, responses to creating an "I Notice, I Wonder Digital Journal" to support their pedagogy and mathematics thinking.

Speaker



Karen Zwanch Assistant Professor of Mathematics Education, Oklahoma State University

8:30am

Using Zines in a Mathematics Classroom to Promote PST Understanding

🕒 8:30am - 8:55am, Mar 4

📍 Cross Timbers II

Authors: Ann Wheeler; Winifred Mallam

During this presentation, the researchers will discuss the use of zines to promote learning in mathematics education classes for preservice teachers. Examples of electronic and paper zines will be explored.

Speakers



Ann Wheeler Professor, Texas Woman's University



Winifred Mallam Texas Woman's University

9:00am

Don't Touch My Hair-Using Culture to Teach Mathematics

🕒 9:00am - 9:25am, Mar 4

📍 Homestead

Authors: Jessica Showell

This research focuses on using ethnomathematics to connect the cultural staple of Black hairstyles to teaching and learning of mathematics.

 Speaker



Jessica Showell PhD Student, Georgia State University

Secondary Math Teachers: Will and Skill for Student Engagement

🕒 9:00am - 9:25am, Mar 4

📍 Becker I

Authors: Kimberley Odonnell

Studying the connection between personal responsibility and self-efficacy for student engagement outcomes.

 Speaker



Kimberley Odonnell Baylor University

Utilization of bilingual languaging practices in family mathematics events

🕒 9:00am - 9:25am, Mar 4

📍 Haak

Authors: Gerardo Sanchez Gutierrez

We explore how bilingual families make sense of mathematical problems using their entire linguistic repertoire while completing a mathematics task.

 Speaker



Gerardo Sanchez Gutierrez The University of Texas at Austin

Framework for and Development of the Metacognition for Teaching Inventory

🕒 9:00am - 9:25am, Mar 4

📍 Cross Timbers II

Authors: John Weaver; Juliana Utley

In this presentation, we will discuss a theoretical framework for metacognition for teaching and describe the development of the Metacognition for Teaching Inventory (MTI).

 Speakers



John Weaver Clinical Instructor, Oklahoma State University



Juliana Utley Professor and Morsani Chair in Mathematics/Science Education, Oklahoma State University

From Gatekeeper to Gateway

🕒 9:00am - 9:25am, Mar 4

📍 Virtual Presentation (In-Person Attendees: Pheasant Ridge)

Authors: Taajah Witherspoon

Algebra is considered as a gatekeeper for higher mathematics. This research sought to expand on the direct correlation that exists between multiplicative and fractional reasoning with algebraic competence.

🗣️ Speaker



Taajah Witherspoon Assistant Professor (2015), The University of Alabama at Birmingham

9:30am

Networking and Collaboration Break

🕒 9:30am - 9:55am, Mar 4

Break Time! This year we would like to provide an opportunity for networking and fellowship. So, from 9:30 and 9:55 am, we encourage you to meet someone new, catch up with old friends, or just take a moment to enjoy the company of others scholar over a cup of coffee.

10:00am

PIVOT!: Preparing Pre-Service Teachers for Interruptions in Schooling

🕒 10:00am - 10:55am, Mar 4

📍 Homestead

Authors: Brianna Kurtz

This presentation will explore a project preparing pre-service K-12 teachers in their ability to „pivot,“ in their delivery methods in mathematics.

🗣️ Speaker



Brianna Kurtz Assistant Professor of Teacher Education, Mary Baldwin University

OU Transformative Tutoring Initiative: A High-Dosage Math Tutoring Model

🕒 10:00am - 10:55am, Mar 4

📍 Cross Timbers I

Authors: Stacy Reeder; Kate Raymond; Mandy Howell; Cristina Moershel; Jennifer Johnson

High-dosage tutoring models have been shown to significantly improve learning. The features of our tutoring program with two local high schools will be shared.

 Speakers



Stacy Reeder University of Oklahoma



Kate Raymond Assistant Professor, University of Oklahoma



Mandy Howell University Of Oklahoma



Cristina Moershel University of Oklahoma

Active Learning Ingresses of Early-Career Collegiate Instructors

🕒 10:00am - 10:55am, Mar 4

📍 Haak

Authors: Sean Yee; Kimberly Rogers

This study identifies the active-learning methods that novice mathematics graduate student instructors found most accessible, helping with novice professional development.

 Speaker



Sean Yee Associate Professor, University of South Carolina

Using Children's Literature: PSTs Write Rigorous Lessons, or Do They?

🕒 10:00am - 10:55am, Mar 4

📍 Becker I

Authors: Winifred Mallam; Georgia Cobbs; Ann Wheeler

This session focuses on mathematics lessons pre-service teachers (PSTs) created using children's literature. Participants will evaluate and critique sample lessons.

 Speakers



Winifred Mallam Txas Woman's University



Georgia Cobbs University of Montana



Ann Wheeler Professor, Texas Woman's University

Assessing Undergraduate Students' Multiplicative Concepts

🕒 10:00am - 10:55am, Mar 4

📍 Becker II

Authors: Jianna Davenport

Discussion of the validation of an assessment for undergraduate students, the multiplicative concept stage and its use in undergraduate student mathematics thinking and reasoning research.

🗣️ Speaker



Jianna Davenport Graduate Assistant, Oklahoma State University

Personal Inventory in College Algebra

🕒 10:00am - 10:25am, Mar 4

📍 Virtual Presentation (In-Person Attendees: Pheasant Ridge)

Students that monitor their own learning progression, and adopt new strategies to improve learning, possess a positive self-regulatory trait that often leads to academic success.

🗣️ Speaker



Karl Kruczek NSU

10:30am

Elementary PSTs' Mathematics Teaching Beliefs after Teaching STEM Virtually

🕒 10:30am - 10:55am, Mar 4

📍 Virtual Presentation (In-Person Attendees: Pheasant Ridge)

This session explores elementary PSTs' beliefs about mathematics teaching after a virtual STEM teaching experience.

🗣️ Speakers



Megan Burton Associate Professor, Auburn University



Cathrine Maiorca University of California- Long Beach

11:00am

Middle school mathematics teachers' curriculum work during the pandemic

🕒 11:00am - 11:55am, Mar 4

📍 Homestead

Authors: Hilary Tanck

Findings from a post-qualitative study investigating four middle school mathematics teachers, and curriculum work during the COVID-19 pandemic will be presented.

🗣️ Speaker



Hilary Tanck Professional Practice Assistant Professor, Utah State University

Understanding Collaborative Math Partnerships: Learning From Research

🕒 11:00am - 11:55am, Mar 4

📍 Cross Timbers I

Authors: Trena Wilkerson; Colleen Eddy; Tina Mitchell; Megan Che; Jamaal Young

Join the conversation about the importance of collaborative partnerships in mathematics education and what is available in current research on systematic partnership processes

🗣️ Speakers



Trena Wilkerson Professor, Baylor University



Colleen Eddy Associate Professor, University of North Texas



Tina Mitchell Visiting Assistant Professor, Coordinator of MAT Program, Delaware State University



Megan Che Associate Professor, Clemson University



Jamaal Young Associate Professor of Mathematics Education, Texas A&M University

A Framework for Equity Centered Co-Design

🕒 11:00am - 11:55am, Mar 4

📍 Virtual Presentation (In-Person Attendees: Pheasant Ridge)

Authors: Aris Winger; Allison DePiro; Sam Rhodes; Sheela Sethuraman

A Framework for Equity Centered Co-Design

🗣️ Speakers



Allison DePiro Senior Implementation Specialist, CueThink



Sam Rhodes Assistant Professor, Georgia Southern University



Aris Winger

Supporting Preservice Teachers' Learning of Word Problems with Linguistics

🕒 11:00am - 11:55am, Mar 4

📍 Becker I

Authors: Ashley Williams; Rachael Welder; Michelle Kwok; Jason Moore

Linguistic analysis was applied to support preservice K-8 teachers in making sense of semantic and structural differences in additive word problems.

🗣️ Speakers



Ashley Williams Graduate Instructor, Texas A&M University



Rachael Welder Texas A&M University



Michelle Kwok Clinical Assistant Professor, Texas A&M University



Jason Moore Assistant professor, Oakland University

Systemic Coherence Through a Shared Vision of Mathematics Instruction

🕒 11:00am - 11:55am, Mar 4

📍 Virtual Presentation (In-Person Attendees: Pheasant Ridge)

Authors: Holt Wilson; Christine Fisher; Cathy Holl-Cross; Olanrewaju Oriowo

We present an initial framework and methodology for supporting the implementation of state K-12 mathematics standards that centralizes a shared instructional vision.

Speakers



Holt Wilson University of North Carolina Greensboro



Christine Fisher University of North Carolina Greensboro



Cathy Holl-Cross Graduate research assistant, University of North Carolina Charlotte



Olanrewaju Oriowo University of North Carolina Charlotte

Experiences of Urban Mathematics Teachers' during the COVID-19 Pandemic

🕒 11:00am - 11:25am, Mar 4

📍 Cross Timbers II

Authors: Mary Capraro; Robert Capraro; Alesia Moldavan

During this presentation we will discuss 10 urban secondary mathematics teachers' experiences regarding their transition to remote instruction. Recommendations regarding remote instruction will be provided

Speakers



Mary Margaret Capraro Professor: Mathematics Education, Texas A&M University



Robert Capraro Professor, Texas A&M University



Alesia Moldavan Assistant Professor of Mathematics Education, Fordham University

11:25am

The Impact of Remote Learning on Undergraduates' Math Anxiety

🕒 11:25am - 11:55am, Mar 4

📍 Cross Timbers II

Authors: Melinda Lanius

We study the effect of the Spring 2020 emergency remote transition on undergraduate student's math anxiety.

 Speaker



Melinda Lanius Auburn University

12:00pm

RCML Business Meeting w/ Lunch

🕒 12:00pm - 1:25pm, Mar 4

📍 International IV

1:30pm

Teaching & Learning Mathematics Within Integrated STEM

🕒 1:30pm - 1:55pm, Mar 4

📍 Virtual Presentation (In-Person Attendees: Pheasant Ridge)

This session shares research featured in *Investigations in Mathematics Learning*, a special issue on teaching and learning mathematics within integrated STEM.

 Speakers



Christa Jackson Professor, Mathematics Education, Saint Louis University



Thomas Roberts Assistant Professor, Bowling Green State University



Cathrine Maiorca University of California- Long Beach

Validating the Algebra Teacher Self-Efficacy Instrument for PSTs

🕒 1:30pm - 1:55pm, Mar 4

📍 Haak

Authors: Melissa Donham; Dittika Gupta; Trena Wilkerson; Colleen Eddy

This presentation will share the validation of the Algebra Teacher Self-Efficacy Instrument (ATSEI) for pre-service teachers (PSTs), initial findings, and implications in teacher education.

 Speakers



Melissa Donham Baylor University



Dittika Gupta Associate Professor, Midwestern State University



Trena Wilkerson Professor, Baylor University



Colleen Eddy Associate Professor, University of North Texas

Rooting Interdisciplinary Collaboration in Social Justice

🕒 1:30pm - 1:55pm, Mar 4

📍 Becker II

Authors: Summer Bateiha; Sadia Mir

Although teaching mathematics in conjunction with multiple disciplines exists and is explored in mathematics education research, we focus on social justice connecting mathematics and storytelling.

🗣️ Speaker



Dr. Summer Bateiha Associate Professor, Virginia Commonwealth University in Qatar

Middle Grade Students' Mathematics Identity: Instrument Development

🕒 1:30pm - 1:55pm, Mar 4

📍 Cross Timbers II

Authors: Jennifer Cribbs; Juliana Utley; John Weaver

In this presentation, we will discuss the development of a mathematics identity instrument that can be used with middle grades students.

🗣️ Speakers



Jennifer Cribbs Associate Professor, Oklahoma State University



Juliana Utley Professor and Morsani Chair in Mathematics/Science Education, Oklahoma State University



John Weaver Clinical Instructor, Oklahoma State University

Hip-hop Supergroup Lessons in Pedagogy: A Collaborative Autoethnography

🕒 1:30pm - 1:55pm, Mar 4

📍 Becker I

Authors: Marti Cason; Melanie Fields

A collaborative autoethnography with two mathematics educators examining the experience of a hip-hop supergroup as a form of pedagogical development.

🗣️ Speaker



Marti Cason Mathematics Teacher, Vanguard High School - Mesquite ISD

2:00pm

Mathematics Learning Loss due to Interruptions in Formal Education

🕒 2:00pm - 2:55pm, Mar 4

📍 Homestead

Authors: Davie Store; Jessie Store

This study will focus on exploring if there are differences in student performance in all mathematics domains during the COVID-19 pandemic.

🗣️ Speakers



Davie Store Central Michigan University



Jessie Store Alma College

Advancing the Productive Struggle: A Scoping Review

🕒 2:00pm - 2:25pm, Mar 4

📍 Cross Timbers II

Authors: Miriam Sanders; Danielle Bevan; Mary Capraro; Robert Capraro; Jamaal Young

This proposed session presents the results of a scoping review that helps to increase the nexus between the theoretical and practical application of productive struggle.

🗣️ Speakers



Miriam Sanders Texas A&M University



Danielle Bevan Assistant Professor , Houston Baptist University



Mary Margaret Capraro Professor: Mathematics Education, Texas A&M University



Robert Capraro Professor, Texas A&M University



Jamaal Young Associate Professor of Mathematics Education, Texas A&M University

Don't Criticize, Create: Blank-Slate Learning

🕒 2:00pm - 2:55pm, Mar 4

📍 Virtual Presentation (In-Person Attendees: Pheasant Ridge)

Authors: Barba Patton; Sara Thurmond; Andy Tomek; Angela Winn

Acclimating to new environments can be hard, especially today. Starting fresh with a ,blank slate, is the best way to ensure the success of students

🗣️ Speakers



Angela Winn Math tutor and supplement instructor, University of Houston-Victoria



Andy Tomek University of Houston-Victoria

Problem Posing: Understanding Prospective K-8 Teachers' Common Errors

🕒 2:00pm - 2:55pm, Mar 4

📍 Becker I

Authors: Ashley Williams; Rachael Welder

Developing PTs problem posing skills by identifying trends and error patterns in the multi-step word problems they pose.

🗣️ Speakers



Ashley Williams Graduate Instructor , Texas A&M University



Rachael Welder Texas A&M University

Towards Paradise as a Framework for Mathematics Education

🕒 2:00pm - 2:55pm, Mar 4

📍 Cross Timbers I

Authors: Nikolaus Ortiz

I use two stories about Black life to theorize a Black Liberatory Mathematics Education (BLiME). This framework seeks to resist anti-Blackness in mathematics education.

🗣️ Speaker



Nikolaus Ortiz Assistant Professor, Georgia State University

Investigations in Mathematics Learning (IML) Editor Chat 1

🕒 2:00pm - 2:55pm, Mar 4

📍 Pheasant Ridge

Come chat with an editor for RCML's flagship journal: Investigations in Mathematics Learning (IML)! Bring ideas and questions for your 1-1 meeting! No advance notice is needed.

🗣️ Speaker



Jennifer Cribbs Associate Professor, Oklahoma State University

2:25pm

Meta-analyses on Few Studies: Techniques, Benefits, Drawbacks, and Examples

🕒 2:25pm - 2:55pm, Mar 4

📍 Cross Timbers II

Authors: Michael Rugh; Jamaal Young; Mary Capraro; Robert Capraro

Meta-analysis allows us to better examine the effect of a treatment even after a few studies. Methods, benefits, drawbacks, and an example are provided.

🗣️ Speakers



Michael Rugh Adjunct Professor, Texas A&M University



Jamaal Young Associate Professor of Mathematics Education, Texas A&M University



Mary Margaret Capraro Professor: Mathematics Education, Texas A&M University



Robert Capraro Professor, Texas A&M University

3:00pm

How do Teacher Preparation Programs Prepare Teachers to Choose Curriculum?

🕒 3:00pm - 3:25pm, Mar 4

📍 Cross Timbers II

Authors: Kate Raymond

This session will investigate how teacher preparation program are preparing teacher to integrate online curriculum materials into their practices.

🗣️ Speaker



Kate Raymond Assistant Professor, University of Oklahoma

Examining Validity Evidence: Promoting Valid Interpretations and Uses

🕒 3:00pm - 3:25pm, Mar 4

📍 Homestead

Authors: Timothy Folger; Jonathan Bostic; Erin Krupa

This submission presents components of a research study using the Delphi method with experts in the field of validity and validation.

🗣️ Speakers



Timothy Folger Bowling Green State University



Jonathan Bostic Associate Professor of Mathematics Education, Bowling Green State University

Examining Lesson Study in Preservice Teacher Education

🕒 3:00pm - 3:25pm, Mar 4

📍 Cross Timbers I

Authors: Gabriel Matney

This study of preservice teachers investigates their experiences with a program requirement to learn about and engage in multiple iterations of open approach lesson study.

🗣️ Speaker



Gabriel Matney Professor, Bowling Green State University

The Impact of State Promotion Policies

🕒 3:00pm - 3:25pm, Mar 4

📍 Haak

Authors: Claudine Keane

The present multiple case study explored three New York City mathematics teachers, their experiences and perspectives with social promotion and academic promotion criteria. This study described and highlighted how the NYC promotion criteria policies impact their teaching and decision-making.

🗣️ Speaker



Claudine Keane Baylor University

Pathway Based Instruction

🕒 3:00pm - 3:25pm, Mar 4

📍 Becker I

Authors: Jacqueline Dass

Targeting instruction for every learner based on their individual levels of needs for each and every learning standard.

🗣️ Speaker



Jacqueline Dass Owner/CEO, www.mymathpath.com

History of Mathematics in the Classroom: A Focus on Cultures

🕒 3:00pm - 3:25pm, Mar 4

📍 Virtual

Authors: Brian Evans

A brief overview in math history through various cultural contributions is given, and generates ideas for using math history to motivate students.

🗣️ Speaker



Brian Evans Professor, Pace University

3:30pm

Networking and Collaboration Break

🕒 3:30pm - 3:55pm, Mar 4

📍 Delaney Hallway

4:00pm

Teaching Mathematics Online: A Citation and Keyword Co-occurrence Analysis

🕒 4:00pm - 4:25pm, Mar 4

📍 Cross Timbers II

Authors: Jamaal Young

This study examines the citation patterns and keyword co-occurrence trends present amongst studies examine the teaching of calculus online. The results of this study provide bibliometric data that can inform research and practice related to the teaching and learning of calculus online.

🗣️ Speaker



Jamaal Young Associate Professor of Mathematics Education, Texas A&M University

Mathematics Problem Solving, Literacy, and ELL for New Teachers

🕒 4:00pm - 4:55pm, Mar 4

📍 Virtual Presentation (In-Person Attendees: Pheasant Ridge)

Authors: Brian Evans

We will discuss supporting new math teachers as they teach ELL students, particularly in the context of urban environments.

🗣️ Speaker



Brian Evans Professor, Pace University

41 Years of Teaching: Have Things Really Changed?

🕒 4:00pm - 4:55pm, Mar 4

📍 Cross Timbers I

Authors: Daniel Brahier

A reflection on mathematics education as it has changed (and stayed the same) from 41 years, 0 experience of classroom teaching.

🗣️ Speaker



Daniel Brahier Professor, Bowling Green State University

Learning to Notice: PSTs Noticing During a Varied Field Experience

🕒 4:00pm - 4:55pm, Mar 4

📍 Becker I

Authors: Sandi Cooper; Michael Warren; Kenley Ritter; Melissa Donham; Melissa Donham

This session reports on a study analyzing the development of preservice teacher noticing during a summer mathematics academy for early learners.

🗣️ Speakers



Sandi Cooper Professor, Baylor University



Michael Warren Instructor of Mathematics, Tarleton State University



Kenley Ritter Baylor University



Melissa Donham Baylor University

5:00pm

Founders Lecture: Current Research Trends in Mathematics Learning That Guide Us for the Future

🕒 5:00pm - 6:00pm, Mar 4

📍 Delaney

Let's examine research trends in mathematics learning by reflecting on the past five years. This lens will help us to consider how we can plan for the future. What has been the impact? Where do we need to go from here? What are the needs? As we explore these trends and future planning we will engage in discussions around RCML's three goals:

- Developing and sustaining a professional learning community of researchers and school leaders.
 - Advancing research about PK-20 mathematics learning, PK-16 teacher preparation and teacher professional development.
 - Informing practice through dissemination of scholarly works through professional fellowship, conference presentations and publications.
-

🗣️ Speaker



Trena Wilkerson Professor, Baylor University

Sat, Mar 05, 2022

7:00am

Breakfast and Snacks

🕒 7:00am - 7:55am, Mar 5

📍 Delaney Hallway

Please come out early to enjoy breakfast and coffee before the Saturday breakout sessions.

8:00am

PST Assessment Experiences Across Mathematics Education Courses

🕒 8:00am - 8:55am, Mar 5

📍 Homestead

Authors: Michael Warren; Melissa Eubank; Eileen Faulkenberry; Beth Riggs; Kathy Horak Smith

Mathematics teacher educators share experiences creating whole-class and individual assessment tasks spanning multiple mathematics education courses.

🗣️ Speakers



Michael Warren Instructor of Mathematics, Tarleton State University



Melissa Eubank Mathematics Instructor and Director of Tutoring and Learning Center, Tarleton State University



Eileen Faulkenberry Professor, Tarleton State University



Kathy Horak Smith Professor and Department Head of Mathematics, Tarleton State University

Developing Mathematical Knowledge for Teaching in Pre-Service Teachers

🕒 8:00am - 8:25am, Mar 5

📍 Cross Timbers I

Authors: Jason Proctor; Tonya Garrett

This session presents the results of how elementary teacher candidates' MKT developed after creating and implementing a revised curriculum for a Numbers & Operations course.

🗣️ Speakers



Jason Proctor Northeastern State University



Tonya Garrett Assistant Professor, Northeastern State University

An exploratory study of factors influencing mathematics problem solving.

🕒 8:00am - 8:25am, Mar 5

📍 Virtual Presentation (In-Person Attendees: Pheasant Ridge)

In this quantitative study we investigated the factors influencing students problem solving proficiency.

🗣️ Speakers



Sam Rhodes Assistant Professor, Georgia Southern University



Antonio Gutierrez de Blume Associate Professor of Research, Georgia Southern University



Allison DePiro Senior Implementation Specialist, CueThink

Measuring Students' STEM Smart Skills - Studying Teachers' Beliefs

🕒 8:00am - 8:25am, Mar 5

📍 Haak

Authors: Alan Zollman; Emily Suh; Blanca Estevez Posadas

This systematic review of the literature reports on teacher beliefs about the life skills and practices students need to be successful STEM learners.

🗣️ Speaker



Alan Zollman Professor, Indiana University Southeast

8:30am

Preservice Teachers' Lessons: A Study of Mathematics Knowledge for Teaching

🕒 8:30am - 8:55am, Mar 5

📍 Virtual Presentation (In-Person Attendees: Pheasant Ridge)

Authors: Seanyelle Yagi; Linda Venenciano; Winnie Wong

This qualitative study presents an analysis of two preservice teachers, lesson designs and reflections to assess their mathematical knowledge for teaching.

🗣️ Speakers



Seanyelle Yagi Assistant Specialist, University of Hawaii at Manoa



Linda Venenciano Associate Professor, University of Hawaii, Manoa



Winnie Wong University of Hawaii at Manoa

Student Voices and Reflections on Mathematics Teacher Preparation Programs

🕒 8:30am - 8:55am, Mar 5

📍 Virtual

Authors: Hope Marchionda; Nick Fortune; Natasha Gerstenschlager

We will share and discuss findings from preservice and inservice mathematics teachers on their beliefs about the strengths and weakness of their preparation programs.

🗣️ Speakers



Hope Marchionda Associate Professor, Western Kentucky University



Nicholas Fortune Western Kentucky University



Natasha Gerstenschlager Western Kentucky University

9:00am

Fraction Division: Preservice Teachers Domain and Representation Knowledge

🕒 9:00am - 9:55am, Mar 5

📍 Homestead

Authors: Kwaku Adu-Gyamfi

We share a study that demonstrates that Preservice teachers, ability to attend to student solutions, interpret student strategies, and respond to student thinking may be limited and compartmentalized to particular representations and conceptualizations of fraction division.

🗣️ Speaker



Kwaku Adu East Carolina University

Don't Deface, Reroute: Road to Success

🕒 9:00am - 9:55am, Mar 5

📍 Virtual Presentation (In-Person Attendees: Pheasant Ridge)

Authors: Sara Thurmond; Barba Patton; Angela Winn; Andy Tomek

Student evaluations, which take time, are the collecting of grades or gathering of information to promote future successful learning. Strategies will be shared for both.

Speakers



Angela Winn Math tutor and supplement instructor, University of Houston-Victoria



Andy Tomek University of Houston-Victoria

Building High School Students' Spatial Sense through Short, Daily Tasks

🕒 9:00am - 9:55am, Mar 5

📍 Haak

Authors: Telithia Russ; Jennifer Cribbs; Adrienne Sanogo

In this presentation, we will examine potential changes in high school students' spatial sense abilities based on a targeted intervention.

Speakers



Telithia Russ Graduate Student, Oklahoma State University



Jennifer Cribbs Associate Professor, Oklahoma State University



Adrienne Sanogo Associate Dean For Academic Programs and Student Services, Oklahoma State University

Building Community in the STEM Fields

🕒 9:00am - 9:25am, Mar 5

📍 Virtual

Authors: Edel Reilly

Reports on a project in a mathematics department to build community through monthly meetings, activities, and workshops in a STEM field.

Speaker



Edel Reilly Indiana University of Pennsylvania

Enhancing Culturally Relevant Math Tasks with Multicultural Literature

🕒 9:00am - 9:25am, Mar 5

📍 Becker II

Authors: Dittika Gupta; Alesia Moldavan; Angela Bullard; Molly Melloan

This study examines how preservice teachers used multicultural literature to design and implement culturally relevant math tasks in methods courses.

🗣️ Speakers



Dittika Gupta Associate Professor, Midwestern State University



Alesia Moldavan Assistant Professor of Mathematics Education, Fordham University

Investigations in Mathematics Learning (IML) Editor Chat 2

🕒 9:00am - 9:55am, Mar 5

📍 Pheasant Ridge

Come chat with an editor for RCML's flagship journal: Investigations in Mathematics Learning (IML)! Bring ideas and questions for your 1-1 meeting! No advance notice is needed.

🗣️ Speaker



Jonathan Bostic Associate Professor of Mathematics Education, Bowling Green State University

9:30am

Building Community through Mathematics Education Leadership Collaborative

🕒 9:30am - 9:55am, Mar 5

📍 Becker I

Authors: Sandi Cooper; Trena Wilkerson; Arash Abnoussei; Dorina Mittrea

In this session, a team will share the experiences of forming and maintaining an effective partnership of mathematics educators through strategic plans for collaboration.

🗣️ Speakers



Sandi Cooper Professor, Baylor University



Trena Wilkerson Professor, Baylor University



Dorina Mittrea Baylor University

10:00am

Corequisite over of remediation: A reflection three years later

🕒 10:00am - 10:25am, Mar 5

📍 Virtual Presentation (In-Person Attendees: Pheasant Ridge)

Authors: Lorraine Gale; Cora Neal

Learn about the impacts, strengths, and challenges of a corequisite quantitative reasoning course at a four-year, open-enrollment institution.

🗣️ Speakers



Lorraine Gale Weber State University



Cora Neal Weber State University

Reaching for College Readiness - Preparing, not Repairing

🕒 10:00am - 10:25am, Mar 5

📍 Cross Timbers I

Authors: William Speer

🗣️ Speaker



William Speer Director, Math Learning Center, University of Nevada Las Vegas

Shaping the future: Specifying an Optimized Sequence of Shapes

🕒 10:00am - 10:25am, Mar 5

📍 Becker II

Authors: Julie Nurnberger-Haag; Clarissa Thompson

We propose a better specified and theorized sequence to promote geometric shape learning by applying insights from multiple disciplines.

🗣️ Speaker



Julie Nurnberger-Haag Assistant Professor, Kent State University

10:30am

Talk Moves for Mentoring Model Construction in Mathematical Biology

🕒 10:30am - 11:00am, Mar 5

📍 Virtual Presentation (In-Person Attendees: Pheasant Ridge)

We discuss the role of faculty mentors in guiding four groups of undergraduates to developing a mathematical biology research question and accompanying model.

🗣️ Speaker



Carlos Castillo-Garsow Associate Professor, Eastern Washington University

Virtual reality simulations and preservice teachers' diagnostic competence

🕒 10:30am - 10:55am, Mar 5

📍 Virtual Presentation (In-Person Attendees: Pheasant Ridge)

Authors: Enrique Ortiz

The purpose of the study was to help preservice teachers (PSTs) transition into the elementary education classroom with appropriate questioning skills.

🗣️ Speaker



Enrique Ortiz Professor, University of Central Florida

Using HSGPA as Placement Tool for College Math Coursework

🕒 10:30am - 11:00am, Mar 5

📍 Cross Timbers I

Authors: Stacey Denum Michie; Joshua Baker

This study examines using HSGPA as a placement tool at a community college to address placement equity gaps in college level mathematics.

🗣️ Speaker



Stacey Denum Michie Oklahoma State University

Understanding Mastery-Oriented Mathematics Teachers' Resilience

🕒 10:30am - 11:00am, Mar 5

📍 Haak

This study will explore middle grades mathematics teachers (MGMT) who maintain their mastery orientation while teaching in performance-based environments.

 Speaker



Tonya Rhodes Graduate Teaching Assistant/PhD candidate, Oklahoma State University

PSTs and Vignettes: Identifying Critical Issues in Mathematics Education

🕒 10:30am - 10:55am, Mar 5

📍 Becker I

Authors: Ryann N. Shelton; Keith Kerschen; Trena Wilkerson; Melissa Donham

This session will address how vignettes can be used with preservice teachers to support their identification of critical issues related to mathematics teaching and learning.

 Speakers



Ryann N. Shelton Baylor University



Keith Kerschen Concordia University Nebraska



Trena Wilkerson Professor, Baylor University



Melissa Donham Baylor University

11:00am

Boxed Lunch

🕒 11:00am - 11:55am, Mar 5

📍 Delaney Hallway

Before you leave please stop and grab your boxed lunch to go!
Thanks again for another engaging and informational RCML conference.