(MT)² ANNUAL CONFERENCE
"STARTING NEW IN 2022"

EAST ROBERTSON HIGH SCHOOL ⊗ JANUARY 29, 2022

⊗ ⊗ ⊗**Campus Map on Back Page**⊗ ⊗ ⊗

⊗ ⊗ ⊗ 8:00-8:50 AM ⊗ ⊗ ⊗

Elementary

Sarah Hatton, Cheatham Park

Using District Resources to Plan Tasks

Sharing the importance of using tasks to help students understand the foundations of math. We will also be using the district provided resources to plan and create tasks for classrooms.

Room: A150 8:00-8:50

Middle, High, Post-Secondary

Holly Anthony and Paula Greathouse, Tennessee Tech University

Developing Mathematical Literacy through Young Adult Literature

Reading young adult (YA) literature in mathematics classrooms provides access points for students to practice reading like mathematicians. We share a variety of YA novels that can be leveraged in math classrooms to enhance math instruction.

Room: A179 8:00-8:50

Middle, High

SarahAnn MacDonald and Alyssa Gooch, Stewart County High Scool

Helicopter Linear Regression STEM Activity

A fun, engaging, hands on activity for use at the middle school and high school level. During this presentation, you will learn how to engage students in making a paper "helicopter" that they will drop from various heights to create a linear equation/regression. This activity can be modified to fit any needs, and connects to engineering, science, and technology!

Room: A150 8:00-8:50

High

Isamar Rachal and Chelsea Martinez, Kenwood High School

Technology in Education

Addressing old school teaching strategies and blending/incorporating new technologies to find the perfect balance with the changing times.

Room: A165 8:00-8:50

⊗ ⊗ ⊗ 9:00-9:50 AM ⊗ ⊗ ⊗

Elementary

Jennifer Meadows and Emily Medlock, TN Tech University & Lipscomb University

Preparing Future Elementary Teachers to Select and Implement High Quality Instructional Materials

According to the Brookings Institute, "There is strong evidence that the choice of instructional materials has large effects on student learning." In this session, we will look at an overview of modules funded by the state of TN for understanding high-quality instructional materials, attending to standards and goals, fostering effortful thinking, and supporting all learners in the elementary math classroom.

Room: A106 9:00-9:50

Middle, High

Carey Wilson, New Colossus Academy (Part-time) and Tennessee Tech (Full-time student/Part-time GA)

Mathematics, STEM, and Batteries! Oh my!

Modeling data collected from assembling a battery from fruit. This session will talk about the integrating STEM into this mathematics lesson. You will create a battery and discuss how the data might be collected and mathematically modeled.

Room: A110 9:00-9:50

Middle, High, Post-Secondary, General

Monica Laird, Fairview High School

Standards Based Grading

The basics of using standards based grading to create a prescriptive classroom environment with clear communication of strengths and weaknesses of students.

Room: A147 9:00-9:50

High

Cynthia (Cindy) Crenshaw, University School of Nashville

Modeling with Sinusoidal Functions

Motion on a swing modeled by sinusoidal functions: In this session, we will find equations for the vertical and horizontal position of a child on a swing. Additional examples including dampened spring motion also included.

Room: A149 9:00-9:50

⊗ ⊗ ⊗ 10:00-10:50 AM ⊗ ⊗ ⊗

Pre-K, Elementary

Jane Baker, Tennessee Tech University

Imaginative Math Stories in PreK-2

This session presents fun, imaginative ways to tell math stories in PreK-2 classrooms. Attendees will become acquainted with three types of math stories and receive plans for the implementation of many unusual story mats.

Room: A160 10:00-10:50

Middle, High, Pre-Service

Markie Keith, Lebanon High School

Assessment Resources

Resources to make assessments. Ways to effectively use card sorts and the many ways they can be used.

Room: A165 10:00-10:50

High, Post-Secondary, General

Ryan Fox, Belmont University

Quantitative Reasoning Meets #adulting: Mathematical Content and Real-World Context

When are we ever going to use this in the real world? Come share your thoughts on a project I modify to encourage students to answer the question, "What am I going to do when I grow up?" using knowledge learned from previous math classes.

Room: A150 10:00-10:50

High

Sharon Glenn, Ensworth High School

Digital Collaboration Projects in Google Classroom for Precalculus

In the past year, I have had to retool several of my classroom projects to work digitally. I will share several assignments (in both Desmos and Google Slides) that I have created along with some takeaways that could easily be applied to other topics. Participants will see samples of student work, will obtain "clean" electronic copies to use with students, and will experience some assignments as a student would experience them. Note: If you do not have access to google slides, this will be less fun than if you do have Google Suite access.

Room: A161 (COMPUTER LAB) 10:00-10:50

⊗ ⊗ ⊗ 11:00-11:50 AM ⊗ ⊗ ⊗

Elementary, Middle

Erin Nunley and Cherry Ross, Overall Creek Elementary

How to put the M in STEM!

During this session we will learn how to take current events in our world and build math tasks that apply to Tennessee standards.

Room: A110 11:00-11:50

Middle

Tammy Brown and Christina Ploeckelman, Montgomery Central Middle

Teaching Integers with Manipulatives and Discovery

Participants will explore strategies for teaching integers using manipulatives and discovery based activities.

Room: A160 11:00-11:50

High, Post-Secondary, General

Dr. Sam Narimetla, Tennessee Tech

"You Taught Us This" - An Engineer's Take On Useful High School Math Concepts

Many concepts taught by High School math teachers are utilized by engineers as they try to solve engineering problems. In this presentation, we will shed light on a few such concepts with pertinent examples.

Room: A149 11:00-11:50

Middle, High, Post-Secondary

Holly Anthony and Paula Greathouse, Tennessee Tech University

Take it to The Limit: Developing Mathematical Literacy

Reading young adult (YA) literature in mathematics classrooms can be motivating and engaging for students. We share math activities from the YA novel, The Limit, that can be used in secondary math classrooms.

Room: A179 11:00-11:50

Middle, High

Sharon Glenn, Ensworth High School

Introduction to the Activity Builder on Desmos

Participants will learn to operate the teacher dashboard and create an activity on the Activity Builder on Desmos (including a card sort as well as interactive sketch and graphing screens). First time users welcome!

Room: A161 (COMPUTER LAB) 11:00-11:50

⊗ ⊗ ⊗ 12:00-12:50 PM ⊗ ⊗ ⊗

Lunch
Middle TN Mathematics Teachers Business meeting
THEATER

⊗ ⊗ ⊗ 1:00-1:50 PM ⊗ ⊗ ⊗

Pre-K, Elementary, Middle, High, Post-Secondary, General, Pre-Service

Dr. Scott Eddins, 9-12 Mathematics Coordinator and Lisa Choate, 5-8 Mathematics Coordinator, TDOE

Tennessee Department Of Education Mathematics Updates

TDOE updates regarding the new 2023-24 mathematics standards and support resources for implementation.

This session will be hosted by TDOE staff:
Dr. Scott Eddins (9-12 mathematics coordinator) and LIsa Choate (5-8 mathematics coordinator).

⊗ ⊗ ⊗ 2:00-2:50 PM ⊗ ⊗ ⊗

Elementary

Jennifer Meadows, Tennessee Tech University

Be a Problem Solver

In this session we will use *Rosie Revere, Engineer* by Andrea Beaty to connect Polya's 4 steps to problem solving with the engineering design process. We will also explore ways of promoting problem solving in the elementary classroom without focusing on the ineffective keyword strategy.

Room: A106 2:00-2:50

Middle, High

Samantha Fletcher, Middle Tennessee State University

Defining "Function" Using a Vending Machine Applet

Explore how to engage students in developing a definition of function using a Vending Machine applet. Engage in the applet as students and discuss pros and cons of this technology tool!

Room: A110 2:00-2:50

Post-Secondary

Holly Anthony, Tennessee Tech University

TAMTE Meeting

The Tennessee Association of Mathematics Teacher Educators (TAMTE) is an organization focused on supporting mathematics coaches, supervisors of instruction, and university mathematics educators in their work to support high-quality mathematics education in PreK-12 settings. We will meet to discuss future initiatives and to invite new members to join. Come learn more about how you can get involved!

Room: A179 2:00-2:50

High

Kim Childress, Pope John Paul II Prep School

Transforming Graphs using Patty Paper Portfolios

This session will provide you with a hands-on tool for graphing functions using transformations. Teachers will create their own patty paper portfolio and discuss horizontal and vertical shifts, horizontal and vertical flips, and inverse functions. Examples of using patty paper functions to graph horizontal shrinks and stretches will be provided as well as what this looks like when vertically planning curriculum. Designed for implementation in an Algebra I, Algebra II, and/or Precalculus course.

Room: A160 2:00-2:50

Middle, High, Pre-Service

Lea Keith, East Robertson High School

Incorporating Writing Using Teams

Learn how to implement writing into your math class to help students communicate what they know in an easy to assess way using Microsoft Teams.

Room: A161 (COMPUTER LAB) 2:00-2:50

⊗ ⊗ ⊗ 3:00-3:30 PM ⊗ ⊗ ⊗

Pre-Service

Jackie Vogel, Austin Peay State University

Preservice Teachers, do you know what TATM (TN Aspiring Teachers of Math) is?

Want to learn about your preservice teacher affiliate, TATM? Looking for opportunities to serve at the state level? Want to meet other preservice teachers? Come join us!

Room: A149 3:00-3:30