AMTE Virtual Institute Considerations for Designing, Teaching, and Assessing Methods of Teaching Mathematics Courses

November 9, 11:30 am – 4:00 pm EST

Торіс	Time (Eastern)	Sessions	
Welcome	11:30 – 11:45 am EST	Opening Remarks and Institute Overview Enrique Galindo, AMTE President Erin Baldinger, Professional Development Committee	
		Strand 1 Presentations	Strand 2 Presentations
Equitable Pedagogy used within Methods of Teaching Mathematics Courses	12:00 – 12:50 pm EST	Empowering Prospective Teachers to Address Inequity with EQUIP Bondurant, Liza – Mississippi State University Kulow, Torrey – Portland State University Cannon, Susan Ophelia – University of Georgia Gallagher, Melissa – University of Houston Byun, Sunghwan – North Carolina State University Join us to learn about the tool, EQUIP! It is an equity-oriented observational tool that you can integrate in your teacher preparation courses. This session will introduce you to basics of EQUIP, and include multiple discussion rooms based on your comfort level with the tool, from beginners to frequent users. Session Resources: go.ncsu.edu/equipamte	 Walking the Talk: Designing Methods Courses Focused on Equitable Practices and Pedagogical Content Knowledge Development Kebreab, Lybrya - Saint Louis University Through problem posing and dialogic, didactic student-teacher relationships, this session offers mathematics teacher educators models, norms, and strategies which engage expert and novice learners. Participants will practice playing the role of both student and teacher with particular attention to typical learning trajectories and common errors as springboards to discourse-rich mathematics learning for all. Session Resources: Sample technology-enhanced exploration lesson Teachers Working at Play-NCTM Blog
Technology used within Methods of Teaching Mathematics Courses	1:00 – 1:50 pm EST	Mathematics Technology Integration with Tinkercad Wan, Anna - University of Southern Mississippi This session will be an introductory look at 3D modeling and connections to mathematics teaching and learning. First, there will be an overview of the	Grounding Discussion of Systemic Racism in Statistical Investigations on Traffic Stops Fernandes, Anthony – UNC Charlotte Weiland, Travis – University of Houston Simic-Muller, Ksenija – Pacific Lutheran University

		free 3D modeling software Tinkercad. Then, participants will experience samples of mathematics activities enhanced by 3D modeling. Session Resources: <u>www.tinkercad.com</u>	In this talk we will discuss our motivation and theoretical framing of using statistical investigations to engage preservice teachers in discussions about systemic racism. The participants will have an opportunity to work with Charlotte traffic stop data in CODAP and mimic part of the investigation done by preservice teachers. We will end by sharing what we learned through our design, development, and implementation of this module. Session Resources: Participants can take a look at the project <u>website</u> and request materials for two modules - traffic stops and school discipline.
Curriculum of Methods of Teaching Mathematics Courses	2:00 – 2:50 pm EST	What's in a Methods of Teaching Course? (Panel Discussion) Martin, W. Gary – Auburn University Jones, Shelly – Central Connecticut State University Ghousseini, Hala – University of Wisconsin Shaughnessy, Meghan – Boston University What do you think are critical components of a Methods course? Panelists will share what they believe are key ideas and how they manage time for the course. Send your questions ahead of time, and join this panel to hear a variety of perspectives.	
Assessment Practices for Methods of Teaching Mathematics Courses	3:00 – 3:50 pm	The Math Pact: Working with Pre-Service and In-Service Teachers to Ensure High-Quality and Equitable Mathematics Learning Experiences for All Students Karp, Karen – University of Louisville Dougherty, Barb – Math Pathways LLC Bush, Sarah – University of Central Florida As mathematics teacher educators, it's our job to help teachers let go of past strategies, tools, and	 What Are We Measuring and Why?: Ungrading and the Pursuit of Equitable Assessment Bowers, David – University of Tennessee- Knoxville Moore, Alex – Westfield State University Research indicates that traditional approaches to grading impede learning, and often only serve to measure cultural proximity to upper-middle class, cis-hetero Patriarchal, neurotypical Whiteness. In this session, we'll explore more Just alternatives to traditional grading. We

approaches that do not serve K-12 students well. In this session, we focus on strategies for working with pre-service and in-service teachers to shift to a team mindset focused on conversations and agreements around using correct and familiar mathematics 1) language, 2) notation, 3) representations, 4) not teaching rules that expire, and 5) developing generalizations. Through this, we can achieve consistent messaging and give K-12 students every opportunity to see mathematics for the truly beautiful, joyful, and deeply connected subject it is.	will analyze how such approaches can shift both the "why" and "what" of assessment, and imagine together ways of navigating the pragmatics of our diverse teaching settings in order to implement more equitable assessment practices. Session Resources: <u>https://drive.google.com/drive/folders/15iEpyqB7MnrGP</u> <u>vPmX2mQ1c-xqYR9AGxq?usp=sharing</u>
Session Resources: https://www.nctm.org/online-learning/Webinars/Det ails/563 https://www.nctm.org/online-learning/Webinars/Det ails/564 https://www.nctm.org/online-learning/Webinars/Det ails/565	