



PROGRAM

Featured Speaker 8:30-9:30 am

SUNIL SINGH **Storytelling: The Journey of Humanizing Mathematics for All**

Stories mark us for life. They are reflections of our humanness and our deepest desires to find our own identities. Mathematics is a library of stories that illuminates the resilience, perseverance, courage, risk, struggle, failure and curiosity found in all those who have been transfixed by this art form. Every race, culture, and civilization has contributed to these stories of the human spirit. However, many of these stories have been marginalized, obscured, or in many cases, never been told. It has now become a moral imperative to tell these stories, with color and conviction, and champion a future of a more graceful, kind and human math education. The endless journey to do this begins by looking exhaustively, passionately, and equitably at its beautiful past.

Session 1 9:45-10:30 am

Grade Level Band	K-12	PK-2	3-5	6-8
Presenter	Jill Casey & Molly Owles	Sara Coombs	Anne Agostinelli	Lily Zandnia
Title	Digital Breakouts: How To's & Engagement Benefits	The CRA Approach to Math Instruction	Remote Learning Recovery through Math Talks	Facilitating Authentic Intellectual Challenges
Description	Want to engage students in a new and interesting way? Learn how to use Google Apps & more to create a digital scavenger hunt that will engage students for entire class periods! Experience with Google apps NOT required.	This session will focus on the Concrete-Representational-Abstract approach to mathematics instruction, with a focus on the "bridging" stages that are often skipped.	Remote learning can be wonderful, but as a replacement for the in-person classroom magic, it leaves some missing links as students enter a new grade level. Let's explore how math talks serve as a bridge to build deep conceptual understanding across grade level content.	Have you ever had a coworker tell you about a great activity and when you try it out, you have different results? In this session, we will explore how our teacher facilitation moves could impact student learning.

Session 1 9:45-10:30 am Continued

Grade Level Band	6-12	6-12	9-12	12+	Coaches/Supervisors
Presenter	Eric Lasky, Kristy Keyes & Kristal England	Alyssa Schneider & Miranda Kay	Craig Cullen	Panel Leader: Rebecca Goad Moderator: Linda Blanco	Kathleen Williams & Rachel Fruin
Title	Anywhere at any Time Learning	Expanding on Algebra I Support in the Classroom	Leveraging Technology to Support Math Instruction	Transitional Mathematics and the PWR Act in Illinois	Coaching PLCs to Move Beyond Admiring Data
Description	We will share how to set up modules so students can learn anywhere at any time. We will also share how to provide individuals learning plans but still have class discussion, group activities, exploration, and performance tasks.	We will address our strategies for building students' number sense and supporting struggling learners in Algebra I. We will also discuss modifications to our Algebra I classrooms and how to structure an Algebra I support course that keeps students on track and motivated.	In this session we will discuss using technology to promote effective math instruction. With a distinction between conveyance and mathematical action technology we will explore using mathematical action technologies to engage students in processes we value.	The PWR Act of Illinois has established a framework for Transitional Math courses to enable students to enroll in college math courses without need of passing a placement exam. The courses must then prepare students for the rigors of college mathematics. How is this best accomplished? Come hear from a combined panel of experienced high school transitional math instructors and their community college liaisons. Participants work with STEM, QL/Stat, or Tech Transitional Math courses in Illinois.	Data plays a key role in meeting the needs of today's diverse student population. Many PLC teams look at data, but do they use it to change practice? Participants will see how to effectively lead a PLC team through a data protocol in order to differentiate instruction.



Session 2 10:45-11:30 am

Grade Level Band	K-12	PK-2	3-5	6-8
Presenter	Adam Poetzel, Jackie Murawska, Sean Nank, Reggie Duncan, Elvia Uriostegui, Katie Hurckes & Kyle Harlow	Chrissy Ivnik	Matt Coaty	Katie Grunow
Title	Past & Present Issues for Teaching During COVID-19	Increasing Math Fluency in a Primary Classroom	Student Math Reflections that Lead to Action	The Importance of Mathematical Play
Description	COVID-19 created short and long term challenges for students and teachers. Join a panel of teacher leaders as they reflect on both lessons learned and current issues related to teaching during this pandemic. Topics include addressing learning gaps, remote learning practices, and resource inequities.	Increasing fluency with students seems to be a buzz worthy topic, but how do you do it? Come learn how to identify students' current understanding and how to nudge them forward in a primary classroom!	Students are used to the cycle of participating, studying, testing and then repeating the process all over again. Ending this cycle is a challenge, but it's possible to give students opportunities to intentionally reflect on their progress and set actionable math goals	Play is essential for all ages. This session will give an overview on the current research of the importance of play and how I used that research to implement free mathematical play in my classroom. Tips and tricks will be shared. Most importantly, there will be time to play!

Session 2 10:45-11:30 am Continued

Grade Level Band	6-12	6-12	9-12	12+	Coaches/Supervisors
Presenter	Marissa Grayson	Jackie Palmquist, SueEllen Vozza & Alyssa Schnieder	Rick Cazzato & Jenny Gilbert	Panel Leader: John Bialas Moderator: Linda Blanco	Lisa Bernstein
Title	Thinking Mathematically From Minute One	Number Talks in a Remote Teaching World	Using Desmos in Precalculus Classes	Dual Credit Policies and Best Practices	Improving Student Outcomes Begins with Effective PD
Description	Engage students in warm ups that push students to think mathematically about everyday situations with no risk and participate in productive math discourse. All activities promote the CCSS Math Practice Standards, use technology, support student ownership, and can be applied to your class tomorrow!	The powerful 10 minute Number Talks routine helps to build numeracy skills, uncover misconceptions, include all students in the math conversation and more, can now be done remotely. Both synchronous and asynchronous Number Talks are possible. Takeaways from our session will include actual Number Talk files you can use in class tomorrow.	We will share some of our favorite Desmos activities we created and use in Precalculus courses on many topics. We will share how we have adjusted our use of Desmos in remote learning and links to our activities that we use in Algebra I, Geometry, and Statistics. No experience needed.	Dual credit math courses are used as an alternative to, or in conjunction with, AP courses. Some of these courses are taught on the college campus, while others are conducted at high schools. A combined panel of high school dual credit math instructors and community college partners will share their experiences and field questions from the audience.	Increased student proficiency in mathematics won't happen unless teachers use instructional strategies their students need. Learn to identify the hallmarks of effective professional learning programs that support educators in shifting classroom instruction and evaluate your own school's PD efforts.

Session 3 11:45-12:30 pm

Conference Takeaways & Virtual Trivia

Share your conference takeaways with a small group of educators and then participate in a Virtual Trivia Contest. There will be prizes for the top teams.

Bonus Sessions

Bonus Recorded Sessions not included above will also be available to ICTM members and non-members paying for “Tier 2 Access” after the conference. To see a list of current bonus sessions, go to <https://www.ictm.org/annual-conference> and look for the “**Bonus Sessions**” section on that page.