



## The Math of Their Dreams: Illuminating Students' Brilliance

### **Cultivating Collective Brilliance: Co-Creating Equitable Learning Communities**

Sessions in this strand invite participants on a shared journey into the heart of mathematics, bridging student identity, collective agency, and ways we can broaden our understanding of what it means to do mathematics. In harmony with the conference theme, this strand underscores the power of collectivism in nurturing students' mathematical identities and fostering equitable teaching environments. Sessions will focus on students, acknowledging their individual brilliance as well as the synergies that arise when they engage in collective mathematical discourse and sense making. Participants will explore effective mathematics routines and instructional practices that will help them facilitate meaningful connections across mathematical ideas with their students. Sessions will delve into strategies and practices for nurturing students' mathematical identities, encouraging them to bring their unique perspectives and experiences to the learning environment while emphasizing the significance of co-creating identity-affirming learning environments, thereby promoting a sense of collective agency. This strand is a call to action for educators to learn from and with all of their students. By reimagining our notions of mathematics, sessions aim to broaden both students' and teachers' perspectives on what it means to "do" mathematics, creating an inclusive, equitable community of learners.

### **Revolutionizing Assessment: Illuminating the Brilliance of Student Thinking in Mathematics**

Transform and reimagine your classroom assessment practices to spotlight the mathematical dreams and brilliance of your students. Sessions in this strand focus on assessment and feedback strategies that unveil the power of student thinking in mathematics and illuminate their learning journey. Sessions in this strand will center on understanding and valuing students' unique perspectives, fostering a shift in how we collectively think about assessments in our classroom. Participants will be immersed in actionable strategies and creative and innovative methods of assessment that not only advance student learning but also provide teachers with insightful glimpses into the landscape of students' brilliances. Sessions in this strand aim to illustrate how teachers can leverage and celebrate students' expertise, promoting assessment as a shared community practice. By stepping into these interactive sessions, teachers will be given tools for providing timely, educative, and constructive feedback as well as opportunities to delve into asset-based assessment practices.

### **Digital Empowerment: Harnessing Technology for Mathematical Engagement**

Sessions within this strand explore a variety of cutting-edge technological tools and strategies that encourage active learning. Participants will discover effective methods for using technology to engage students, capture their imagination and mathematical insights, and promote collaboration. Teachers will learn how to effectively harness technology in their classrooms to create vibrant learning communities with active engagement and collaboration, where students are not just consumers but active creators, serving as an extension of their cognitive effort. Sessions will showcase how technology can serve as a platform for students to express their mathematical identities, ideas, and interactions with peers as well as deepen their engagement with learning mathematics. Sessions in this strand invite teachers to collectively navigate this exciting digital landscape, illuminating the mathematical dreams and brilliance of their students.

### **Expanding Teachers' Content Knowledge to Recognize Students' Brilliance**

Students enter the classroom imbued with a wealth of mathematical wisdom. Their potential, however, can remain untapped if we are not attuned to their unique ways of thinking, knowing, and doing mathematics. Sessions in this strand will invite participants to walk in their students' shoes, adopting the lens of a learner with a vibrant mathematical identity deeply engaged in mathematical content. By delving into mathematics from this fresh perspective, teachers can broaden their understanding of diverse learning approaches within the content, leading to a richer, more inclusive learning environment. Sessions in this strand will empower participants to deeply understand students' emerging mathematical brilliance through a detailed examination of student work and engagement in authentic classroom settings.

### **Fostering Teaching Practices to Nurture Opportunities for Students to Shine**

Imagine a mathematics classroom where students determine possible ways to solve problems, debate the validity of one another's approaches, and deepen their understanding of the content and sophistication of solutions on the basis of their peers' ideas. Sessions in this strand will help participants make the dream of promoting students' positive mathematical identities and sense of agency over their learning a reality through the exploration and examination of innovative teaching practices. The ways in which the pedagogical approaches can promote equitable learning opportunities will be addressed through the use of video, audio, and other ways that student voices shine.