

NCTM 2023 Annual Meeting & Exposition

Conference Strands

Uplifting and Inspiring the Mathematics Educator

Educators' professional lives are a continual push against limited time and resources—now more than ever. Although teaching is filled with days of ongoing interactions, it can easily feel isolating and defeating with ever-growing expectations. As a community of educators, we must find ways to collaborate and grow together in manageable, effective, and inspirational ways. Examples of sessions in this strand might include the following:

- Self-care resources and practices
- Connecting teachers and building community through online and in-person experiences
- Routines that can improve classroom teacher sustainability and effectiveness
- Building professional learning networks

Creating Inclusive, Engaging, and Rigorous Mathematics for All

Each and every student has the right to engage in grade-level content. To do this, we must create inclusive and rigorous learning experiences for all learners that center the needs of multilingual students and those with disabilities in math. Educators must also challenge practices and structures that deny access in our instruction and produce stagnation through separation. Each and every student can learn from and contribute to mathematics classes if instructional practices are inclusive, engaging, and rigorous. Examples of sessions in this strand might include the following:

- Assessment that is informative and encouraging
- Co-teaching/integration teaching strategies for success
- Centering the culture of non-English learners in the classroom
- Universal design for learning in mathematics
- Creating accessible tasks

Challenging and Advancing Policy and Structures in Mathematics Education

Policies and structures are often put into place with an intention of improving student outcomes; however, at times these policies and structures further perpetuate inequities. The needs of our students and society are rapidly changing, and as a result, we need a comprehensive review of the classroom structures and site policies that affect student learning. As we gather at the home of America's decision makers, let's empower teachers to make decisions that promote positive change in their district, school, and classroom. Examples of sessions in this strand might include the following:

- Review of evaluation and assessment policies
- Classroom structures that support the development of mathematical practices
- Broadened pathways to rigorous mathematical instruction
- Strategies for increasing the diversity of culture, practice, and thought
- Reflection of past and present decisions and the implications
- Recognizing and responding to disparities in schools and district outcomes

Expanding the Narrative of Who Belongs

Our mathematics classrooms should be places that nurture a sense of belonging and foster positive mathematical identities for all students. This requires us to focus explicit attention on how students see themselves in their daily learning. Instruction must center, leverage, and build on their experiences and strengths, include a diverse representation of contexts that allow students to see themselves in the mathematics, and provide opportunities to think deeply about community and global contexts for mathematics situations. Examples of sessions in this strand might include the following:

- Instructional strategies such as representation in contexts and resources
- Broadening perspectives by using data to visualize and understand local and global issues
- Instilling students with an identity as mathematicians
- Activities that model community-building and genuine connections through math

Improving Core Instruction through Deeper Mathematical Content and Pedagogical Knowledge

A deeper knowledge of mathematical content empowers teachers to engage students in developing deep conceptual understanding and mathematical thinking and reasoning. When teachers are equipped with a deep understanding of mathematics and equitable teaching strategies, they are poised to increase students' joy for mathematics and decrease the number of students requiring intervention. Examples of sessions in this strand might include the following:

- Improvements for core instruction that reduce the need for interventions
- Deep mathematical understanding of concepts
- Appropriate use of assessment
- Reflection and practice of math pedagogical knowledge