

Conference Strands

Broaden the Purpose of Learning Mathematics

As educators develop their students' appreciation of the joy, wonder, and beauty of mathematics, students can grow to understand and critique the world through a mathematical lens. Sessions in this strand can include, but are not limited to, ways in which we broaden mathematical identity in the classroom, involve all stakeholders in the mathematical community, connect students' home communities to their learning environment, and empower every student to extend their learning beyond the classroom.

Create Equitable Structures in Mathematics

Ensuring equitable mathematics learning of the highest caliber involves the ability to recognize and dismantle barriers to high-quality instruction within classrooms, schools, and districts, including structures and sequences that track students and teachers. Sessions in this strand will focus on, but are not limited to, using growth mindsets to overcome deficit thinking, recognizing student brilliance, and sharing best practices for allowing students access to continued studies of mathematics.

Implement Equitable Mathematics Instruction

To connect all students to the beauty of mathematics, NCTM advocates empowering teachers to develop strategies to teach the whole student with research informed practices. These practices help teachers accommodate and navigate challenges to meet a common goal of high levels of learning by all students. Sessions in this strand will include, but are not limited to, current and innovative practices that incorporate the strategic use of mathematical discourse and those that promote reasoning and sense making while effectively utilizing the eight Mathematics Teaching Practices.

Developing Deep Mathematical Thinking for All

The gateway to an appreciation and understanding of mathematics is struggling in a murky and confused space where students are free to wonder, be curious, and play with different approaches, individually and collectively. Sessions in this strand will focus on, but are not limited to, developing deep mathematical thinking that allows stakeholders to realize effective Mathematics Teaching Practices as essential elements of deep learning where students experience the joy, wonder, and beauty of mathematics.

Catalyzing Change Through Leadership

Successful mathematics leaders from the district to classroom level make a difference by setting clear and ambitious expectations built on developing deep mathematical thinking and creating equitable structures. The use of successful coaching practices helps empower educators to provide experiences that support understanding, positive identity, and agency for all students. Sessions in this strand can include, but are not limited to, focusing on how school-based and district-level, reflective practitioners use the power of collaboration to improve mathematics teaching and learning.

Using Tools and Assessment

Technology and assessment are invaluable resources to help improve instruction and inform decision making. Sessions in this strand will highlight the importance of using technology or assessment to create equitable structures in math, implement equitable math instruction, and develop deep thinking when rehumanizing mathematics.