

NCTM 2019 San Diego Annual Meeting Stands & Descriptions

All proposals must be submitted to a unique strand. You will select your strand along with your grade-band audience on the “Topics” step of the proposal submission. Choose the strand that most applies to your proposal.

Assessment: Eliciting and Using Student Thinking

Effective teaching of mathematics uses evidence of student thinking to assess progress toward mathematical understanding and to adjust instruction continually in ways that support and extend learning. Sessions in this strand will include, but are not limited to, determining mathematical goals, developing purposeful ways to elicit student thinking, making sense of student thinking, asking meaningful questions to gain deeper insight into students’ understandings, and using what we learn about students’ mathematical reasoning to guide our instruction.

Building on Students’ Strengths: Practices That Challenge, Engage, and Empower

Sessions in this strand focus on strengths-based teaching and learning practices for engaging and empowering each and every student. Sessions include, but are not limited to, designing and implementing instruction that affirms students’ identities as humans and as authors of mathematics, challenges students to solve rigorous and worthwhile mathematical tasks that are relevant to them, amplifies students’ voices and mathematical ideas, supports collaborative classroom communities, and leverages mathematics as a sense-making tool for personal and social change.

Professionalism & Advocacy

Who we are as professionals evolves throughout our careers. Whether participating in our first professional learning community (PLC) or stepping onto the national stage, we turn to our colleagues for professional support, and they turn to us. Sessions in this strand will meet you where you are on your journey as a teacher, learner, and advocate for mathematics education. Sessions will provide you with the ideas and tools necessary to continue evolving. Expect opportunities to learn about collaborative learning experiences, mentoring, coaching, social media, and how to become an effective advocate for our profession and our students.

Beyond the Classroom Walls: Empowerment, Access, and Equity

The Empowerment, Access, and Equity strand will focus on policies, strategies, and practices that support or impede access to the highest quality of mathematics teaching and learning with fair and impartial opportunity. This strand will look within and beyond the classroom to interrogate systemic barriers and explore ways to intentionally disrupt and dismantle them. Sessions can include policy advocacy and attitudes, practices, and belief systems to empower students who have not historically seen themselves as knowers and doers of mathematics.

Creating Inclusive Classrooms: Meeting the Needs of Each and Every Student

What should we consider when thinking about creating vibrant, inclusive, and inviting classroom communities? How do we genuinely make space for full participation and meaningful contributions from each and every student? Sessions in this strand will focus on giving teachers concrete strategies to support and empower the wide range of students to fully engage and excel. Sessions in this strand may address Response to Intervention (RTI), Multi-Tiered Systems of Support (MTSS), inclusion, multilingual education, gifted programming and instruction, and other forms of differentiation and strengths-based support strategies.

Building Mathematical Knowledge for Teaching

Building your mathematical knowledge for teaching involves both content and pedagogical knowledge. Sessions in this strand will take a participant through the decisions a teacher makes to teach a given topic. Sessions include, but are not limited to, using and connecting mathematical representations, building procedural fluency with a foundation on conceptual understanding, using technology to visualize and understand mathematical ideas, enhancing teacher content knowledge, and finding ways to articulate a topic across grade levels.

Enhancing Mathematical Thinking through Reading, Writing, Speaking, and Listening

Students regularly communicate in math class, but how can pre-K–12 teachers ensure that this communication is *mathematically* purposeful? Sessions across this strand will explore how to encourage students to engage in expressive and receptive discourse in ways that further their mathematical thinking as well as how teachers can plan for this important aspect of instruction. Participants will explore various ways to strengthen students' ability to prove, justify, explain, explore, argue, and reason through the utilization of various strategies, tools, and/or technology.

For the Love and Joy of Mathematics

Doing mathematics has the potential to be enjoyable, exciting, and awe-inspiring. Having positive experiences learning mathematics motivates future learning. Sessions in this strand are focused on the joy of doing mathematics. They may include doing math for math's sake, ways to inspire our students to see the beauty of mathematics, and how we craft ways to share the joy with our colleagues.
