



## 2019 Nashville Strands & Descriptions

All proposals must be submitted to a unique topic strand. You will select your strand along with your grade band audience on the “Topics” step of the proposal submissions. See below for strand titles and descriptions:

### 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 and varied 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.

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### Building on Students’ Strengths: Practices That Challenge, Engage, Empower, and Meet the Needs of Every Student

Sessions in this strand focus on strengths-based teaching and learning practices for engaging and empowering each and every student in an inclusive classroom. Sessions attend to the design and implementation of instruction that affirms students’ identities as humans and as authors of mathematics, challenging students to solve rigorous and worthwhile mathematical tasks that are relevant to them, amplifying each and every student’s voice and mathematical ideas, supporting collaborative classroom communities, and/or leveraging mathematics as a sense-making tool for personal and social change. Sessions may specifically address Response to Intervention (RTI), Multi-Tiered Systems of Support (MTSS), inclusion, co-teaching, multilingual education, gifted programming and instruction, and other forms of differentiation and strengths-based support strategies.

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### Growing Professionalism and Developing Advocacy

Whether participating in your first professional learning community (PLC) or refining teaching practices to create more inclusive classrooms, we all have something to share and something to learn from each other. How do you establish and maintain professionalism in your classroom, in your interactions with families and colleagues, in your social media presence, and in your community? This strand focuses on developing your professional voice as a teacher and advocate for students and fellow teachers, as you evolve throughout your educational career.

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### Beyond the Classroom Walls: Access, Equity, and Empowerment

The Access, Equity, and Empowerment 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 may address policy, advocacy, attitudes, practices such as teacher or student tracking/de-tracking, and belief systems to empower all teachers and students as knowers and doers of mathematics.

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## 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, developing effective questioning strategies, using technology to visualize and understand mathematical ideas, enhancing teacher content knowledge, and finding ways to articulate a mathematical content or practice focus and/or a progression across grade levels.

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## Enhancing Mathematical Thinking Through Reading, Writing, Speaking, and Listening

Students regularly communicate in math class, but how can 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' abilities to prove, justify, explain, explore, argue, and reason through the utilization of various strategies, tools, and/or technology.

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