



## 2019 Boston 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:

### Empowering Students through Equitable Teaching and Learning

The focus of teaching and learning is centered on empowering each and every student as sense-makers and doers of mathematics as they develop their mathematical identities and become agents of their own learning. Presentations will focus on exploring equitable teaching practices to increase the potential for engaging students in meaningful mathematical experiences.

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### Revolutionizing Mathematics Curriculum

Curriculum is the means to creating transformative, accessible, and authentic learning experiences for each and every student. Presentations will engage participants as critical consumers of curricula as they build connections of mathematical ideas to develop coherence across grade levels, disciplines, and contexts.

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### Advancing Students’ Thinking: Thoughtful and Intentional Integration of Technology

The use of tools and technology in mathematics classrooms can be a powerful way to enhance student learning when used with intent and not just for the sake of using technology. Presentations will highlight how to advance students’ accessibility to key mathematical ideas and support the development of each and every students’ conceptual understanding through the use of mathematical tools and/or technology.

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### Assessment: A Window Into Student Thinking

The focus of assessment should be on capturing students’ thinking so we can gauge progress toward mathematical understanding and adjust instruction to support and extend learning. Presentations will focus on assessment as the vehicle to gain insights into students’ thinking, to empower students to use feedback to continue their own learning, and as a resource for planning next steps in instruction to strategically meet the needs of each and every student.

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### Self, Structural, and Systemic Change for Access and Equity

Access and Equity in school mathematics outcomes is often conflated with equality of inputs such as providing all students the same curricular materials, the same course offerings, the same teaching methods, the same amount of instructional time, and the same school-based supports for learning. This is different, however, from ensuring that all students, regardless of background characteristics, have the same likelihood of achieving meaningful outcomes. Presentations in this strand may focus on eliminating systemic inequities and structures, developing effective accountability measures, strategies to humanize mathematics, creating access to mathematics for all students, and teaching for equity and social justice.

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## Connecting Learning Beyond the Classroom Walls

To encourage mathematical connections outside of students' classrooms, teachers must leverage relationships with stakeholders to impact students' families and communities. Presentations in the strand can include, but are not limited to, ways in which we broaden the mathematical community to involve families in students' learning, ways to connect students' home communities to their learning in school and ways to empower each and every student to extend their learning beyond the classroom walls to make revolutionary change.

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## Professionalism: Educators as Learners and Agents of Change

Empowerment of educators happens when we open our doors to professional learning. Presentations in this strand will focus on strategies for developing both individual and collaborative professional learning that will empower educators to engage in improving and enhancing mathematical knowledge and pedagogy, and understanding of students' mathematical thinking. There will be time to reflect on the development of teachers as leaders and agents of change as well as supporting a sense of collective efficacy.

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