

2018 Hartford 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:

Technology and Tools

Presentations in this strand will emphasize ways in which tools and technology enhance meaningful instructional experiences. Sessions in this strand introduce ways to engage students in creating, comparing, conjecturing, generalizing and reasoning in mathematics. This strand will highlight opportunities for the use of technology and appropriate tools to support students’ increased discourse, strategic thinking, and engagement with important mathematical ideas.

Teaching Practices that Promote Learning

Presentations in this strand will explore research-informed instructional strategies that foster student engagement, reasoning and sense-making, and discourse around mathematical ideas. Presentations highlight teaching practices that engage each and every learner both individually and collaboratively in rigorous mathematics. Presentations reinforce effective ways to leverage professional collaborations promoting growth and shared accountability for student learning.

Assessment

The word “assessment” comes from the Latin word meaning “to sit by” which provides the image of educators sitting beside their students listening to their ideas. Presentations in this strand focus on assessment practices that provide and make use of evidence of student learning. Presentations demonstrate ways in which teachers use data to inform the design of future learning experiences based on evidence from a variety of sources.

Increasing English Learners’ and Emerging Bilinguals’ Access to Mathematics

Mathematical understandings and language competence develop interdependently. Presentations in this strand focus on instructional strategies that build on the valuable knowledge English learners bring to the classroom to promote meaningful mathematical engagement while developing language skills. The approaches shared in this strand support mathematical and linguistic sense-making; focus on receptive and productive language functions; and support constructive mathematical conversations.

The Intersection of Language and Discourse in the Mathematics Classroom

The sessions in this strand raise teachers’ awareness about language, provide teachers with ways to talk explicitly about language, and model ways to respond to students. Presentations will highlight ways to effectively build on students’ everyday language as well as develop their academic mathematical language. These sessions show how to provide opportunities for interaction, scaffolding, and other supports for learning academic mathematical language. Also, they illustrate how to make judgments about defining terms, use informal language in mathematics classrooms, and decide when imprecise or ambiguous language might be pedagogically preferable.

Reaching Each and Every Learner: Student Agency, Ownership, and Identity

Each and every student deserves to be mathematically empowered. Negative stereotypes limit perceptions of who can be successful in learning mathematics. Students should have the opportunity to engage in mathematics in ways that develop their agency (the capacity and willingness to engage academically), foster ownership over the content, and encourage them to see themselves as doers of mathematics. Presentations in this strand focus on attending to agency and identity to promote positive student identities as sense-makers, problem solvers and creators of ideas and to create more inclusive mathematics communities for students who have been historically marginalized.

Curriculum: Making Connections

Curriculum should reflect inherent connections to students' prior knowledge, personal experiences, previous mathematics learning, and other content areas. Presentations in this strand prioritize curricular materials that support teaching mathematics for sense-making, develop greater understanding, and engage students in learning through the mathematical practices. Purposeful connections are highlighted and explicitly demonstrated in ways that mathematical concepts and practices are discussed and explored in further depth within and across grade bands.
