Making Math Social

Constructing knowledge socially, through discourse, activity, and interaction related to meaningful problems, is one foundational principle for effective math teaching, according to NCTM’s Principles to Actions: Ensuring Mathematical Success for All (2014). Making math social is the process of generating, implementing, and reflecting on instructional decisions that lead to deep learning of mathematics by understanding typical needs among early adolescents to interact with their teachers, peers, and the world around them. Students’ diverse backgrounds, daily lives, and personalities influence the types of interactions in which they engage.

Although individual study and reflection are important parts of any discipline, providing a culture of learning math socially enhances sense making for students. An overarching theme while working toward this culture shift is that teachers and their students must reach a shared understanding of how this looks, sounds, and feels within specific learning activities. To do so produces students who value the contributions of all classmates. Drawing out the thinking and innovations of students who are hesitant to participate takes deliberate planning and multiple strategies over time.

The Editorial Panel of Mathematics Teaching in the Middle School (MTMS) encourages readers to submit manuscripts addressing the process of making math social and strategies to create and maintain this type of environment. The questions at right may guide you during the process.

PLANNING FOR SOCIAL INTERACTIONS
- What learning activities can help build relationships with and among students?
- What social norms or group roles engage each and every student in learning mathematics?
- What learning activities encourage sense making as students practice key skills in social settings?
- How do teachers use interactive tasks to pique student curiosity about important mathematics?

LEARNING THROUGH DISCOURSE
- How does collaboration influence student understanding of mathematics?
- What strategies do teachers employ to facilitate student-to-student discourse?
- How do teachers steer discourse toward precise language, and what impact does it have on conceptual understanding?
- How do teachers encourage and facilitate the participation of English language learners?

FACILITATING COLLABORATION WITH TECHNOLOGY
- What qualities of web-based or digital apps lead to deep mathematical discourse?
- What uses of social networking demonstrate an impact on student learning?
- How do flipped classrooms create opportunities for collaborative problem solving?
- How do students refine their thinking by publishing ideas online and receiving feedback?

The manuscript should be no more than 2500 words, not counting references and figures. Submit manuscripts through http://mtms.msubmit.net. On the Keywords, Categories, Special Sections tab, select this 2018 call from the list in the Department/Calls section. Manuscripts are due February 1, 2018.