Mark Hoover* (mhoover@umich.edu), University of Michigan, 610 E. University, Ann Arbor, MI 48104. Building intercommunity collaborative capacity for preparing mathematics teachers to enact mathematical coherence.

The purpose of the overall session is to illuminate opportunities for building coherence into the curriculum and instruction afforded by the CCSSM, curriculum materials, progression documents, assessments, and so forth. Coherence is shaped by such supports, but teachers are the lynchpin to actual mathematical coherence as it plays out in instruction. Of course, the mathematical education of teachers is key, but improved mathematical preparation of teachers is a knotty problem requiring expertise that draws from distinct professional communities. In this talk, we argue that there is a need to build intercommunity collaborative capacity to address fundamental needs in the preparation of mathematics teachers. Such collaboration requires tools and norms to help structure cross-professional work. We think that collaboration on item and instructional task development can provide a fruitful educative context for mathematicians and educators to develop MKT and learn to collaborate on MKT. We elaborate how the design of items and tasks integrates knowledge and reasoning in mathematics with instructional practice in ways that productively structure collaboration and we propose item and task development activities designed to build much needed intercommunity collaborative capacity. (Received September 17, 2014)