# THE UTE MODEL: DEVELOPING PRE-SERVICE TEACHERS' VISIONS OF HIGH-QUALITY MATHEMATICS INSTRUCTION

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The *University Teaching Experience* (UTE) model is a field experience where secondary mathematics PSTs teach in a first-year undergraduate mathematics course coinciding with their first methods course (Bieda et al., Accepted). Teacher educators mentor PSTs in planning and teaching in the UTE, supporting PSTs to enact ambitious teaching practices early in teacher preparation. We report results of our assessment of PSTs' vision for high-quality mathematics instruction (VHQMI) at the outset of the UTE, which inform mentoring of PSTs during the UTE.

## Methods

We used the VHQMI protocol (Munter, 2014) in semi-structured interviews with participants during the first month of the semester in which they were participating in the UTE. The VHQMI probes PSTs' beliefs about the teacher's role, students' engagement, the nature of mathematical tasks, and the nature of classroom discourse in classrooms with high-quality mathematics instruction. We analyzed transcripts using Munter's (2014) rubric.

#### Results

In responding to the question "Can you describe what classroom discussion would be like if instruction was high quality?" all PSTs' responses scored in the top two levels of the rubric. Also, PSTs generally indicated high-quality mathematics instruction involves using tasks with opportunities for mathematical sense-making. When asked "What things should the teacher do for the instruction to be high quality?" PSTs indicated that teachers should be *knowledgeable others*, *facilitators*, or *monitors* (Munter, 2014) rather than imparting knowledge to students. However, when asked about what students' engagement would be like for high-quality mathematics instruction, their responses reflected norms of direct instruction. These findings suggest attention to students' engagement with tasks and evidence of students' learning may be particularly critical for PSTs as they reflect upon their practice in the UTE.

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