

1125-L5-2194

Ryota Matsuura* (matsuura@stolaf.edu), 1520 St. Olaf Avenue, Northfield, MN 55057, and **Sarah Sword, Al Cuoco and Glenn Stevens.** *Assessing Secondary Teachers' Algebraic Habits of Mind.*

Assessing Secondary Teachers' Algebraic Habits of Mind is a research project funded by the National Science Foundation since 2012. We are developing a long-term research program with the ultimate goal of understanding the connections between secondary teachers' mathematical knowledge for teaching and secondary students' mathematical understanding and achievement.

Our hypothesis is that teachers who not only possess strong content knowledge but also the *mathematical habits of mind* (MHoM) used by many mathematicians teach in a way that results in increased student learning and achievement. Recognizing the need for evidence-based research to refine and test this conjecture, we are engaged in a study centered on the following question: *What are the mathematical habits of mind that secondary teachers use, how do they use them, and how can we measure them?*

We are engaged in ongoing work to identify and precisely define MHoM, and to operationalize this framework into paper and pencil assessment problems that accurately and uniquely measure mathematical habits of mind for teaching. In this session, we will focus on the development of the assessment, sharing examples of problems and data from the field tests. (Received September 19, 2016)