

You are cordially invited to attend the
MSU Mathematics Education Colloquium



Presented by:
Dr. Einat Metzuyanim, University of Pittsburgh
&
Dr. Beth Herbel-Eisenmann, Michigan State University

Wednesday, April 29, 2015
3:30 – 5:00pm 252 Erickson Hall MSU

Highlighting Heritages & Building Tasks: A Critical Analysis of Literature on Mathematics Classroom Discourse

In this talk, we share our work related to reviewing research on mathematics classroom discourse that has been published in peer-reviewed journals since about 1985. We separated this literature into (sometimes overlapping) groups based on what we call their “intellectual heritage” and use Gee’s (2011) “building tasks” to critically examine the heritages and sub-heritages. Through this analysis, we see for example, epistemological variation in relationship to ‘mathematics’, that politics and identity mainly appear in only a few heritages/sub-heritages, and a potential marking of ‘status quo’ and ‘still emerging’ work based on the discourse of the texts themselves. We raise critical methodological issues about this work and offer some insights about how the different heritages/sub-heritages foreground and background the building tasks.

Dr. Einat Heyd-Metzuyanim started her career as a software engineer, thereafter earning a Master’s in Education and serving as a middle school mathematics teacher and educational counselor. In 2012, she received her Ph.D. with distinction in mathematics education from Haifa University. Advised by Professor Anna Sfard, her dissertation focused on emotion, identity, and mathematical learning. She holds a position at The Technion - Israel's Institute of Technology, in the Department of Education in Technology and Science. Currently, she is on leave for a postdoc fellowship with the Learning Research and Development Center (LRDC) at the University of Pittsburgh where she is mentored by Professor Lauren Resnick. During her stay at the LRDC, Heyd-Metzuyanim won a Spencer Foundation Small Research Grant to research middle-school mathematics teachers’ professional development aimed at changing teacher practice towards discussion-based and cognitively demanding instruction. In 2014, Heyd-Metzuyanim won the Research in Mathematics Education Early Career Publication Award from the AERA.

Dr. Beth Herbel-Eisenmann is currently Associate Professor of Mathematics Education at Michigan State University. Her work involves collaborating with secondary mathematics teachers about classroom discourse and how to work toward intentional changes to classroom discourse practices through action research. She collaboratively disseminated findings from work at conferences and one of those collaborations produced an edited volume, *Promoting purposeful discourse: Teacher research in mathematics classrooms*, which was published by NCTM in 2009. In part because of this work, she was awarded the 2010 Early Career Award from the Association of Mathematics Teacher Educators. These collaborations are extremely influential to her practice as a mathematics teacher educator and researcher and inform her current design work co-authoring professional development materials, which focus on supporting mathematics teachers to become more purposeful about facilitating productive and powerful classroom discourse. These materials, *Mathematics Discourse in Secondary Classrooms (MDISC)*, were piloted multiple times with secondary mathematics teachers and fostered another long-term collaboration with six middle school teachers. Her research has been published in *Journal for Research in Mathematics Education*, *Educational Studies in Mathematics*, *Journal of Mathematics Teacher Education*, *Journal of Urban Mathematics Education*, *Teachers College Record*, *Teaching and Teacher Education*, *Mathematics Teacher*, and *Mathematics Teaching in the Middle School*. She also co-edited two research volumes: *Mathematics teachers at work: Connecting curriculum materials and classroom instruction* (with Janine Remillard & Gwendolynn Lloyd) and *Equity in discourse for mathematics education: Theories, practices, and policies* (with Jeffrey Choppin, David Wagner, and David Pimm).

The Program in Mathematics Education sponsors this event.