Joan Ferrini-Mundy* (jferrini@msu.edu). Mathematics, Educational Research, and STEM Education Policy: Challenges and Opportunities in the Intersection.

Drawing on examples from my own experience, I will reflect on how making mathematics more central in educational research and in STEM education policy could improve endeavors in both arenas. I will describe a large-scale, multi-district K-12 mathematics and science education research and development project – Promoting Rigorous Outcomes in Mathematics and Science Education (PROM/SE) – where the project team confronted issues of curriculum coherence in mathematics. Using current national context and initiatives as examples, I will propose ways in which mathematics education research might better inform STEM education policy development and implementation. Specifically, the relationship of educational research to improvement in K-12 STEM education, undergraduate education, standards, assessments, and STEM education policy will be explored. (Received September 22, 2010)