1043-97-130 Mark Thames\* (mthames@umich.edu), 2400 School of Education, 610 E. University, Ann Arbor, MI 48109-1259, and Hyman Bass (hybass@umich.edu), 2413 School of Education, 610 E. University, Ann Arbor, MI 48109-1259. Mathematical knowledge for teaching: Coordinating mathematical and pedagogical perspectives.

Dewey's "psychologizing of subject matter" and Shulman's pedagogical content knowledge (PCK) represent early efforts to bridge disciplinary knowledge to teaching & learning. Pressing these ideas further, we take mathematical knowledge for teaching (MKT) to be the mathematical knowledge, skills and sensibilities entailed in the work of teaching, broadly conceived. And we consider MKT to be determined empirically, by a close study of actual practice (more than the curriculum or the discipline). This approach has made manifest a specialized mathematical knowledge that is particular to the profession of teaching, and not captured by PCK. In addition, we have developed measures of MKT, and curricular materials for teacher education and development. In this presentation, we will show how MKT can help coordinate mathematical and pedagogical perspectives, linking certain fundamental mathematical practices to practices of mathematics teaching and learning. (Received August 24, 2008)