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Yvonne Lai and **Hyman Bass**. *The Role of Collective Work in Undergraduate Teaching of
Mathematical Knowledge for Teaching to Future Elementary Teachers*. Preliminary report.

Well-trained mathematicians have a fluent understanding of the mathematics of elementary school, yet they would face serious challenges trying to teach place value to third graders, or fractions to fourth graders. And so, in content courses for prospective elementary teachers, they need to equip students with a kind of mathematical knowledge that they themselves, as instructors, do not normally possess. We analyze the use of instructional materials for teaching Mathematical Knowledge for Teaching (MKT), a construct developed by Ball, Bass, and their colleagues at the University of Michigan. The materials address key content areas, yet are unusual in that they serve a dual audience: both prospective teachers and course instructors. The materials aim to help mathematics faculty develop sensibilities about the content and nature of MKT-while supporting instruction of that knowledge. Providing this support is difficult through written materials alone. We hypothesize the importance of collective work in teaching these courses, for example, through professional exchanges about locally suited pedagogical practices and the content being taught. We report on a study in which we analyzed pilot user experiences to better understand the role of collective work in supporting implementation. (Received September 22, 2011)