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Peter S Wiles* (wiles@math.wisc.edu), University of Wisconsin-Madison, Department of Mathematics, 480 Lincoln Dr., Madison, WI 53706-1388. *Coordinating Mathematical and Pedagogical Content in Preservice Teacher Education.*

It has been found that the depth of teachers' subject matter knowledge has an important influence on their instructional practice. Equally important is their knowledge of children's learning and their ability to make mathematical ideas easily understood. In order to prepare future teachers, teacher education should adequately concern both. I will describe a mathematics course for prospective elementary school teachers that focused on mathematical subject matter situated in the context of children's learning. The students in the course regularly examined written and video accounts of children solving arithmetic word problems. In the process of investigating the development of children's understanding of basic number concepts, the prospective teachers uncovered important mathematical ideas. It was the hope of the instructor that the students in the course would develop mathematical knowledge that was immediately relevant in the context of teaching. (Received September 13, 2000)