1096-L5-438 **Gary A. Harris*** (gary.harris@ttu.edu), Department of Mathematics and Statistics, Texas Tech University, Lubbock, TX 79409, **Tara Stevens** (tara.stevens@ttu.edu), Texas Tech University, Department of Educational Psychology, Lubbock, TX 79409, and **Raegan Higgins** (raegan.higgins@ttu.edu), Texas Tech University, Department of Mathematics and Statistics, Lubbock, TX 79409. *The undergraduate mathematics preparation of middle school math teachers.*

The adoption by many states of the Common Core State Standards for Mathematics (CCSSM) and the publication of the Conference Board of the Mathematical Sciences document "The Mathematical Education of Teachers" (MET II) have raised questions about the mathematical knowledge of current teachers of mathematics , as well as, the mathematics preparation of future mathematics teachers. In this presentation we present results obtained from a five-year professional development project targeting middle school math teachers. These results involve effects on measures of teachers' mathematics self-efficacy, mathematics knowledge for teaching, conceptual mathematics knowledge, and classroom practices. Then we discuss the ramifications for the undergraduate mathematics curriculum and delivery for future middle school math teachers. We conclude that undergraduate programs for future teachers should include a rigorous development of the fundamental mathematics concepts encountered in the middle grades. Moreover, we provide evidence that the sophisticated level of abstraction required for such a rigorous development is well within the capabilities of those students who enroll in upper division undergraduate mathematics courses which focus specifically on these concepts. (Received September 03, 2013)