1014-97-1086 Richard O. Hill\* (hill@math.msu.edu), Department of Mathematics, A302 Wells Hall, E. Lansing, MI 48824, and Sharon L. Senk (senk@math.msu.edu), Department of Mathematics, D320 Wells Hall, E. Lansing, MI 48824. Results from a Capstone Course for Future High School Mathematics Teachers, jointly taught by a Mathematician and a Mathematics Educator.

Following the recommendations of MET, for the fall semesters of 2003 and 2004, Michigan State University has offered a capstone course for future mathematics teachers of grades 7-12. Each was team taught by a mathematician and a mathematics educator. The primary text was *High school mathematics from an advanced standpoint*, by Usiskin et al. We shall discuss what we taught, some (surprising) discoveries about what these future teachers knew and learned, the benefits of collaborations by mathematicians and mathematics educators in capstone courses for future teachers, and our plans for such courses in the future. (Received September 27, 2005)