1067-Y1-2174 Lee A Evans* (lee.evans@usma.edu), D/Math, Thayer Hall, West Point, NY 10996, Jeremy M Riehl (Jeremy.Riehl@usma.edu), D/Math, Thayer Hall, West Point, NY 10996, and Kristin M Arney (kristin.arney@usma.edu), D/Math, Thayer Hall, West Point, NY 10996. Assessing and Improving Students' Fundamental Mathematical Skills throughout their STEM Education. Preliminary report.

Students enter the STEM programs with different backgrounds in mathematics. Our experience indicates that if students lack a good understanding of 13 fundamental pre-calculus skills and concepts that we have identified, they will most likely not perform to their full potential in subsequent math, science, and engineering courses. We have developed a method for assessing and improving students' fundamental skills throughout the core mathematics sequence and into STEM disciplines. In this session, we will discuss ways to strengthen students' mathematical fundamentals, our assessment techniques, and how we collaborate with other STEM disciplines on motivating and improving proficiency in the needed areas. (Received September 22, 2010)