1135-M5-2862 **Kristin M. Arney*** (kristin.arney@usma.edu), West Point, NY , and **Kayla K. Blyman** (kayla.blyman@usma.edu), West Point, NY. *Transforming Mathematics Assessments to Drive Better Learning.* Preliminary report.

In mathematics classes, it is common to find students asking when they are going to use the material in the real world. We are taking steps towards removing the sterile facade that often plagues a mathematics classroom during exams by assessing students on their ability to apply course material in a more realistic environment with collaboration and technology available to assist them.

This method of assessment is being piloted in *Mathematical Modeling and Introduction to Calculus*. This course, rooted in mathematical modeling with discrete dynamical systems, is the first mathematics course taken by approximately 900 students at the United States Military Academy.

This method entails weekly assessments in place of major exams. The assessments consist of three parts: a night before read-ahead focused on a new application, an in-class individual portion where students respond to short answer questions, and an in-class group portion where groups of 3-4 students provide team responses to the same questions after discussion, learning, and consensus. We believe this will result in better attainment of higher order learning goals, better preparation for professional collaboration, increased technology skills, and more creative excellence.

Sample assessments are provided. (Received September 26, 2017)