Robert Talbert* (talbertr@gvsu.edu), Department of Mathematics, 1 Campus Drive, Grand Valley State University, Allendale, MI 49401. Peer instruction in linear algebra. Preliminary report.

Peer instruction is a method of teaching pioneered by Eric Mazur of the Harvard University Physics Department to improve students’ conceptual understanding of physics. For over 20 years, peer instruction has been at the center of a large body of SoTL literature showing its effectiveness in improving student learning in physics and other STEM disciplines across a variety of institutional settings. In this talk, we describe the application of peer instruction in linear algebra. We will discuss the method of peer instruction in general and its potential benefits in linear algebra, and then look at a peer instruction-centered redesign of a linear algebra course. Finally we examine some sample data from student work along with future plans for further implementation of peer instruction. (Received September 16, 2013)