David E Meel* (meel@bgsu.edu), Department of Mathematics & Statistics, Bowling Green State University, Bowling Green, OH 43403. *Guided Discovery in Linear Algebra.

In this talk, examples of activities and applets used to engage students with guided discovery activities in linear algebra will be discussed. In particular, we will look at various cognitively-guided activities, the interface, and discuss the learning opportunities afforded students as they interact with environments. In addition, the talk will address the cognitive change that is experienced by the students as they interact with the applets and how particular assessments, such as interviews and concept mapping, were used to document such change. (Received September 17, 2007)