Mike Weimerskirch* (weim0024@umn.edu) and Shelley Kandola (kandola2@msu.edu). Open Educational Resources in Active Learning Classrooms.

Modern technology allows practice of routine computational skills to happen outside of class time freeing instructors to focus on higher-order thinking skills. In turn, technology can enhance active learning instruction by providing interactive tools students can use for experimentation. This two-pronged approach, offered through openly-licensed videos, homework and software is having a profound effect on student learning at the University of Minnesota. The first advancement was to replace printed textbooks with video as the primary source of information. Students are able to begin working on homework as soon as the semester starts, perhaps even before the first class meeting. Lacking from the traditional curriculum have been rich exercises that require students to engage with mathematics in a deep and meaningful way. Creation of group projects worthy of having three people thinking and working together over an entire class period is necessary to make the active learning experience worthwhile. The current goal is to collaborate with the greater mathematical community to expand the material available for institutions at all levels. (Received September 15, 2019)