1145-E1-587 Kristin A Camenga* (camenga@juniata.edu) and Kimberly A Roth. Effective Practice and Feedback Methods in Calculus I. Preliminary report.

How do students learn most effectively in Calculus? Research suggests that the time students spend practicing problems and the feedback that they receive have a positive effect on student learning. However, there are many ways to accomplish this practice and give feedback, so what is most effective? In the context of a small private liberal arts college with Calculus 1 sections of about 30 students, we are studying the effects of three types of practice and feedback on student achievement on exams. The methods of practice and feedback include WeBWorK, textbook homework with students self-checking, and teacher-designed homework with a student grader. Preliminary results will be shared; the treatments will be repeated in the Spring 2019 section in a different order. (Received September 10, 2018)