Nancy Emerson Kress* (nancy.kress@colorado.edu), Matt Voigt (mkvoigt@gmail.com), Jess Ellis Hagman (jess.ellis@colostate.edu) and Jessica Gehrtz (jrgehrtz@gmail.com). Learning Assistants and Undergraduate Tutors in Active Learning Precalculus and Calculus Courses: Cultivating a Sense of Belonging Among Students from Marginalized Groups. Preliminary report.

While the use of active learning in university Precalculus and Calculus courses has been associated with increased levels of persistence in mathematics, research has found that reform based mathematics teaching, of which active learning is one example, is inconsistent in its promotion of equitable access to mathematics learning opportunities (Ball et al., 2005; Boaler, 2002; Delpit, 1988; Lubienski, 2000; Parks, 2010). Early results from our large multi-institution study indicate that significant differences in sense of belonging and inclusion persist between students from underrepresented groups and their white male peers in active learning mathematics courses. This presentation will describe a structure for supporting undergraduate learning assistants and tutors to develop a deeper understanding of teaching for equity and access in active learning contexts. Students in these instructional roles provide a key leverage point in the effort to promote a stronger sense of belonging and positive experience in mathematics for students from underrepresented groups. Using sociocultural theory and a critical perspective to motivate the work we will share how learning assistants and tutors can play a valuable role in increasing participation in mathematics by women and minorities. (Received September 26, 2017)