

1086-N5-2489

Melissa L Goss* (melissa.goss@unco.edu), 501 20th St, Campus Box 122, Greeley, CO 80639, and **Rebecca Anne Dibbs** (rebecca.dibbs@unco.edu). *Group Norms Establishment and Enculturation into a Calculus 2 Classroom using the Approximation Framework*. Preliminary report.

The establishment of certain social norms, sociomathematical norms, and classroom practices can foster meaning-making and sophisticated mathematical reasoning. A Calculus 2 course taught from a reform curriculum may include a mix of students who participated in a calculus 1 course taught within the same curriculum and those who did not. The purpose of this educational ethnography is to understand how group norms are established and how students are enculturated into a calculus course taught within the approximation framework. Participants in this study consisted of 24 students enrolled in one section of Calculus 2 at a public university in the Rocky Mountain Region. Classroom practice was observed in whole group lecture and small group work lab days, and 4 students were interviewed to inquire into students' perspectives of the class practices and effects on their learning. Results show strong computational knowledge aids in understanding of approximation framework concepts regardless of Calculus 1 experience. Students who do not complete the pre-lab assignments defer to group peers. Students also defer to a subset of the group to perform computations on a calculator and may or may not evaluate if their group members' computations make sense or are correct. (Received September 25, 2012)