1145-E1-2656 **Megan J Breit-Goodwin***, Megan.Breit-Goodwin@anokaramsey.edu. *Transforming the Teaching and Learning in Introductory Statistics.* Preliminary report.

The Guidelines for Assessment and Instruction in Statistics Education College Report (American Statistical Association, 2016) set forth the challenge to transform introductory statistics into a conceptually connected, contextually meaningful course that engages students in authentic statistical thinking and processes. This study investigated the impact of implementing reform teaching and learning methods on student learning and confidence in an introductory statistics course at a two-year college. Do students build understanding and operation between multiple representations and descriptive measures of data? Does student confidence in their statistical thinking, reasoning and operation change? Student learning was measured using pre and post assessments that addressed conceptual understanding, contextual interpretation, and flexible operation with data. Student self-confidence was measured using a pre and post knowledge survey. Learning gains were demonstrated and increases in student confidence were documented. Study results are descriptive of the experiences and outcomes of the classes in which the inquiry was conducted and suggest opportunity for further inquiry into the impacts of reform statistics teaching and learning methods across diverse postsecondary contexts. (Received September 25, 2018)