

1125-O5-2678 **Malissa M Peery*** (mpeery@utk.edu). *“REACT” to Improve Student Success Rates and Classroom Effectiveness–Reaching Excellence through Active Coordinated Teaching*. Preliminary report.

REACT courses provide graduate teaching assistants (GTAs) with a mentorship opportunity and combat poor success rates in gateway mathematics courses. I created lecture videos and employ an innovative flipped format where GTAs manage in class activities and assessments, gaining valuable pedagogical content knowledge. REACT students watch video lectures and take notes outside of class time. Lectures are not repeated in class. Students are expected to come to class prepared. In class, they work in groups on activities that improve their skills and help build connections between concepts in both College Algebra and Basic Calculus, two commonly paired courses. GTAs interact with students while they work, encouraging peer learning, clarifying details, answering questions and asking questions that help students put the pieces together. Students are assessed via clicker and hand graded feedback on group activities, traditional quizzes and unit tests. The result is a more personal learning experience for the student and GTA. REACT students succeed at a higher rate than that of students in traditional sections as evidenced by departmental final exam data. In addition, student ratings of REACT GTAs are higher than those of non-REACT GTAs. (Received September 20, 2016)