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Theresa A. Jorgensen* (jorgensen@uta.edu). *ASSURE Calculus - Achieving Success through Undergraduate Research and Engagement.*

With the goal of igniting a passion for inquiry, freshmen STEM students at the University of Texas at Arlington were connected with authentic research experiences in ASSURE Calculus (Achieving Success through Undergraduate Research and Engagement). In this year-long Calculus sequence, students developed and explored research questions which they could investigate utilizing the mathematical tools of calculus that they were simultaneously learning in the course. These research projects were completed in groups of 4 or 5 students, spanned the entire semester, comprised 10% of their overall semester grade, and culminated with written reports and poster presentations. Calculus I research questions were based in issues related to their university community. Calculus II research projects arose out of issues affecting the broader community. I will describe the structure of the courses including the timeline for the research projects. Impact on the students was measured using the Student Assessment of their Learning Gains (SALG) instrument. The SALG focuses on students' self-reflection of their learning and summarizes the learning progress that the students perceived they made as a consequence of the class pedagogy, including the embedded research component. (Received September 22, 2015)