Numerous undergraduate students take introductory STEM courses as a stepping stone towards obtaining their degree. One of the most common introductory STEM courses taken by undergraduates is general chemistry. Due to the scope of information covered, it can be challenging for students to comprehend the material and thus fail to advance within the course. The University of South Alabama (USA) has employed numerous tools to give instructor feedback on student course experience, such include the student perception of instruction and small group instructional feedback (SGIF). The purpose of this research project is to introduce an additional tool that can influence an instructor’s future pedagogy based on an end-of-semester attitude assessment of their students.

The Attitude toward the Subject of Chemistry Inventory (ASCI) is a survey given pre- and post-semester to assess a student’s change in attitude directly towards the subject of chemistry. The survey allows students to rank their emotional response to a group of subsets: anxiety, intellectual accessibility, fear, interest and utility, and emotional satisfaction. The validity and reliability of the ASCI has been verified by other universities in past research. In this study, the ASCI results from two CH131 courses will be evaluated and compared to see if any significant changes in attitude were found and how those changes could relate to course design.

The ASCI results from each semester, did not display a dramatic shift in student attitude which was unexpected due to the changes the COVID-19 pandemic had on educational learning. Also, students saw chemistry as a challenging subject, but seemed to understand chemistry’s societal or personal construct utility. These findings point to an instructor’s teaching methodology, which highlights the importance of student feedback for professors. The goal of introducing a statistically validated tool for an instructor could not only increase their personal tolerance of results, but could also be a guide to analyze the effects of a change in pedagogy overtime while keeping course content consistent.