

THE IMPACT OF A VIRTUAL LABORATORY TOUR ON AFFECTIVE DOMAIN OF FIRST-YEAR CHEMISTRY STUDENTS

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The affective domain, in particular students' attitude and self-efficacy, is an important factor for educators to consider as they are linked to students' overall success in a subject (Flaherty, 2020). The following presentation will describe the design, implementation, and impact of a 360-degree virtual laboratory tour. The purpose of this was to improve students' familiarity within the laboratory by showing them where their classes would take place and the equipment they would be using in order to improve their feelings towards the chemistry laboratory. To measure the impact of this resource we designed a pre-post-test study where students were surveyed before and after they used the resource. As students' attitudes towards chemistry and self-efficacy were of interest the Attitude toward the Subject of Chemistry Inventory v2 (ASCIv2; Xu & Lewis, 2011) and a modified version of the College Chemistry Self-Efficacy Scale (CCSS; Uzuntiryaki & Çapa Aydın, 2009) were used. It was determined that students who used the resource (N = 40) had an increase in self-efficacy however there was no change in students' attitude. A majority of students who used the virtual laboratory tour said they used it to gain familiarity with the laboratory. This study will discuss the success and failures of virtual laboratory tours and the journey to create an effective tour for first year chemistry students.

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