

Background

- Experiences in classrooms can lead to an increase of STEM motivation^{1,3}
- Personal experiences can have a large influence on one's STEM motivation²
- Personal experiences with medicine can influence career choice⁴
- Chronic illnesses and medical experiences can potentially lead to more interruptions^{5,6,7}



Survey Data

- 1280 survey responses
- Pre and Post semester surveys
- 14 introductory biology courses
- Major and Non-Major students
- Utah Valley University is open enrollment
- 47% Female
- 24% First Generation Student

Survey Questions

Science Identity	I see myself as a biology person. I see myself as a science person. I see myself as a scientist. Other people (friends/family) see me as a science person. My science instructors see me as a science person.	Grade Motivation	Scoring high on science tests and labs matters to me. It is important that I get an "A" in science.
Career Motivation	Learning science will help me get a good job. Understanding science will benefit me in my career. Knowing science will give me a career advantage. I will use science problem-solving skills in my career. My career will involve science.	Value of Peer Interaction	I think about the grade I will get in science. Getting a good science grade is important to me. I like to do better than other students on science tests. My college science classes are more enjoyable when I work with other students. I understand more when my classmates participate in college classroom discussions.
Intrinsic Motivation	Learning science is interesting. I am curious about discoveries in science. The science I learn is relevant to my life. Learning science makes my life more meaningful. I enjoy learning science.	Sense of Belonging	I learn best in college science classes when I work with classmates. When classmates share their ideas in college science classes this helps me learn. When I am in a science setting I feel a connection with the science community. When I am in a science setting I feel respected. When I am in a science setting I feel comfortable.
Self-Determination	I study hard to learn science. I prepare well for science tests and labs. I put enough effort into learning science. I spend a lot of time learning science. I use strategies to learn science well.	Competency in Science	When I am in a science setting I trust my instructors to be committed to helping me learn. When I am in a science setting I enjoy being an active participant. When I am in a science setting I try to say as little as possible. I am good at solving complicated scientific problems. I read websites/articles or books about scientific issues.
Self-Efficacy	I am confident that I will do well on science labs and projects. I believe I can earn a grade of "A" in science. I am confident I will do well on science tests. I believe I can master science knowledge and skills.	Community in Science	I work on a project involving scientific concepts. I think about how my life is affected by science. To what extent is serving the community important to scientific work? To what extent is working with people important to scientific work? To what extent is helping others important to scientific work? To what extent is connecting with others important to scientific work?

When Students Miss Class Due to a Medical Condition, Are they Engaging More with Science?

Porter Bischoff, Kody Garrett, Clayton Rawson, Dr. Josh Premo*, Dr. Britt Wyatt*

Utah Valley University

* = Principal Investigator

