

Assessing Online Supplemental Instruction in an Introductory Community College Cell and Molecular Biology Class

Samson Stynen – TMCC, Student/Tutor

Jon Reddick-Lau – TMCC, Mentor

For many students, Biology 190 (Introductory Cell and Molecular Biology) can be their first science course in college and has proven to be a barrier for students continuing their biology education. In order to help students, Truckee Meadows Community College (TMCC) offers Supplemental Instruction (SI) which is a nontraditional form of tutoring for traditionally difficult courses with a 30% or higher D/W/F rate. SI focuses on collaborative group study and discussion, and is led by a trained peer who has successfully completed the course. When COVID came, due to institutional requests, SI was moved to an online format. This raises a broad question, is online supplemental instruction (OSI) as effective as in-person SI?

Currently, the fundamental goals of this project are to determine *(1) if BIOL 190 course GPA's are significantly different among students who attend OSI, or no OSI at all, and (2) if OSI attendance is a predictor of BIOL 190 course GPA.*

We found, using the multiple linear regression and Mann-Whitney, that the number of SI visits, student type, and first-generation status statistically significantly affect course GPA the most. It was further found that if a student participated in OSI had significantly higher course GPAs than those who did not.