

DreamIT Final Report

In my DreamIT project, I attempted to have students answer, “How do scientists ask and answer questions?” In both IB Biology and Chemistry classes, students received many opportunities to collect data, analyze results, and design their own procedures. This is, in fact, how scientists do their jobs.

In IB Biology, students had a template lab report from which to write, but some students struggled to follow the “protocol checklist” document. Repeated feedback to these students would have prevented these errors. To save time, I could have instituted regular sessions of peer grading while I circulated the room and answered individual/small group questions.

I have learned that the lesson design process involves trial and error. Missteps, as in the scientific process, are essential. They elucidate next steps and potential for improvement.

Through this project, I have learned that I have to be literal in what I want students to produce. Directions, especially in the beginning, have to be clear. Feedback must be given early and often. I should not be scared to involve students in the feedback process since grading itself provides insights into how to properly design, collect, and analyze data. As stated in John Hattie’s book “Visible Learning”, the activity most closely related to positive student outcomes is feedback.