

Teaching Philosophy

As a biology instructor I not only want my students to develop appreciation and curiosity for biological study, but I want to instill intellectual curiosity in my students no matter their chosen major field of study. I have seen this successfully done, and been able to do this successfully myself, when the instructor created a safe and open learning environment where all students had an active role in and out of the classroom. A safe and open learning environment is one that allows students to ask questions and make mistakes without being shamed, usually bringing a high level of comfort with discussing course and related topics with the instructor. Such an open environment will more likely motivate a student to have personal motivation to pursue and retain knowledge, instead of taking education lightly to just get a degree.

When a student has personal motivation to discover the world around them, I have seen their academic pursuits are more likely to be successful. An increase in a student's intellectual curiosity will bring with it a desire to have greater subject mastery, a mind open to analysis and critical thinking, and a desire for life-long learning. I have always found that the classes where instructors inspire the pursuit of knowledge not only for a grade but for the challenge of the pursuit and the love of learning are those where the most information is retained. In biology, this personal motivation can take a learner to many places, where the world will present many questions and answers. Much motivation can come from properly applying the knowledge relayed in class. For example, when a student senses how intricately and significantly biology can affect their life, the learning of it takes on new and greater meaning.

Inspiring students with intellectual curiosity requires an array of learning experiences that will help captivate their minds by showing the pertinence of the subject matter in their lives. This is easily done with biological subjects. While interactive lectures lay a foundation for my classroom, lectures and outside assignments should try to integrate activities that further classroom interaction and application of the subject material. Hands on teaching and learning experiences via labs and other exercises can help fulfill this. Some of the primary processes I find valuable using in lectures include sharing day-to-day examples of the biological concepts, how these might affect students' lives, and how the concepts might be used in technology. In addition, intellectual curiosity can be fostered by exploring current research in either small groups or as a class, having individuals and groups teach specific concepts, etc. I have found that getting students involved in the learning process will bring ownership in the learning process.

Grading is a necessary part of academia; however, I have found that I prefer assessment to be varied to show the proper integration and application of the knowledge gained rather than the mere regurgitation of facts. To having a full understanding of the biological subject, I have found great value when assessment encourages the development of writing and public speaking skills. Some types of assessments that I find especially valuable include assignments that focus on writing professionally to learn publication standards, critically analyzing research publications in groups or as an individual, teaching concepts to a class, public speaking and presentation skills, and experiential learning. The combination of traditional assessments and additional assessments can show greater breadth in knowledge gained than only using traditional assessments.

None of the approaches heretofore mentioned do any good if I do not create a safe and open learning environment as an instructor. Examples used must come from areas that would appeal to all cultures, genders, and ethnicities. In addition, students from different backgrounds enrich a classroom as experiences are shared. Biological instruction must be founded in the combination of stressing core knowledge and application while inspiring a love of learning and developing well-rounded academic skills.