

B) Teaching Philosophy

I believe both teaching *and* learning require significantly more than just showing up for the required class period a few times per week. If learning can be broadly defined as a process that brings together cognitive, environmental, and emotional influences to exact changes in one's knowledge, then learning is not purely cognitive. It is also connected to the learner's surroundings and emotional response. I recognize the need to create interactions, both in and out of the classroom that foster interest and understanding connected to the mind, hands *and* heart of the student.

In my field of chemistry, for each course I teach, I consider students' past experiences and their expectations for the future. I then thoughtfully employ a number of strategies to foster a positive student learning experience. For example, I am committed to organization in a course. I provide a full course schedule on the first day of class, announce due dates well in advance, make grades accessible, and return graded material promptly. I make a priority of being clear and fair in the course policies. While there is always room for grace in emergency situations, I believe that students rise to the established expectations, and that we all find comfort in consistent rules and boundaries. I find that removing any chaos associated with course management helps to reduce student anxiety. I believe this ultimately increases the probability that a student has an emotionally positive experience with the course material itself, opening the door to learning.

I also commit myself to the recognition that students are people. I learn the names of all of my students and try to make an effort to know more about them than just their score on an exam. Once this relationship has been established, it allows me to more easily challenge and encourage a student to improve. A classroom that allows for student questions, a lack of judgment, and a call to think critically contributes to an environment ripe for student learning. I should also mention that I view learning as a two way street, and in many ways, I too, have learned so much from my students through these interactions.

Finally, with the environmental and emotional tone of the classroom set, I employ multiple strategies to engage the cognitive aspect of learning. These strategies include actively pursuing and implementing teaching methods that increase engagement and promote student self-evaluation. This is achieved through both the use of technology and active learning techniques. I seek out ways to make interdisciplinary connections to help strengthen and support learning not only in my course, but in other courses as well. Finally, I find it critical to maintain enthusiasm for the discipline. In fact, I have been told that I have a "proton-like" attitude. If I don't think the material is worth being excited over, then how do I get a hesitant student to engage with it? I find that this excitement is contagious, and often when I simply suggest how "cool" or "fun" I believe a certain concept is, I will later hear students express a similar sentiment.

The cognitive, experiential and emotional aspects of learning can all be extremely important when taken independently. However, I believe that when the three are combined, successful learning, and therefore successful teaching, can occur. It is my goal for this powerful combination to help students complete one of my courses not with a sense of relief, but with a sense of accomplishment and confidence in their science literacy. Since most students that I encounter, even chemistry majors, will not go on to a career in chemistry, it is important that I teach students information that is relevant not only to their lives, but to their futures, and if I can teach students how to learn, then I have ultimately achieved my goal.