

TEACHING PHILOSOPHY

Education is at the heart of a functioning, democratic society. As such, teaching is an honor, and an intellectual and creative exploration. Students are not empty vessels. Nor will filling them with facts that are easily forgotten be valuable outside of the confines of the classroom. In teaching, as in science, process is paramount. When students are able to derive meaning by applying their own logical, critical, and creative skills to a problem, then they have learned.

As a teacher, I aim to guide students into being:

rigorous, intellectually honest thinkers

- whose first inclination when confronted with a hypothesis is to attempt to falsify it
- who are careful not to accept facts as truth simply because those facts come from an authority
- who are skillful in using data to derive new interpretations or hypotheses

creative and open to new paradigms

- who seek new ways of doing, seeing, and understanding
- who periodically reevaluate their belief systems, as new evidence arises

effective communicators

- who write and speak well
- who can use technology to enhance, but not supersede, content

respectful of diversity, both in other people and in academic disciplines

- who seek connections between disparate concepts
- who maintain open minds, and do not jump to conclusions

According to my past students, my primary strengths as a teacher are that I am knowledgeable, approachable and respectful, always open to questions, and that I take discussion beyond the expected boundaries. They say that I give clear explanations, but also insist that they try to answer their own questions. They find my classes thought-provoking, the grading hard but fair, and cite organization, flexibility, and patience as other attributes that I bring to their educational experience.

All students do not learn in the same way. Some retain information better when it is presented visually; others require auditory cues. Some take copious notes; others retain major concepts in their heads, and reconstruct detail from these. A few things are universally true, though. Learning is not passive. And students respond positively to being recognized as individuals, with needs and goals outside of the classroom. Students who are successfully encouraged to make connections between the subject matter and their own experiences derive more, and more lasting, meaning from their education.

Increasingly, students bring diverse cultural backgrounds to the classroom. With these come unique learning styles. When I was training Rosalie Razafindrasoa, a graduate student in Madagascar, I became aware of ways in which these differences in background can affect expectation and process. Initially, Rosalie assumed that, as the teacher, I was infallible, and not to be questioned. I found a subject about which she knew more than I did—the particular herpetofauna of the island on which we were living—and encouraged her to teach me what she knew. After this interaction, our relationship became more fluid, and she began to ask me questions, questions that, in some cases, she had been wondering about for years. “Why invoke evolutionary theory to study ecology and behavior?” “Why come to Madagascar when there are frogs in America?” We were able to discuss these questions, rather than interface as mere lecturer and listener, each bringing to bear what we knew, and so both learned from the interaction.

As a teacher, it is my job to provide structure within which learning can take place. But I must also allow for flexibility within that framework, to accommodate a diverse student body. When I was an undergraduate student, I responded well to firm deadlines. I have since taught students who request more freedom with their time, and my ability to offer them that flexibility allows them to feel respected as individuals, while still being expected to produce their best work.

Testing and grading are particularly difficult aspects of teaching. In courses where it is possible, I believe that what works best in bringing out top performance and understanding is frequent writing assignments that demand both synthesis and original thinking and/or research. Multiple choice exams do not, in my experience, test for knowledge that will be retained. Knowledge without the ability to demonstrate, reflect, and integrate that knowledge means little. Emphasis on writing and speaking is therefore important in a classroom. Furthermore, classrooms ultimately become insufficient as teaching tools, especially in the topics of evolution and ecology. Taking students outside, into the field, is the best route to generating enthusiasm and intellectual curiosity.

Students, like all people, will rise, or sink, to meet expectations. When a teacher expects little, the students give little. When a teacher expects consistently high quality, the students rise to the occasion. There will always be some students who do well, and some who do poorly. Lowering the level of expectation to include more students in the category of “success” fails in two ways: some students will still fail, and those who succeed have less to be proud of for their efforts, and fewer skills to take with them into the rest of their lives. Education should not serve primarily to make the student feel good about herself in the moment. Education is about enriching the lives of students so that they may live informed, enlightened lives in which they have the curiosity to ask “*why?*”, the knowledge to ask “*are you sure?*”, and the courage to ask “*is this right and good?*”.