

Anne Vardo-Zalik: Teaching Philosophy

I center my teaching philosophy on a simple phrase: *find the connection*. My focus as an educator is to create an enthusiastic and supportive learning environment in my classroom and to help students connect what they are learning to their lives and other classes. I visualize an undergraduate degree not as an abstract collection of unrelated courses, but rather, a unique mosaic of classes that can play off of one another. Indeed, one of the things I love most about teaching courses in infectious diseases (in addition to grossing people out) is the fact that I can bring in aspects of history, chemistry, art, ecology, immunology and psychology. Science is an interdisciplinary course of study, and I use every opportunity to illustrate this to my students.

I value the importance of research as a teaching tool and incorporate current papers into classroom activities so that students can visualize the application of what they are learning. I start by simply making the connections for them, by showing them news headlines, audio clips, or videos that relate to the topics they are learning. Then, I step back. I provide the pieces to the puzzle, and let the students, through group discussions, case study investigations or problem based scenarios, connect the pieces together. I carry this through in my assessments, allowing students a diversity of modes to learn and apply their knowledge. In my upper-division courses, research paper discussions often lead to activities where students design experiments to further address a particular scientific question. These connections and research-driven exercises emphasize that these lessons matter beyond the walls of the classroom.

Engaging students in the learning process is critical for long-term assimilation of scientific concepts. Therefore, I blend traditional lectures with concept applications for every class, such as videos, journal articles, news headlines, breakout discussions, and 'low-tech clicker' questions. These multiple viewpoints and sources provide opportunities for students to think critically and relate what they are learning to *their* world. I strongly encourage discussions throughout each class, and am routinely asking the students questions to check on their understanding. While teaching a shared, upper-division course via polycom last fall, I made 'discussion dice' to engage students at the distant campus. For every question I asked the class, I rolled a die and the students assigned to that group would have to answer the question. These open dialogues are important, as they allow me to pace my coverage of material and also create a student-centered classroom. I ask for student feedback throughout the semester and I make every effort to adjust my courses as appropriate. It is important for me that students feel valued as participants in the classroom and in the evolution of the curriculum.

The ability to attend local and web-based teaching workshops has increased my repertoire of teaching modalities to include online technologies and a variety of engagement techniques. This semester, I began utilizing a flipped-classroom exercise in an upper-level parasitology course, putting more of an emphasis on engaged learning outside of the classroom. I now have students learn parasite life cycles on their own, before class. At the start of class, I assign brief, ungraded, board work exercises for each student that illustrates some portion of the life cycle. The class now has extended time to discuss the connection between the life cycle and broader aspects of immunology, pathology and ecology, creating a more in-depth examination of the subject.

My role as a teacher does not stop once I end lecture. I am invested in my students and their success, so I work closely with students who need extra one-on-one time. I mentor both undergraduate research and teaching assistants and am an adviser to the campus biology club. Actively working with students outside of the classroom affords me multiple opportunities to engage our developing scientists, as we work together to answer relevant questions through application-based approaches. It's this connection with my students that creates a supportive community where we can each learn and grow.