

Across the globe, changing environmental conditions pose increasingly significant challenges to many communities. To address these and other complex socio-environmental issues at global, regional, national, and local levels, there is a growing need for emerging professionals who are knowledgeable, compassionate, and effective leaders and team members in their respective fields. I believe it is my role as a teacher to support students to become this type of professional. I strive to create a collaborative and interactive learning environment that both supports and challenges students, using their prior life experiences and interests as the foundation of our work together. I consider myself to be successful when students improve their skills and knowledge in three key areas.

First, I support students to become effective problem solvers. My objective in this area is to develop their ability to engage with nuanced issues by becoming familiar with and practicing critical analysis. For example, in a course I developed called *the Vermont Food System* (University of Vermont Environmental Studies), students were asked to write opinion papers and participate in seminar discussions focused on the intersection between food insecurity and livable wages in agriculture. Students were quick to grasp the practical conflict between these two concepts, and vigorously discussed the importance of programs and policies that supported anti-hunger and/or economic development policies such as the U.S. Farm Bill. To better facilitate participation in this type of activity, I believe it is important to understand students' starting point. In the past, I have used both in-class discussions and an on-line survey at the beginning of the semester to gauge the range of knowledge, interests, and relevant prior life experiences. I then adjust my course plan so the class can effectively progress towards increasingly complex material. A follow up survey at the end of the course allows me to determine growth in student comprehension and critical thinking skills, as well as areas in which I could improve my instruction and facilitation.

Second, I help students develop their *critical lens*. The critical lens is that which allows them to interpret and contextualize new information. To accomplish this, I ask students to develop an argument based on high-quality sources and thoughtful citation. To accomplish this task, students must evaluate sources and determine whether data is credible or not. My assessment of these skills is integrated into a wide variety of assignments (e.g. papers, presentations, group engagement). By including source integrity in my grading rubrics, I encourage students to seek out high quality data and information, and challenge their own assumptions. Through development of their critical lens, students become discerning consumers of information during their college years and beyond. Should they go on to work on environmental issues after their time in college, I hope that their experiences in my classes enable them to create or advocate for evidence-based policy and programs.

Third, I strive to support students' communication skills. I believe that students will be most successful when they can communicate clearly using multiple modalities, including oral, written, graphical, and/or interactive approaches. I believe that students improve their ability to communicate concepts and opinions through the feedback and revision process, and I often provide opportunities for multiple iterations of key assignments in my courses. Though this is a time-intensive teaching approach, it provides valuable opportunities to engage students one-on-one and to offer personalized guidance. Additionally, I have successfully integrated peer review into my courses. By making the peer review a graded assignment and by creating clear guidelines, my students are supported to give each other high-quality feedback in a professional manner.

My guiding inspiration as an educator is drawn from the theory of *andragogy*, defined by Knowles as "the art and science of helping adults learn" (1970, p.38). While andragogy is often discussed in the context of *Adult Learning Theory*, I have found it to be as effective with undergraduate

students as it is with adult learners. Specifically, principles of andragogy require that teachers think of their students as individuals with reservoirs of life experiences that are rich resources for learning. The ability to direct their own learning, referred to as *self-concept*, is central to this theory. I work to bring *self-concept* into the classroom whenever possible. For example, in a course I taught in the called *Organic Farm Planning* (University of Vermont, Department of Plant and Soil Science), I required students to complete a farm plan as part of their final deliverable. In addition to the core assignment (i.e. a business description for a hypothetical agricultural business venture, location or site description, overview of principal cooperators, land tenure approach and opportunity/risk assessment, and references), students were required to include ten additional components of their choosing. Each of these components were drawn from one of the following categories: production, finance and marketing, rules and regulations, and lifestyle and community. This semi-structured assignment allowed students to shape their final project according to their specific interests, while requiring that they also address topics outside their comfort zone.

Lastly, I am committed to creating inclusive learning environments within and outside of the classroom. This aspect of my teaching is guided by principles of *cultural competency*, or the theory that collaborations across cultures require understanding of one's own cultural background and privilege. This requires the valuation of diversity and diverse perspectives, the ability and willingness to practice self-reflection, and awareness of power dynamics in scholarly instruction and research. I work to create learning environments that both acknowledge and respect the diverse backgrounds and perspectives of students, while challenging them to examine their own assumptions and biases. The focal areas of my scholarship and teaching require rigorous examination of how race, class, gender and ability have played a role in parallel historical narratives in agriculture, food systems, food insecurity, and global environmental change. By addressing these sometimes competing narratives through lectures, class assignments and open discussions, the students in my courses are asked to thoughtfully consider how justice, equity, and power can be better considered as we work together to address social-environmental problems.

In summary, I work to equip students with skills that are needed to have impact on a wide range of socio-ecological issues. My topical focus is on climate change as one of the preeminent challenges of our time. Its multifaceted nature requires that we cultivate a diversity of professionals with varied backgrounds, perspectives, and expertise to address it. Effective problem solving, critical thinking, and communication are skills that the emerging generation of leaders and team members will need to address climate change and similarly complex socio-environmental problems. If I am successful in my teaching, these individuals will apply these skills, along with their experiences inside and outside of the classroom in a culturally competent manner. By doing so, it is my hope that they will be empowered to take on the most urgent environmental and social challenges of their generation.

References

Knowles, M.S. 1970. *The modern practice of adult education; andragogy versus pedagogy*. New York: Association Press.