Teaching Philosophy

I do not believe my role as an instructor is merely to educate students, but also to provide structured opportunities for students to exercise agency towards learning on their own. When students are not responsible for their own learning, education becomes a system of indoctrination (Freire, 1964). My student-centered beliefs about education lead me to two main goals as an instructor. First, to cultivate student curiosity and direct it in productive directions. Second, to create learning environments that both support and challenge students in their academic growth. The effectiveness of particular pedagogies are idiosyncratic to the needs of individual students and the specific learning context (Garrison & Vaughan, 2008; Twigg et al., 2013). Consequently, I employ a host of pedagogical tools and use them as befits particular situations.

In order to enable students to take responsibility for their education, I provide many opportunities for students to customize their learning. At senior levels, I provide students with a high degree of control over their learning outcomes. As part of this increased control, students are required to write formal "contracts" about what they are responsible for accomplishing, and when. At junior levels, I provide an abundance of small, structured projects that students can select between. The agency I afford students both increases their intrinsic motivation toward academics and gives them a sense of personal accountability to their own learning.

Lecture can be an effective pedagogical tool, but I use it sparingly. On the one hand, the highly structured nature of lecture reduces much of the burden of assimilating knowledge (Kirschner, Sweller, & Clark, 2006). However, when overused, it also can devolve into a series of factoids disconnected from their relevant context (Hailstorks, 2007). This misleads students about what education is. It also creates a passivity that works against the development of effective reasoning skills. Lecture creates situations where students do not engage in genuine learning; they are mere spectators to the teacher's learning (Freire, 1964). I complement and replace some of my "lecture time" with student-centered pedagogical tools. These tools are chosen based on evidence that they demonstrably improve student achievement and satisfaction in higher education: problem-based learning, mastery quizzing, artifact construction, and asynchronous discussion (Lou, Bernard, & Abrami, 2006; Garrison & Vaughan, 2008; Means et al., 2013; Twigg, 2013).

I have recently come to pay attention to the social needs of my students. When students feel socially involved with their peers, they more willingly engage with course material (Woods, Badzinski, & Baker, 2007). Students develop more robust, domain-transferrable academic skills when social activities are situated in the context of course material (Vaughan et al., 2013). Students have higher achievement at universities that actively support the development of student community groups (Chickering & Gamson, 1987). And finally, having social rapport with an instructor is one of the main predictors of academic success (Light, 2001). To this end, I

incorporate group-based projects in my classes. I have also recently begun to allow for students to meet me personally at extra-curricular movie nights (chosen to fit with course content) and board game / Q&A evenings. On occasions, I push play-based socialization into the classroom; I teach an evolutionary behavior course that draws heavily on game theory. To illustrate core concepts of signaling, iterated interactions, and mixed strategies, we play card games that are understandable in game-theoretic terms.

My introductory psychology course highlights my approach to instruction and also demonstrates that student-centered pedagogies can effectively scale to class sizes of 500 students. This course is divided into 8 content units. Each unit is covered over a span of 4 days: the first two days are lecture on core concepts, the third is a group-based project, and the fourth is a "flex" day for review of difficult material or an additional group project. After the two lectures, but before the project, students are responsible for completing a quiz. This quiz is a 15-question multiple choice test constructed from test bank questions. Students can repeat it as many times as they wish, with their highest grade being taken. Each time they re-try the quiz, it pulls 15 random questions from a bank of about 200. Repeatable quizzes encourage students to study to mastery rather than sufficiency. The unit-quiz format also helps students develop a paced studying regime.

The core of this class is what I call "involvement credit". If students demonstrate that they are taking ownership of their education, they receive credit for it. Each unit, a handful of non-mandatory assignments are released. These include simple data collection and analysis projects (e.g., tracking and analyzing sleep behavior using a smartphone sleep app), experiment design (e.g., re-creating and running classic psychophysical experiments), survey design and data analysis (e.g., what types of study habits predict exam performance), and article summaries (with focus on classic readings). An open-ended discussion forum is also an option that is always available. Students receive credit and feedback for quality contributions that help clarify course content or identify a link between course material and the personal lives of students. This course ends up being less time-investment than traditional lecture; good projects are easier to design than good lectures. It also generates higher quality work by students, since nearly everything they do is of their own choosing.

The core foundations of my educational philosophy are 1) student agency, 2) student accountability, and 3) scaffolded learning opportunities. My introductory psychology course exemplifies how I put my philosophy into practice. Finally, my educational philosophy is not merely constructed from first-hand experience. It is grounded in empirical research on effective teaching strategies in higher education.