Why do I teach?

After a week of teaching, a colleague posed the following question to me: Isn’t lecturing exhausting? As I thought about this question, I realized that, on the contrary, I felt energized when I left the classroom or when I completed a mentoring meeting with students. The preparation for a course or individual classes and the anticipation of teaching on days when I am weary of the daily grind can be exhausting, but when I am in the classroom or interacting with students, I feel an exhilaration that comes with helping others to discover the fascinating complexities of the human body. This enjoyment of teaching, mentoring, and interacting with students flows into whichever course I may be teaching, whether it be basic Human Anatomy and Physiology, Exercise Physiology, or Women’s Health and Exercise, to name a few. To me, human physiology and the study of how the body mechanistically responds and adapts both acutely and chronically to exercise are awe-inspiring and challenging. It is this amazement of the complex yet often logical physiology of the body, particularly as it changes in response to exercise, that I desire to contagiously share with students.

What learning environment do I hope to engender?

The task of teaching is not one to be taken lightly. As I heard last year from Jay Lorenzen, a staff member of Campus Crusade for Christ (CRU) who speaks nationally about leadership, teaching should be undertaken with a properly balanced mix of confidence and humility.\(^1\) This can be achieved by creating a learning environment that focuses on the subject being explored, where the attention of both teacher and student are focused on whatever great truth, concept, or idea is the topic of discussion.\(^2\) Such a classroom and learning environment are what I aim to create, and I believe one glimpse of that can be seen in the lab that I taught as a graduate assistant for Functional Human Anatomy. The undergrads in this course had the privilege to view dissected human cadavers during the lab component of the course. I distinctly remember a few lab sessions where I explored the cadaver with the students. In amazement, we discussed what we were seeing as the illustrations from the textbook came to life. I used my knowledge to guide them in this pursuit of discovery, but I also challenged them to think about what they were seeing using the knowledge that they had gained. In this way, we were a community that was pursuing a truth.\(^1\)

What do I hope students will learn?

When the last lecture has been given, the final exams and assignments are completed, and students voice their "thanks" and "goodbyes" at the end of a course, it is my hope that students will walk away with an enduring understanding of how to learn, think critically, and solve problems. While I completely believe in the value of the content being taught in my courses, particularly as the students move on to become health professionals or researchers, few students will recall from pure memory the exact content that I taught. Of course, there will be time for the students to solidify the knowledge and their use of resources through further academic and professional experiences. Much of life, both personal and professional, is about solving problems which may involve independent research, self-teaching, and learning. For this reason, my goal is that my students will learn how to learn and how to use the resources available to effectively solve problems. I have mentored several undergraduate honors students through the process of conducting research and writing their honors thesis. My approach is to guide them through the scientific process, which ultimately involves asking a question then exploring and learning what needs to be done to find the answer. As these students have moved on to both clinical and academic career paths, it is my hope that they will be able to use the skills and perseverance that they have learned to answer the questions and solve the problems presented to them both in life and in their careers. I have personally witnessed this growth in one of my undergraduate mentees, who recently began a PhD program. She is currently coordinating a research project and has drafted a manuscript largely on her own,

\(^1\) Jay Lorenzen, staff with CRU. "The Grace of Great Things and the Teaching Task." PSCG Retreat Speaker, Oct 2013.

and has recently moved from trainee to independent technologist, performing a rather complicated data collection technique.

How do I approach different classroom settings?

As an instructor in the exercise physiology sub-field of kinesiology, I will most likely have the opportunity to teach in different classroom environments, which clearly require different teaching strategies and provide unique advantages and disadvantages, benefits and challenges. For example, within the lab setting, my approach is to involve the students in effective, hands-on activities that will hopefully enliven the content taught in the lecture component of the course. Participation in the active learning components of the lab and an in-depth interaction with the material presented will be considered heavily when assessing achievement in a lab setting.

Introductory or required courses with large enrollment provide unique challenges due to the difficulties encountered when trying to promote active learning strategies. Although the structure of these courses will largely be lecture-based due to course design and the limitation of class size, it is my goal to illuminate the value of the topic presented. Bringing technological advances into the learning environment such as clickers or online discussion forums, where students are organized into smaller focus areas, may be helpful to promote active learning. Within the large foundational Kinesiology course that I am co-teaching this semester (Biophysical Basis of Kinesiology), I am using clickers to assess prior knowledge before the start of the lecture and areas of confusion among the students at the end of the lecture.

Elective courses with low enrollment allow for a small community of students to seek knowledge and explore a specific topic together with my guidance. Class discussions, classroom assessment techniques, and case studies that encourage life application of the newly-acquired knowledge will be used to promote learning. In the past, I have used an active learning strategy referred to as "think-pair-share" in which students are encouraged to engage with a question by thinking about it themselves, discussing it with a partner, then sharing it with the class. This strategy provides a mechanism by which all students are engaging with the question and have the opportunity to formulate thoughts and ideas prior to a large-group discussion. At the end of lectures, I have employed the "muddiest point" classroom assessment technique in which students are asked to write a concept from the day's lecture that they did not fully understand or a question that arose from the day's topic. The following day, I clarify areas of confusion and answer the questions posed.

Final thoughts

Despite my passion for exercise physiology and guiding students as they discover this topic, two areas that I continually seek to improve include lively engagement with the students and an aura of healthy confidence, particularly when lecturing or teaching large groups of students. However, it is my hope that this confident and engaging approach to teaching will be gained as I strive to create a classroom that is focused on the subject and creates a community that is devoted to and excited about exploring that subject.