

Teaching Philosophy

Education is one of the oldest aspects of human culture, with the earliest written evidence dating back to the Xia Dynasty around 1600 BC. However, the westernized formalization of education and the rise of technology have drastically changed the requirements of what a collegiate education looks like. My teaching philosophy is shaped by this changing world and the challenges and opportunities it presents. My approach has 3 core tenets: **Relationships Matter**, **Process Over Results**, and **Student-Driven Information**. Each tenet developed in response to my own experiences as a student, teacher, mentor, and coach and is meant to maximize each student's preparation for the next stage in their educational journey, whether that is a future class or a future career.

Relationships Matter

Students learn more from people they connect with. In fact, the literature and my own research support that the student-faculty relationship is one of the largest factors in determining student success (Cardoso et al. 2011, Cates and Linsenmeier, *in prep*). Because of this, I emphasize developing an individual relationship with every student. For instance, as a Teaching Assistant for a graduate-level statistics class during the early parts of the COVID-19 pandemic, I made it a point to check in with students about the class and how their lives were progressing outside of class. The personalized attention allowed me to customize the course to match their interests (see **Student-Driven Information**), modulate the material to better match what they could take in on a given day, and led to student success despite the pandemic. The liberal arts environment at Lake Forest provides the opportunity and the space to develop these sorts of personal relationships and maximize the college experience of students. As faculty, we also play an important role in shaping the relationship between students and their classmates (Cardoso et al. 2011). To build these meaningful relationships for my students, I use modern technology such as slack and shared note-taking documents to make interaction easier and encourage students to work together both during and outside of class. Once implemented, I see significant Slack activity and self-organization of study groups. I additionally try to foster a feeling of intellectual safety and the shared struggle of learning by sharing my own experiences of learning and admitting my knowledge gaps which creates the intellectual safety for them to do the same. Finally, I encourage diversity in thought and experience, as simply encountering people of different backgrounds improves learning outcomes and overall student development (Terenzini et al. 2001). Creating an environment that encourages, creates, and solidifies these relationships is invaluable to any successful classroom and is foundational to my teaching philosophy.

Process Over Results

Give a man a fish, and you feed him for a day, teach a man to fish and you feed him for a lifetime. We are in the business for teaching students, so why do we focus so much on giving students facts rather than teaching them the process of how to learn? While facts provide important scaffolding from which students can build their knowledge base (Ambrose 2010), the emphasis on both teaching and testing factual knowledge is the equivalent of giving a man a fish. Teaching how the fact was discovered, and the processes that can be applied to learn new facts prepares students for future courses and careers. This is especially true today when tools like Google have made finding the answer to simple facts a 10-second search away. Instead, I want students to learn to think and to use modern tools to discover the necessary knowledge. I encourage students to use Google and other tools, such as ChatGPT, to supplement and enhance their work. I emphasize these processes by openly using and integrating general processes and technology into my classes and exams. As I said above, if I do not know the

answer to a student's question I will admit so. However I will then look up the answer with them, modeling the types of Google searches and helping to educate what the answer may look like so that they may be able to answer their own questions in the future. I also include examples from a wide range of topics to demonstrate how a process can be applied to various situations. I emphasize the use of a process by testing students on how they would apply a technique to a novel situation, allowing them access to modern tools, and providing credit based largely on their thought process and less on the final answer. The goal is for students to leave the class with cognitive tools and a growth mindset to help develop expertise in their future endeavors.

Student-Driven Information

Students will naturally learn more about what already interests them, so we as educators must meet them halfway. We know that prior knowledge helps develop new knowledge as it provides a scaffold for students to organize and interpret new information (Ambrose 2010). Given that students will inherently know more about topics that interest them, by connecting the material to what students are already interested in we not only maintain student interest, but we help students retain the material better. I was introduced to statistics, not through mathematics courses, but through sports and in particular the NFL. Sports analytics offered a new way to understand the game and provided the scaffolding for me to learn and remember statistical concepts. I, therefore, aim to learn what students care about beyond the course and connect the course to topics they already care about. Taking this one step further, we can encourage student investment in the course by having students have a hand in designing what material is covered and updating topic examples to align with the students in each class. Not only does this align with the interdisciplinary goals of Lake Forest's neuroscience program, but by encouraging students to play a part in course design, we ensure that students are learning the material that inspired them to sign up for the course in the first place. In the classroom, I find that incorporating students' goals significantly improves student outcomes even when the syllabus does not change. By including the students in the course design, I emphasize relationship building and clearly demonstrate that I care about them and what they want to achieve. Even if I disagree with students on what should be covered, having the discussion is valuable to help students think about and commit to why they are taking the course and will improve their experience.

These three tenets are not isolated from each other and instead work together such that each tenet supports the other and creates a comprehensive learning environment. By emphasizing the process, we open the door for tailoring the class to be student-driven. By focusing on a student-driven course design, we help build meaningful relationships. By building these relationships, we are better able to tailor the class to cover the processes that will help the student achieve their goals and create a better and more effective learning environment. My most positive experiences as a student, educator, and mentor have all contained these tenets and I plan to continue to implement them as a professor at Lake Forest College.