Teaching Philosophy Statement

As a faculty member at a public state university, my first priority is to educate students that come through my classroom and develop their understanding of the world around them. Through my courses, I strive to provide students with many of the necessary tools to succeed after college, including critical thinking and analysis, problem solving, and collaboration techniques.

I take this role very seriously, and I am constantly working to improve myself as an educator and to provide my students with a positive learning environment. In the classroom, I view myself as a *facilitator* of knowledge transfer, and I have developed teaching strategies to optimize my ability to encourage critical thinking and enhance comprehension. I employ a constructionist approach to teaching; regardless of the subject material, I use strategies to actively involve students in the learning process through activities that require them to derive meaning rather than simply be told how to think about a subject.

In my classes, I create an environment where students reflect on and question commonly held assumptions and make discoveries that help them understand people, information, and technology in new ways. I encourage students to think about topics and issues outside their normal paradigms for evaluating the world. This can be uncomfortable at times but usually provides a valuable learning experience. For example, I taught INST366 (Privacy, Security, and Ethics for Big Data), INST611 (Privacy and Security for a Networked World), and SURV612 (Ethical Considerations for Data Science Research)—we discuss real-world examples of ethical quandaries regarding data collection, analysis, and use. In these classes, I push students to assess and evaluate ethical questions they may face in their future careers and to recognize that the answers to many technology-driven questions are far from simple. Helping students break out of commonly held assumptions about technology and data may help them differentiate themselves from other applicants for a job, or it may spur research ideas for a future data scientist or professor.

Below, I highlight the core components of my teaching philosophy, which include a focus on consistency, flexibility, and active engagement.

Consistency + Flexibility = Classroom Success

Consistency both within and across semesters enables a more reliable method to evaluate my progress as an instructor, as well as the success or failure of specific class components over time and across multiple instructors. One way I facilitate consistency is by creating a shared drive for each class and sharing access with other instructors teaching the course. This drive will contain all tea
that course, including syllabi, lectures, assignments, videos, and more. Another way I do this is through how I structure course materials. I make extensive use of Canvas, organizing each week into modules that follow a similar structure. Each module has a RE
readings and/or assignments.

Another approach I consistently use in my classes is includ
at the start of classes. It is especially important when teaching undergraduate courses to make explicit connections between course he content and what's happ
teach are focused on risks from new technologies, which generates no shortage of news coverage. In INST366, I will share 2-4 news articles from the prior week that overlap

class. In INST611, I use discussion boards to encourage sharing and discussing current events that are related to class, then we further discuss these articles during class.

Of course, as important as consistency is, every teacher knows how unpredictable a given class, topic, or semester can be. Therefore, I have always centered flexibility in my approach to teaching, and the COVID-19 pandemic only reinforced my focus on being flexible and empathetic when my students struggle. In most classes, I collect feedback from students at the beginning of the semester to help set expectations, and midway through the semester to identify areas where there may be issues or misunderstandings. I use this feedback to adjust assignment dates and the content of assignments when students are not getting the intended benefits from the activity, and to adjust materials for future semesters. For example, during the FA21 semester, I decided to drop two (of six) case study assignments (vs. dropping one) in INST366 based on mid-semester feedback from students. In all my undergraduate-level courses, I drop one or more lowest scores for different assignment categories and provide opportunities to submit assignments late without penalty. In my graduate-level courses, I try to be more flexible in what we discuss, encouraging students to share with me what topics resonate with them. In these classes, I often use discussion boards to help determine what we talk about in a given class meeting, incorporating their questions, comments, and articles into my lecture.

Reinforcing Core Concepts Through Active Engagement

I build my classes around discussion and activities to reinforce important concepts and encourage students to think *beyond* the readings. For example, I often try to get everyone in class involved, even if only at a dyadic level. I employ a lot of visual techniques (e.g., mapping out concepts on the board or a Google Jamboard, post-it note brainstorming) to reinforce concepts and get everyone involved. For example, in INST366, I have students walk through the MIT Moral Machine interactive site[1] (in which an autonomous car fails and you need to decide who dies), then get into small groups and respond to a few prompts on a Jamboard (see Figure 1). As they add responses, I start grouping them by similarity, then we discuss themes as a class.

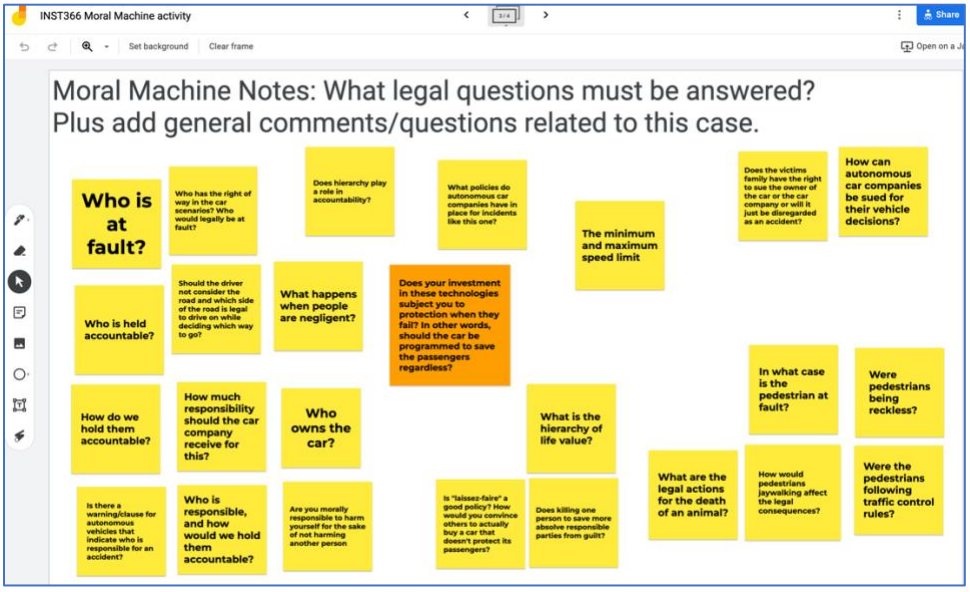

Figure 1. Screenshot of Jamboard activity from INST366.

[1] https://www.moralmachine.net/

One of my favorite in-class activities is called Black Mirror Writ[2]. Developed by Professor Casey Fiesler, this activity draws from the popular science fiction show "Black Mirror" and is speculative ethics activity. Students break into groups and, through multiple stages, develop a "Black Mirror" episode. This is especially useful in classes that focus on technology ethics because the activity forces students to speculate about various ways t to be done to prevent negative outcomes. This reinforces the idea that technology harms are rarely black-and-white, but rather shades of gray.

Methods courses offer numerous opportunities for active engagement, and I created a number of in-class activities for students in INST808 (Interviews and Grounded Theory) to apply what we cover in lecture. For example, during a week covering how to conduct interviews, I gave everyone in class a basic description of a study idea on college student stress, plus an initial set of interview questions. Each student individually expanded their interview protocol, then they paired up with another student and each conducted a 10-minute interview, then got feedback on how they (as the interviewer) did. Students then switched roles so everyone got practice interviewing. In another class covering data analysis, I printed out an interview transcript and had each student read through the transcript, then start coming up with initial codes to apply. At their tables, they then shared and discussed their coding approach, which reinforced how each researcher approaches a dataset from a different perspective.

Always Reflecting, Reviewing, and Growing

I've been teaching college-level courses for more than a decade, but I will be the first to admit that teaching is always a work-in-progress. In addition to the componen thinking about ways to improve my teaching. This involves significant self-reflection as well as formal and informal assessments by my students and peers. On me to focus on continuous improvement in the classroom is to annotate my syllabus throughout the semester. This means I have a document I edit each week after teaching with any thoughts on what worked—and what didn't work. This also allows me to, add no add more content on a topic students were especially interested in, or create new activities or assignments.

In additional to more formal student evaluations, I often use the final exam as an opportunity to get feedback from students on what aspects of the course they particularly enjoyed and what topics they wished we had discussed more. As I'm grading exams, I keep a list more discussion of, then use that list when I'm w me to stay current in my topics and readings, which is especially important given many of my classes are driven by new technology trends and developments.

[2] Assignment overview (from Casey Fiesler): https://medium.com/cuinfoscience/the-black-mirror-writers-room-the-case-and-caution-for-ethical-speculation-in-cs-education-5c81d05d2c67