Teaching Statement

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As an educator, I care about my students as individuals, each with their own unique, vivid and complex life. It would be ideal for each student to leave the course with a mastery of the material, but that is not something I can expect every student to accomplish in ten weeks. Instead, I want all students who enter my course to leave with something that they will remember and find useful, and that they feel more prepared for the future. To accomplish this, I collaborate with my staff to provide an environment that inspires, motivates, and supports my students to master the material the best they can.

Motivating Students

I want students to develop an intellectual curiosity and to actively tinker with the ideas introduced in class. Since I teach at the university level, my students are typically still discovering their interests and identities. I hope that I can help students develop the same curiosity that I have, apply course topics to their own projects and create new projects to explore beyond the scope of the course. My courses are designed to encourage such curiosity. In programming projects, I include questions to encourage students to spend time to understand their code. In lecture, I integrate questions that prompt students to interact with the material and connect it to topics previously covered in the course. These questions motivate discussion, tie the content to other topics in computer science, and allow me to gauge how well students are understanding course topics. I also inject moments in lecture that encourage curiosity, such as peculiar and interesting facts about the material, which showcase the inner workings, or examples of how the covered material applies to daily life.

New Techniques

Additionally, I am eager to adopt new techniques to improve teaching effectiveness. I try to stay current and follow the best practices outlined by education research. For example, in the course I teach in spring 2021, I hope to implement binary grading[1], which involves the establishment of clearer expectations for student submissions, scoring submissions as either satisfactory or unsatisfactory, more personalized feedback, and implementation of a resubmission process for assignments. This grading scheme encourages students to spend less time thinking about points and instead be able to focus on and enjoy learning. Additionally, I implemented active learning techniques in the form of polling questions, but I would also like to integrate more small group discussions in lecture. This allows students to share their experiences, practice their communication skills, and better reinforce material covered in lecture.

Getting Student Feedback

To ensure I am creating an environment that works best for my students, I need to know more about my students. To accomplish this, I hold a pre-quarter and mid-quarter survey, in addition to the university's end of quarter evaluations. I also gather feedback from office hours and lectures. This feedback enables me to adapt to the needs of my students. Adaptations could involve spending more time on difficult subjects, adjusting assignments, or kindling ideas for larger changes to the course. In particular, student feedback has pushed me to try alternatives for grading such as binary grading.

Providing Help

Each student comes from a unique background and deals with a variety of stresses in their life. For a student who wants to learn, I want to make sure that they can get the aid they need to succeed. I want to minimize the barriers to success in my course. My courses offer a large number of office hours and enable students to easily schedule a 1-on-1 with course staff for help. The goal in these meetings is not only to help students understand the material, but also to make sure they develop their critical thinking skills such that they can solve problems without my help.

Conclusion

As a teacher, the most important thing I can do is to provide an environment that inspires students, motivates students to master the material, and supports students in reaching that mastery. I understand that my students come from varied backgrounds, and I want all of them to leave the course more prepared for their future, and having enjoyed their experience with learning. Teaching can present a difficult problem to solve at times, but I love it, and I am eager to continue growing as an educator.

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1. Berns, A. (2020). Scored out of 10: Experiences with Binary Grading Across the Curriculum. Proceedings of the 51st ACM Technical Symposium on Computer Science Education.