

Diversity Statement

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Today's classrooms are extremely heterogeneous. The non-uniformity of students' prior classroom training, and the diversity of their life experiences, present both teaching challenges as well as instructional opportunities for inclusiveness. As an instructor, it is crucial to accommodate the diversity within the classroom and encourage the growth of all students. Therefore, one must recognize that students are individuals with unique backgrounds and learning styles and adjust their teaching style accordingly.

Throughout my experience teaching calculus, I have seen a wide diversity in students' knowledge coming into a course. In math courses, one often encounters a mix of both students who are retaking the course and those who are seeing the material for the first time. To further complicate things, different instructors can still heavily influence students' experiences, if a university tries to coordinate courses to make students' learning experiences more uniform. These differences are even greater in courses like calculus due to the high rate of students repeating the course along with those coming straight from high school with varying degrees of rigor. For summer courses, I also had to recognize that students came from various universities where calculus courses were run differently. It is the instructor's responsibility to be aware of these differences and adapt their course accordingly, while balancing the needs of the individual and the broader group.

On the first day of class, I seek insight on my students' backgrounds through some welcome questions, such as if they have taken the course before and when and where they took their last math course (see appendix A of my teaching portfolio). When teaching new topics, I also ask if students have seen the material before. These questions, however, are not sufficient measures of students' prior knowledge, and instructors must continually analyze student performance and adjust their courses according to their particular students. In doing so, they must also find ways to engage the stronger students while not losing the weaker ones. One method that I have implemented is peer teaching. Stronger students can challenge themselves to clearly explain concepts they understand to their peers. I also put problems of varying degrees of difficulty on worksheets. Stronger students can then focus on the more difficult questions while their peers work on more straight forward problems and gain familiarity with the material.

Different personal backgrounds and situations can affect a student's experience in the course, especially for those who come from disadvantaged circumstances. Many students must overcome negative expectations, such as those based on race, socioeconomic class, and gender. These biases create negative outcomes, as traditionally under-represented students feel like they do not belong in the class. I have always fought to make under-represented groups feel more included, as seen through my experiences mentoring LGBTQ+ students, working with students with various disabilities, and working at an urban school. As an instructor, I foster a welcoming environment for all students that allows them to succeed to the best of their ability.

To accommodate students, instructors must try to build a relationship with their students. Trust is a very important element in the student-teacher relationship. At the beginning of the semester, I explicitly tell my students that I am there to help them and that I care about their success. I emphasize the importance of approaching me about any issues that may interfere with their work in my class, as I have no other way of knowing what goes on in their lives outside of the classroom. In my welcome sheet, I also ask students if there is any additional information they want me to know. These details help me to best serve my students. For example, one semester I had a student tell me that she had a full-time job and therefore could not attend my office hours during the week. Knowing this, I was able to accommodate her schedule and held additional office

hours for her over the weekend. I have also held virtual office hours for students who lacked reliable transportation and provided physical copies of the course materials posted online for students without reliable internet access.

Another crucial responsibility for instructors is developing a positive learning environment. I promote a respectful environment where all of my students can feel safe to express themselves and learn. I do not tolerate bullying, as it creates a hostile environment and infringes on the rights of the victim. Furthermore, it is also disrespectful to me and the other classmates as it disrupts the whole class. I set the expectation for a respectful environment on the first day of class; in my syllabus (see appendix B of my teaching portfolio), I emphasize the importance of everyone's opinion and listening for understanding. I also stress that it is okay to make mistakes; everyone makes mistakes and, when a mistake is made, discussion should only be about the error itself and not the person who made them.

Instructors must accommodate various learning styles and personalities in their class. I structure my class to include a combination of lecture, individual work on practice problems, and group work. When I was teaching online, however, it was difficult for students to work together since many students did not have a writing tablet; in this situation, I let students choose to work in a breakout room as a group or to guide me through problems as I wrote on my tablet. I also use my own assessments to gain more insight on how to create the best learning environment for my class. For group work, I have intentionally paired weaker students with stronger students who explain the material well. I have also observed how various students interact with one another and assessed the different personalities in my classroom, which has helped me identify which students work well together and improve the classroom dynamic. For example, when I noticed that one student was more timid and shy, I put him in a group with students that were friendly and outgoing. This group helped the shy student come out of his shell, and they became close friends throughout the course.

Because it is my responsibility as the instructor to provide my students with the best education possible, I am flexible in trying new things to improve my teaching. Throughout the course, I emphasize this sentiment to my students and tell them that I am open to constructive criticism. While I encourage them to provide feedback, I also remind them that there are restrictions on the changes I am able to make in the course. In my teaching philosophy, I discuss how I also use informal formative assessments to constantly monitor student understanding, allowing me to adjust my course or explain the material differently when necessary. Ultimately, I recognize that, with teaching, you can never be perfect; no matter how great of a teacher you are, there is always room for improvement. Moreover, there is no standard way to run a course that best serves all students; instead, courses need to be adjusted for each particular group of students.