Diversity Statement
Melanie Dennis

As a woman with a disability, implicit bias in instructors and barriers to participation strongly shaped my experiences as a student in mathematics. As a result, I focus my teaching philosophy and methods on ensuring equal access to opportunities in math education, and on eliminating barriers to participation in the classroom for women, minorities, and students with disabilities. To increase inclusivity in the classroom, I facilitate active mentorship for women and minorities, use math outreach to boost confidence among my minority students, create curricula and lesson plans that normalize disability accommodations, and work with students individually to best accommodate their needs.

To provide equal access for women and minority students, I go out of my way to suggest research opportunities to these students. As a student, I hesitated to ask about these opportunities, for fear of overstepping, and research suggests that female and minority students do not ask after research opportunities as often as their white male peers. As such, I try to serve as more than just a resource for my students, but rather an active mentor who strives to level the playing field. Also, I keep updated on college funding for undergraduate research so that low-income students who may otherwise have to choose between research and working a job can get paid for doing research.

Additionally, because of the difficulties of being a woman in math, I believe it is important to encourage women in math from a young age. To this end, I have organized a workshop in our department’s Sonia Kovalevsky Day for the past four years, and organized the entire event for the past two years. This free event engages local middle and high school girls in hands-on workshops, talks, and panels. The main focus of the day is on the workshops, which try to not only teach the girls some advanced math, but also show them that math can be fun. In looking for volunteers, I advertise to my undergraduate students. By having a whole day in which younger girls look up to these undergrads as female mathematicians, it increases my students’ confidence in their own abilities.

My experiences as a type I diabetic also impacted my confidence in the classroom. In high school, my teachers forbade me from eating in class, forcing me to choose between announcing to the class that I was allowed to eat because I had a disability, or to stand outside the classroom, even in the rain, while I tried to raise my blood sugar. During exams, I used to receive accommodations so that I could take time to raise my blood sugar if it went low. Because of the accommodations, I had to take those exams in a room by myself with an instructor watching to proctor just me - not an environment conducive to performing well. Because of this, I dropped my accommodations, and during college, if my blood sugar went low, I had to take the exam anyway while my brain could not process information. Time and time again, I have had to make the choice between being marked in a very public way as someone with a disability, or not getting the medical help that I need.

My students should not have to be marked as different in order to make it through class with a disability. When students come to me with accommodations, I try to normalize their requests as much as possible. For example, one of my students needed access to my lesson plans the day before each class. I did not want other students seeing him with the lesson plans and asking him how and why he was able to get them, making him explain his disability. Instead, I turned my lesson plans into organized review sheets and posted them on the course website the day before every class. Since everyone had access, instead of his disability marking him out, he got the help he needed while still being a regular member of the class. These practices ensure equal access to class content no matter students’ learning conditions.
Finally, I work with low-income students to make sure that they have access to the same resources as other students in the class. First, I try to assign low-cost textbooks. For example, in my Abstract Algebra class, I assigned problems out of a textbook that costs $17 new, while reserving a more expensive textbook in the library for students to use for their final projects. When department policy required that I use a more expensive book, I wrote out all homework problems as opposed to just giving problem numbers so that students could use cheaper previous editions of the book or open-source books for reading. I also talk with students to make sure that other resources are accessible to them. For example, when teaching Calculus with Algebra, the Academic Skills Center (ASC) set up tutor-led study groups for the students to use to work on homework problems. I checked in with my students to ask if they were using this resource, and several of my students told me that the center was charging for the service and they could not afford it. I worked with both the ASC and my department head to get the charge dropped for my students, and the ASC has since changed its policy so that no Calculus with Algebra student needs to pay to use the study groups.

While my own experiences help me identify with some of my students, there are many students with challenges that I have not personally experienced. For example, as a white woman, I cannot fully comprehend the challenges faced by my students of racial and ethnic minorities. In order to help myself understand my students’ difficulties the best that I can, if a student has been having trouble in my class, or comes to my office hours, I always ask how they are doing outside of class. In this manner, I can still help students even if I have not anticipated their difficulties. For example, I checked in with a student who started the term strong but began missing large numbers of classes, only to find out that he had been suffering from anxiety and depression. I told him about campus resources, offering to help him set up a counseling appointment, and then worked with him to find the best way for him to make up work or turn in assignments on days that he had trouble getting out of bed.

By working with individual students to personalize my response based on their needs, I aim to support students from all backgrounds and give them the resources they need to have a fulfilling undergraduate experience.