Teaching Statement

Engaging with students and fostering education from early childhood through post-secondary education is work that I have been passionate about for over a decade. While my experience as a high schooler and undergraduate educating students of all ages ignited my enthusiasm for teaching, it was my roles as a math graduate teaching assistant and math instructor as well as my participation in professional development that shaped who I am as a teacher today: confident, inclusive, and reflective. I effectively implement active learning and universal design strategies, promote collaboration and community among my students, and foster resourceful independent learners.

Active learning and universal design concepts emphasize the importance of engagement, accessibility, and personalization in the learning process. Although I generally teach large math lectures of 100+ students, I incorporate active learning strategies within my classroom. For example, I will often have my students do a think-pair-share activity where I put a problem or two on the board. They will attempt it by themselves or with a neighbor. After a few minutes, we reconvene as a class and go through the problem. This activity gives students the opportunity to check their understanding of material as they're learning it and ask questions. They also get the opportunity to interact with their peers, who are valuable resources too in the learning process. Additionally, I have incorporated the idea of an entrance ticket into my classroom. I implement this as a once weekly multiple choice question that students answer within 24 hours of our first class of the week based on the material from the previous week. This gives the students another opportunity to check their understanding of basic course concepts before being introduced to new material that will build upon their previous knowledge.

In addition to engagement with material and active learning, student success also depends on the level of accessibility and student choice by which they can demonstrate their learning. These concepts stem from the principles of universal design, and are important elements in my classroom. Completing a 6-week accessibility in the classroom workshop opened my eyes to learning barriers potentially present in my classroom that I have since broken down. I am more mindful of the color pens I use so as to not use colors that may be difficult for a color-blind student. I am additionally mindful of the size of text and graphs for those who are visually impaired. I always wear a microphone and am mindful of my speech speed and clarity for those who are hearing impaired. My lectures are recorded and my handwritten notes are posted to the course website. These conscious actions on my part provide a more suitable environment for multiple types of learners to be able to access and process course material in a way that's most suitable to them. Furthermore, I make it a priority of mine to have a well-organized course

website to ease navigation and provide simple access to course materials. This includes using section headers labeled by week, labels within each week to organize the materials for each class, and labels organizing other class materials such as study guides, forums, important course documents such as the syllabus, and important links.

I use multiple means of assessment in my class, where students not only take the traditional written tests, but they also complete homework with a variety of question types and complete the multiple choice weekly check-ins. In my written tests, I have featured several different question types and modes of solution to provide students with the opportunity to showcase their learning in a way that works best for them. There are problems that I provide the student with the choice to demonstrate their knowledge either algebraically, graphically, or using words. I have also incorporated true/false questions into my tests, and had my students work on a take-home group project as part of a test grade. Another universal design principle that I incorporate is using multiple means of representation. Because I teach math, there are often new symbols and vocabulary introduced in each section. Therefore, I will write the mathematical expression or symbol, a description of the symbol in words, and a graph demonstrating the concept, if applicable. Furthermore, I provide the students with lecture outlines as an aid to their learning.

Collaboration and community-building are essential components of a successful education and elements that I strive to have in my classroom. On the first day of class, I usually have my students introduce themselves to their neighbor and get their contact information. I also set the tone of a collaborative and inclusive classroom when I review the course syllabus. Students cannot learn in an environment that they do not feel comfortable in, so I make it known that I expect students to have respect for everyone in the classroom. Throughout the semester, I encourage students to work together on homework and when studying for tests. I truly believe that classmates can be some of the best resources in aiding another student's learning. When students attend office hours, I work to engage in conversation with them and encourage them to work with other students in office hours too. Furthermore, I encourage students to engage with each other outside of class by either forming their own study group or posting and responding to their classmates in help forums on our class website. These types of interactions between students help foster a positive class environment where questions are welcomed and students are free of judgment. This type of environment is where students make the greatest gains.

Part of my role as an educator is to prepare students not only for specific material they will see in my course, but also to help them build skills that will help them succeed no matter what path they take after completing my course. Therefore, I find it important to help guide the students as independent, resourceful learners. At the beginning of the semester, I have students take a prerequisite survey. Here, I have students use self-assessment to determine their level of preparedness for my course. By providing links to additional learning resources if they feel they need a refresher on the material, I am encouraging the student to take responsibility for their

learning. This is an important step in becoming an independent learner. In addition, I encourage students to utilize all of the available resources before seeking help. Oftentimes I will receive questions that I know are already answered somewhere where all students can see it (email, class notes, course website). Thus, I remind them of their resources and redirect them to the appropriate information. Reiterating useful resources to students such as practice problems, free tutoring services, and office hours helps guide students in determining the resource that best serves their needs and will help them be more resourceful in the future.

Repeated reflection on my actions as a teacher have become more prevalent as I gained experience. Completing professional development programs such as North Carolina State University's inclusive teaching certificate, the leadership development program, and the teaching and communication certificate have all given me countless ideas of how I can improve as a teacher, many of which were mentioned above and have been recently integrated into my classes. As someone who has the power to change students' perception about learning, specifically in math, it is important to me that I continue to make strides toward a better learning experience for all students. Engagement in self-reflection as I have done in the past through written and oral feedback from students via surveys and course evaluations, participating in professional development activities, and discussing ideas with colleagues is critical for my continued success and improvement as an educator.