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Engineering Education Diversity Essay

I believe very strongly that everyone has something unique to bring to a situation, and it is up to leaders and teachers to encourage the uniqueness, and provide a strong foundation for anyone and everyone to be included. Through my time as an educator, I have been fortunate to work with a wide variety of neurodivergent youth and adults with different socio-economic and ethnic backgrounds that brought insight, creativity, and broad perspectives to make projects and lessons more practical and beneficial for everyone involved.

While I was studying physics at Michigan Technological University, I was a physics and computer science tutor in the ExSEL program, which focused on helping students that may struggle in a university setting. In this program, I mainly assisted with students with autism who needed more individual support to ensure their success in their discipline. While serving as the teaching lab manager in the physics department, I also led multiple students, one of whom had autism, and another had cerebral palsy. The perspectives the students brought on equipment organization, lab setup, and general content access was extremely useful, and allowed for us to setup accessibility systems and protocols that are still used in the department today. These experiences helped me greatly as a high school teacher, and as a college professional to better involve everyone I can in tasks and course development.

After I graduated with my undergraduate degree, I moved to Georgia to teach science and technology through the Woodrow Wilson Teaching Fellowship (now Citizens and Scholars). I taught in Barrow County, where every student got free lunch due to the high poverty rate. It was not uncommon for students to skip school to work so they could help their families monetarily. As an educator, this made me focus on making practical, problem-based learning lessons to make sure students saw the practicality quickly and were able to justify coming to school at that time. Working with students that were in this impossible situation taught me to prioritize what is important in the courses I was teaching, specifically focusing on problem solving and time management. I worked with many students to get certificate programs and get into the local technical college so they can get an affordable education with a quick return, and even work while they were getting their education. This was a very eye-opening experience for me, and allowed me to learn more about interacting and teaching those with different life experiences than me. It was also incredibly rewarding to see neurodivergent students not only succeed in the technology courses I was teaching, but thrive in them as they saw the world differently. The ideas and methods that these students developed were inspiring and encouraged me to look differently at problems and projects.