

As the student population becomes more diverse it is increasingly important for faculty to meet their students where they are. That is not to imply lowering expectations, nor making the curriculum easier, but to recognize each student as an individual and to try to incorporate a variety of methods into the curriculum that allow each student to achieve success. In the field of engineering, concepts tend to become complex very quickly, often overwhelming the student and derailing their chances of success. To offset this, I use as many differing methods as possible to strive to convey complex material in a way that allows the student to understand the concept, how it relates to the world around them, and how the material is usefully applied in their profession. Doing so goes a long way toward making an intimidating theoretical construct something that a student can visualize, apply, absorb, and master. As my career has progressed, I've gained wisdom that has continued to shape my teaching philosophy and allowed me to change, evolve, and truly improve as a faculty member. I know that my successes as a faculty member have been largely shaped by several personal journeys, three of which are outlined below.

*Growing as my sons have grown.* I am blessed to have four sons and I have learned as much from them as they've learned from me. As I sent each of them off to college, I found myself with several hopes for them. The hopes that they find their true passion, that they are given every opportunity to succeed, and most importantly, that should they ever find themselves struggling, whether in a specific class, or with a tough decision, there is a professor there to help them. At some point, I realized that the way I was hoping a professor would treat my sons, was exactly the way I should be treating my students. My sons have helped me to become someone that listens, provides guidance, gives "tough" advice to a student who needs it, and makes it clear that their success is my number one priority. Knowing students by name and recognizing them as individuals is the most powerful tool in my toolbox. Although there's nothing "special" about that, the impact it has on student learning and the dynamic it establishes in the classroom is phenomenal. Students know that I expect them to be in class, so they show up. They know that if there's a lack of engagement, I'm going to start calling names, and I often create small groups to encourage participation. Students learn a sense of responsibility because I require them to contact me if they will miss a class. Lastly, they learn that I care about them and I want them to succeed. Such amazing outcomes for such a small gesture. I have successfully introduced innovative techniques in many of the courses I've taught. I've worked with the Instructional Design team to modify and improve my classes using videos, self-paced lectures and online assessments that allow for students to learn at their own pace and thereby customize, individualize, and optimize their learning. I've also incorporated innovative teaching methods by creating 360° videos to provide students with an immersive introduction and information on various pieces of shop equipment. Another innovation is introducing a professional certification exam into my CAD class to provide students with an advantage when applying for internships.

The second journey resulted in my realization that *what happens outside the classroom is as important as what you learn inside*. Early in my academic career, I believed that all learning took place inside of the classroom. Over time, however, I realized that real-world experiences are as important as memorizing facts, equations, and methods, so I strive to engage the students in many projects both within and outside of the classroom. These projects involve undergraduate students in both individual research and independent studies, allowing students to enhance their knowledge by applying what they are learning in the classroom. Providing engineering students with projects and research outside of the classroom is an excellent and essential way for them to synthesize their classroom instruction with real-world problems and help them feel like they belong. I believe that mentoring and role-modeling are keys to inspire students to enter the STEM fields and continue in STEM programs, and to that end, I developed and am the director of an outreach program, FiERCE (Futures in Engineering, Role-Models Can Empower). FiERCE is run as an independent study where over 60 engineering students have provided role-modeling and mentoring in the form of engineering outreach to over 400 local middle and high school students.

Lastly, and most importantly, *kindness is more important than fear*. I grew up in a household where my mother's expectations were balanced in intensity only by my father's kindness. When I first started teaching, I viewed kindness as a weakness, a crack into which a student could take advantage of the system. As I became old enough to truly appreciate the lessons a parent imparts, I realized that kindness is, in fact, the opposite of weakness. To be able to maintain high expectations, while demonstrating kindness and caring, is to show a strength that allows students to strive and achieve without fear. I want my students to know that I care about them, about their lives outside of school, about their growth and success as not only students, but as people.

Providing students with the tools to succeed, balanced with high expectations caring, and compassion are the touchstones that guide my every time I step into the classroom.