

Prior to joining Penn State, I gained invaluable experience as a graduate teaching assistant, a college instructor, and a middle-school math teacher. But it was not until I joined Fayette campus over 25 years ago that I fully appreciated the art of teaching and what it means to respond effectively to students' needs as learners. With the help of this community of coworkers and students, I expanded my boundaries as an educator and a scholar, embraced pedagogical innovation, and abandoned the instructional model of "teacher as knowledge giver." Now, my guiding principle is understanding students' diverse needs and doing everything possible to nurture their engagement and learning.

To facilitate critical thinking and the application of knowledge, I incorporate various teaching techniques based on problem-solving, discussion, service-learning, peer instruction, and the use of technology. Much of what I do is based on the constructivist classroom, a model that I first used as a middle-school teacher, and this student-centered approach to teaching is apropos for college students as well. For example, my Calculus students apply differentiation to identify the best seat in a movie theater, my Statistics students enact human histograms to "become" the data and the graph, my Trigonometry students perform the "wave" to discover behaviors about the sine curve, and my Finite Math students search through their own closets to determine the number of outfit combinations that each student can create. Experience has taught me that students need to be active in their own learning processes, and I develop each of my courses accordingly.

Being responsive to students and engaging their diverse learning preferences also pushes me to continuously develop my pedagogical strategies and methods. After a post-class conversation with a student clarified the inequities that some students face in and out of the classroom, I have worked hard to create a more inclusive classroom where students feel welcome and are given opportunities to succeed. Most recently, I have started to use more equity-based grading, and I adopt OER texts in all classes to make class materials more affordable. My experiences with online/hybrid learning began when I created a hybrid class many years ago when I was asked to teach a statistics class for a new RN to BSN program for nurses. Later this class expanded into a video-learning network where students from several campuses studied together both online and in the classroom. Here I witnessed the value of a "flipped classroom," where students read and watch videos that I've prepared to help them get ready for class, and then class time focuses on problem-solving and activities to reinforce what they have been studying. Now, all my courses, whether face-to-face, hybrid, or web, routinely involve students learning through video, reading, writing, online software, group activities, and group discussions.

Because teaching and learning both reach beyond the classroom, my students have also performed service-learning projects to develop understanding of course topics by practicing what they are learning. For example, statistics students completed data analyses for a local Legal Aid Society, a community center, and a health service, and calculus students tutored clients appointed through Goodwill Industries. My students have also been active participants in the teaching and learning by participating in the campus Learning Fair and serving as peer tutors who attend my other math classes. Likewise, to show my students that I value teaching, learning, and the application of mathematics for understanding the world, I have presented my own work at conferences, taught summer programs for secondary students and educators, integrated math components in honors courses, created a campus faculty learning community that has met monthly for almost eight years, and, most recently, created the new summer-start program that helped students improve their college math placement results.

For all of us, learning is a communal activity. A few years ago, I asked my father—an educator for 40-plus years—how to continually come up with new and creative ideas for my classes. He told me that the best teachers aren't always the most creative ones; they're usually the ones that know where and when to find inspiration for creative ideas. The people at our campus who help and advise me every day prompt me to be creative. The educators who taught me in the past enabled me to try to new things. Former co-workers and classmates who discussed their education philosophies and ideas help me to be the teacher I am becoming. The students who I have met and learned from inspire me to come up with new ideas. So I've never forgotten what my father said, because it reminds me that it's not about me. There lies the core of my teaching philosophy: I am always learning and trying new things, because education is always about the student.