Dr. Idalis Villanueva is a professor in the College of Engineering at Utah State University. She is a faculty mentor for the UTF program. Below, she describes her experience with the UTF program and why she believes it is helping students elevate their education. Enjoy!

Looking at my journey as an engineering educator and researcher, I can’t help but feel a strong sense of responsibility towards the student body as I too can recall the struggles of being a first generation, female, Latina engineer. When I was presented with the opportunity to develop an “Introduction to Engineering” course in the College of Engineering, I was ecstatic.

The College of Engineering is very interested at improving retention rates in our students, since the literature suggests that we are looking as much as about 50%-60% of our HIGHER performing students within the first two years of their engineering education.

Introduction to Engineering courses have been taught nationwide, but I wanted ours to be different. As such, I needed an undergraduate student who can be my “eyes and ears” and a voice to the concerns and needs of the students.

Early this spring 2016 semester, with the support of Dr. Laurie McNeill and Dr. Frances Titchener, I pursued to hire an Undergraduate Teaching Fellow to help me develop a course to change the landscape of first year engineering experiences.

When I first hired Brandon, I explained that we were developing a new class and that I needed his help as a student. I required that he looked at the engineering education literature, at websites, speak to programs on campus that would allow us to develop a new introductory course in engineering.

On his initiative, Brandon has spoken to student professional societies, initiated discussions with graduate students and lab coordinators in engineering, and has presented his findings and recommendations on my bi-weekly research meetings where he discusses his findings to the rest of my lab. His excitement for this course has spread to the other students in my lab (both graduate and undergraduate) who have slowly been including their ideas and comments to the development of the course.

Currently, he is helping me develop the syllabus and will be helping me develop at least 2 course modules before the semester ends. In discussions with him, I can see he has found a new passion for education and I am happy to say that for the first time, Brandon is seriously considering graduate school as a result of this experience.

View original blog post here.