

Reflections

As the end of the semester nears, I begin to move my efforts from explorations to reflections, looking back on how I've progressed, remained unchanged, or regressed, and directly hoping there is more of the former than the latter. This includes celebrating the parts of my life that have experienced growth and acknowledgement of the places that need it. The UTA program has been a source of growth in a few ways, and has called attention to some of my abilities for which I might need more.

Here's some information about me for the reader! My name is Joe Bales, I'm finishing my third year at the University of Arizona, and this Spring 2021 I was an Undergraduate Teaching Assistant under Dr. Antonio Rubio, teaching Calculus II. Some of my experiences might speak less to those wanting to help with an upper-division class in mathematics, but most of it should (hopefully) generalize.

Throughout the semester, my duties involved grading, tutoring, in-class engagement, and holding review sessions before exams. I've never held a position similar to this one before, and I was never the type of student to ask lots of questions or to answer any. Naturally, all of these responsibilities put me in a position to not only help other students learn and improve my understanding of calculus, but to communicate with an instructor when I had previously gotten used to avoiding that. Breaking the ice like this helped me better understand the point of view that many instructors might have, and helped me to realize that mathematics is a topic that many have great passion for—it doesn't just have to be a means to an end.

I've come to realize that mathematics is a passionate subject for many. This has led me to start learning about mathematics not just to pass a class, but for the sake of learning mathematics. I know this concept might sound a bit weird to most, but studying math—and any of my studies for that matter—is changing into the interesting outside reading I do on my own. The UTA program has helped further my transition from the math class environment in which I and many others were raised, to an environment in which I enjoy taking walks and thinking about the mathematics that peaks my interest. I'm thankful that I was able to take part in this program when I did, especially because I'm now moving into a stage where passion is exponentially beneficial.

This growth in passion, which is a strictly beneficial quality to me, also called into light the need for discipline. With reference to the Yin and Yang, the increased amount of passion at times exposes the lack of passion at other times. This is often what students—myself included—consider to be the exhausting parts of the semester. Through having an instructor and other students depending on me to do my job, I've further improved my ability to manage my time, have a sense of urgency, and work through periods devoid of passion, and have come to realize that mastering these are life-long goals.

Hopefully my peers in the UTA program this last semester have gotten this out of their experience as well, or at least have gotten an encouraging environment to have passion as aspiring mathematicians. I'd encourage anyone to apply who would want to get an opportunity to grow themselves in their abilities to teach foundational mathematics, and understand it at more than surface level.