

Teaching Philosophy

One Sunday morning in April 2017, I came across the provocatively titled article¹, “Why is Silicon Valley So Awful to Women?” The article catalogued examples of discrimination against women in technology, but what stood out most was one phrase that postulated the underlying reason for this phenomenon: *that computer science and certain other fields fetishize “brilliance,” cultivating the idea that potential is inborn*. The words “fetishize brilliance” stayed in my mind long after I read the article because they so cleanly encapsulated what had been frustrating me most as a woman who was, at the time, both a student and a teacher of computer science.

I had been thrown unexpectedly into first-time teaching that term because of a staffing emergency and hadn’t had time to reflect on my goals as an instructor before I started. But it became clear to me after a short time in the classroom that what I most wanted was to show my students the value in struggling and deeply engaging with difficult concepts. Many students seemed to believe that they should just “get it,” and that if they didn’t it meant that something was wrong. Some apparently preferred to wait for me to provide answers rather than struggle and risk failure in finding a solution themselves.

I’ve come across several teaching statements that emphasize maintaining students’ levels of fun and enthusiasm. These are commendable goals, and I love when my students are having fun. But I also think that sometimes learning is miserable, and this is okay.

My goal in teaching is to show students that their ability is not fixed and it can be improved, but only through difficult and sometimes unpleasant intellectual exertion. There are a few ways in which I try to encourage this mindset in my students. On top of directly telling them that it’s useful to struggle, I try to systematically break large, complicated problems into smaller, more manageable conceptual steps. I do my best to present this as a general process that can be applied to other problems and hope that they’ll come out of the course with knowledge of how to learn and solve problems that they can retain long after they forget the details of particular course topics.

It’s important to show students attention and empathy, and to meet them wherever they are in their learning process. I consider my greatest strength as an educator to be my ability to approach concepts from multiple perspectives, which lets me provide different explanations and approaches if I see that something isn’t working for some students. I think it’s helpful for students to see that, just because an approach that worked for others didn’t initially work for them, that doesn’t mean they’re less capable or that they can’t also find an effective way to learn.

I also think it helps to understand that sometimes, trying to learn is neither easy nor fun. I often find that when students ask for help, they visibly relax when I confess to having also had some initial difficulty with the topic we’re discussing, or even if I just acknowledge that, yes, this is a difficult topic, and many students struggle with it. And this struggle is okay – even necessary.

The reason I want to counteract computer science’s cultural myth that success depends on innate brilliance is that our students will be more effective, independent learners if they believe they can improve their abilities through effort. Additionally, the “brilliance fetish” inflicts disproportionate harm on certain groups – notably, according to one study², women and African-Americans – who are not stereotypically seen as brilliant and remain underrepresented in computer science. It’s my hope that, by encouraging more computer science students to adopt a growth mindset, I can do a tiny bit to make Silicon Valley less awful to women and other underrepresented groups.

¹ Mundy, L. (2017, April). Why Is Silicon Valley So Awful to Women? *The Atlantic*, retrieved from <https://www.theatlantic.com/magazine/archive/2017/04/why-is-silicon-valley-so-awful-to-women/517788/>

²Leslie, S.J., Cimpian, A., Meyer, M., and Freeland, E. (2015). Expectations of brilliance underlie gender distributions across academic disciplines. *Science* 6219(347), pp. 262-265, DOI: 10.1126/science.1261375.