Teaching Statement

Pablo Zubieta

If were asked what do I like about being a teacher, the first thing I would say is: being able to help students to learn how to use new and old knowledge to navigate increasingly more complex problems or ideas. If I were then made to pick a second reason, it would at first would probably sound selfish, but it would be the that I believe teaching is probably one of the best ways of learning and mastering a subject. But in reality I think this latter reason also informs the first one, when preparing materials for a class I might encounter a new perspective on a subject, and sharing this fresh view, and even better, motivating students so they can experience the same process of insight discovery really makes learning joyful for me.

My goal as a teacher is first to create a space for learning that is both safe and empowering for students and their learning process, and then build on it to help students become effective critical thinkers and problem solvers. To achieve the first objective, I have in the past relied on many low-stakes quizzes and activities so students feel can experiment a non-judgmental learning experience. One thing I was recently made aware of in a pedagogy course, is the crucial importance of good feedback, so another thing that I would like to incorporate into my future teaching is to provide more detailed evaluations that discuss errors and take advantage of such as an opportunity for learning. In the past, I have only do so by clarifying jarring general misconceptions from particular classes, but I'm really looking forward to use this too as a more effective way to improve how I frame the discussions so students can take away better lessons from a course.

As from my second goal, in my field of expertise in particular, materials science and computational physics, I believe there are a lot of very interesting modern tools that could be leveraged for teaching. My work involves in large part, programming, and I have come across many interesting concepts such as reactive programming notebooks, these are computing environments in which you're able to see in real time, how modifying a certain set of inputs affect the output of some computation of formula evaluation, I find that the impact these can have in the learning process takes the idea of having a very good visualization of the concept to another level, since a student can interact with it and get more insights for better understanding the concepts of study and figuring out what works and what does not.

As a student, I have had the fortune of encountering great teachers, and as I reflect on it, on shared characteristic that might have made them stand out is not only that I found the subject that they were teaching interesting, but their passion and excitement the showed while

guiding me in the learning journey. And, while I find this also something that translates well everywhere, not only within an academic setting, it is something I myself strive to replicate with an audience of students. That said, I have also had unpleasant learning experiences, one in particular that I remember well, has to do with the evaluations in a particular course, at the time they seem too disconnect and as a huge gap between what we had be exposed to and the tasks presented there. What struck me and what has become a motivation for my own teaching is that I was not being put in a path of learning how to gradually build simple ideas and concepts into seemingly disjoint endeavors, had that being part of that course, I am certain I would have being more motivated to learn from it. So this is a particular skill set I try to get across as well as part of my teaching and mentorship experiences. Another outcome of my experience above is that I now to clearly state what are the learning goals of any particular class module so it serves as a guide on what to put attention to and also sets the right expectations.