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Statement on Teaching Practice
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My first teaching experience was tutoring my peers in college. Boston University, where I attended my undergraduate studies, had a program that would provide free tutoring to students who were struggling in a class, and I thought it would be a nice way to make a little money on the side. I started my freshman year tutoring students in Italian and Spanish, two languages I knew from my childhood, and gradually added to my curriculum the courses that I took and excelled at – microeconomics, macroeconomics, and statistics, first at the introductory levels, then at the intermediate ones.

As my college years went by and I started contemplating and applying to PhD programs, tutoring became a prominent feature of what made economics so fulfilling to me. The students I was helping were not the most prepared – after all, that’s probably the reason why they were looking for help in the first place. But what I found, time after time, was that the topics we would cover were so powerful that they would seduce even the most unmotivated. Once we got talking, and students realized how what we were covering was relevant for some concrete aspect of their life, teaching was suddenly easy. My many hours of tutoring taught me the importance of one-on-one interactions, and how trying to relate material to issues relevant to people, while being open and respectful, can motivate them to do their best.

As a teaching assistant at the University of Michigan, where I am due to obtain my PhD, I started interacting with larger groups. The first class I taught was an advanced undergraduate course in statistics for economics. Economics majors at University of Michigan are required to pick between two statistics sequences, one of which is significantly more advanced than the other. For this reason, the group that ends up attending the more advanced class is highly self-selected, so I found students who were not only brilliant and very technically prepared, but also extremely interested and engaged. Discussion sessions literally became a playground for me. I remember fondly the spirit of cooperation that bound me and the students. I was in a room of adults excited to learn, and my job was to act as their guide. It was the first time that I truly found teaching to be incredibly gratifying at a deeply personal level.

This sense of team-spiritedness is something that I have brought to every class I taught, especially the ones where students were not so prepared and self-motivated. Heterogeneity among students in their level of preparation and motivation is a fact – indeed, while it does make teaching harder at times, I believe it to be a good thing overall. For this reason, I think that teaching has layered goals. First and foremost, make sure that everyone who takes your class gets out with the basic set of knowledge that the class is supposed to impart, as well as the critical reasoning skills to recognize when a real-world problem fits what they have learned. In the case of an introductory statistics course, for example, this entails grasping the consequences of the Law of Large Numbers and the Central Limit Theorem, understanding how they relate to statistical inference, and gaining some basic practicality with statistical software. Second, do not stifle ambition: ensure that those with the skills and motivation to do so can reach their greatest potential. In practice, this means being approachable when students ask questions that go beyond the curriculum and pointing them in the right direction without interfering too much with class activities.

The class I have taught most frequently is the other, less advanced, statistics course that the university offers for economics majors. It was this experience that made me value both these goals. Heterogeneity in preparation means that I often found myself walking a fine line between losing half the audience because

they couldn't follow what I was saying and boring the other half with topics they already knew. In order to address this, I find that several strategies are useful.

The first basic rule I use is that nobody should walk out of a class feeling like they did not get anything out of it. On one hand, this means making sure that everyone has the tools to succeed by covering the basic mathematical tools that students will need to understand the topic at hand. This can be done both at the outset of a semester and more periodically, in a more focused way, at the beginning of individual classes. In either case, it is important to take nothing for granted, and to make sure that students do not feel compromised or ashamed for asking "dumb" questions. More generally, I find that periodically stopping to ask for questions and treating students with respect when they did not understand something goes a long way in creating an accepting environment that fosters learning. On the other hand, it means giving glimpses of how a certain topic will be useful in the work ahead, thus keeping more motivated students engaged.

Another technique that I use frequently is to pause and ask questions to students, both before and after I start a new topic. Before I start a new problem, or after I give a brief introduction, I like to ask students if they can give me the final answer before my explanation. Imposing a few seconds of awkward silence can be an incredibly powerful tool: it forces students who are paying attention to "spin their wheels", which will form a useful frame for comparison when I will actually explain the problem, and it calls the others back to attention. For example, I like to begin explaining the problem of omitted variable bias by giving students the example of a world where education is irrelevant for wages, but people's ability makes them both more productive at their job and more likely to obtain more education. If we were to simply look at the correlation between wages and education, what conclusion would we draw regarding the relationship between these two variables? How does this relate to the causal effect of education? Asking questions after I explain a problem, instead, is useful to cement a topic, and to help me gauge how good of a job I did. If only very few people can answer, or if some students look nervous or lost, I can take that as a signal that I need to spend more time on a given topic.

The most challenging aspect of interacting with the audience is to break the ice. As someone with a somewhat imposing figure, a loud voice, and a penchant for public speaking, I find students can sometimes feel a little shy or intimidated. In these cases, singling out someone can be of real help. At the beginning of a semester, I usually try to pick students who seem more talkative and comfortable. As the semester progresses, I instead try to single out people who tend to be quieter, especially if I know from testing that they are doing well in the class. I find that this helps in creating an inclusive environment where everyone feels welcome. More generally, I think being inclusive is a crucial part of achieving the team spirit for which I strive. For example, making sure that you give ample background and that you pick your words carefully, without room for ambiguity, when discussing sensitive topics such as discrimination in the labor market is important to avoid alienating some students. Whenever I touch topics that might engage students emotionally, I always take some time to remind everyone that we are in the classroom to think critically and to learn.

Finally, I find testing to be a useful tool. Too often, testing can be perceived by both students and faculty as a system of reward and punishment. Instead, I believe testing and grading to be simply a signaling tool. From my point of view, testing matters in an absolute sense: seeing what sort of problems students can and cannot solve helps me understand if I accomplished my goals. To this end, I find it useful to have several smaller tests throughout the semester, usually in the form of homework or short quizzes. From the point of view of students, their parents, and their potential employers, grading helps understanding where they fall relative to their peers. To this end, it is crucial to establish clear guidelines for what students need to know in order to succeed in a class.