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Teaching Statement

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I want students to learn deeply, and deep learning takes time, reflection, and room to make mistakes; these three principles guide my teaching. First, the design of the course is the map. I adjust the learning objectives to the length of the session and the student's pace; I prefer to cover fewer topics but have students learn them well. Second, students' mistakes are the compass. I reframe mistakes as opportunities to learn rather than failures; I believe the best learning happens when one is not afraid to be wrong. Third, active learning through dialogue and reflection is the method. I encourage students to own their learning process because it's not about teaching but about learning. I developed these beliefs through my own experience learning and teaching, and I have learned the most through teaching. But I am still learning to learn and learning to teach, so I am completing Caltech's Certificate of Practice in University Teaching, which combines workshops and feedback on teaching. Below, I outline a section for each principle. First, I discuss the principle. Second, I share my experience. Third, I give a general idea of how to implement it. Fourth, I give a specific example. For the specific example, I use a course I would love to teach on theory-driven experiments, where students get to design their own experiment.

Learning less but deeply

Learning well takes time. Grades should reflect what someone learned, but it is hard to align the two. Students are judged on their grades, so if there is not enough time to learn well, most will focus on at least getting a good grade. This is why it is essential to align the course with a learning goal that students can achieve in the available time.

I always felt that school rushed us to learn many things, and I rarely felt like I had the time to stop and go deeper. At thirteen, I began teaching English and mathematics in a rural community school my parents built. Students were mostly adults with very different backgrounds, and there was no rush to cover a specific curriculum, so I had to adjust the material and let each student start wherever they were and go wherever they wanted. This was extremely different from a standard classroom, and witnessing the joy of learning and discovery was fascinating. Of course, so much flexibility is not possible in every context, but some of it can be carried into more standard environments.

To do this in a classroom, I set learning objectives that are appropriate for the length of the course and, whenever possible, adjust them to students' background knowledge, because the syllabus should be a manageable map. During the first week of class, I assess students' understanding of key concepts. I then go over common mistakes and review the concepts they struggle with. At the end of the week, there is another quiz that asks about the same concepts from a different angle. The grade that counts is the second quiz. If students are still struggling, I consider adjusting the syllabus or offering extra office hours so that students get the time they need.

I applied this principle in the guest lecture I gave two years in a row: "Coding Experiments in oTree and Running Them Online." There is a lot of content one could cover, but only ninety minutes. Instead of getting into the details of how to code, I wanted students to learn how to structure and think about coding an experiment, so I gave them mind maps, showed how each section in the code connects to the design, and provided checklists that are very useful for running the experiments.

The experimental course would be guided by one learning objective: designing a theory-driven experiment. I would split the process into stages: select the theoretical prediction, design the simplest task to test it, choose the parameters of the task, and write an analysis plan. Each week, we would work on some part of a given stage through topics in behavioral and experimental economics. Students would work in parallel on their own projects, but there would be flexibility in the pace, so different students might be working on different stages. I would rather have students spend extra time getting the task right than rush to an analysis plan that cannot test the prediction.

Mistakes that guide us

Mistakes can be a great compass if we pair them with reflection and feedback to reveal the limits of what we know and therefore what we still need to learn. The goal of feedback is to show not only what is wrong, but why it's wrong. Feedback should guide students through the process of figuring out the misunderstanding that led to the mistake, or whether the mistake came from inattention or a misunderstanding of the question.

I learned to apply this principle in the classroom from a student. The first time I graded was for the course *Behavioral Game Theory*, and a student complained that the feedback only said whether the answer was right or wrong. The next term, when I had to grade for *Introduction to Finance*, I built a rubric around the most common mistakes and gave feedback about the most likely misunderstanding that led to each mistake. I graded two midterms and a final for over thirty students and received no complaints.

To apply this principle in the classroom, I give frequent low-stakes assessments. For each assessment, I give feedback to guide students in what they need to learn. I allow assessments to be resubmitted and grade on the last submission. This helps students feel less afraid of making mistakes and more focused on using them to learn.

In the experiments course, students present their progress to the class or in groups. All students must give written feedback to their peers, and they must address the feedback they receive. Students are graded both on the feedback they give and on how they respond, which helps foster a collaborative environment where students learn from each other. Any stage can be resubmitted at any time, because sometimes in later stages we realize we made a mistake in an earlier one. When writing the analysis plan, a student may discover that, when they simulate noise, their design favors the alternative hypothesis. Rather than just telling them the design is biased, we discuss why, so they can go back and fix it.

Owning our learning process

Learning is an active process. To learn deeply, one needs to engage with the concepts and often struggle with them, trying different ways to solve something in order to understand what works and what does not.

I gave weekly recitations for *Intermediate Microeconomics* at ITAM to help students prepare for tests by working through exercises from previous exams. I had to model how to solve them, but I knew that I learned best by solving the problems myself. So I applied the *I do–we do–you do* strategy. I would pick a concept and group together the different questions that tested it. I would first show step by step how to solve one, then we would solve the next one together, and then they would solve the rest on their own. Attendance was voluntary, and every week the classroom was full.

During class, I would use the *I do–we do–you do* technique. In the *we do* step, we can discuss different ways to approach a problem and why some things work and others don't. In the *you do* step, students can reflect and come back if they need more guidance, but only after having struggled for a while, because facing a problem alone is essential to solving it once they have the right tools.

In the experiments course, students can choose the topic of the project, which helps them take ownership of what they will do. Each week follows the *I do–we do–you do* technique. The *I do* is done in class, where I present papers that are particularly strong in the stage we are discussing that week. For the *we do*, I pick other papers on the topic, and we discuss what went well and what went wrong in each. For the *you do*, they work on their projects at home to make progress on the stage we are working on.

Looking Forward

As a faculty member, I am prepared to teach across the undergraduate economics curriculum, but I would be especially happy to teach microeconomics. At the graduate level, I would love to teach behavioral and experimental economics. My goal is to build a classroom where students feel recognized and have the time and space to grow without being judged for their mistakes. Instead, I want them to look for those mistakes, reflect on them, and push the limits of their understanding. These spaces matter today more than ever, when there is so much pressure to go fast and be perfect.