

Teaching Statement

November 11, 2019

Many years ago, I remember talking to my high school music teacher and he jokingly said that he was surprised I didn't charge him for music lessons. I was confused at the time because for me, to learn something meant to have a set of knowledge or skills taught to me by a more capable or knowledgeable person. It was only a decade later, when I began teaching at the University of Houston, that I came to understand the wisdom that my teacher was trying to pass on to me. My teacher had learned through me because they had to transform themselves to understand how I comprehended music and then lead me from that standpoint. To teach meant they had to re-learn a concept.

This view informs how I think about teaching—it is a process of mutual education on the part of the teacher and the student. A teacher cannot merely tell students the correct answers and inform them of the relevant material, but they must also learn how students can (mis)understand the content that they teach.

I have taught five semesters of undergraduate courses at the University of Houston: Principles of Macroeconomics (three times), Principles of Microeconomics and Intermediate Macroeconomics. Based on my teacher evaluations, I was awarded the department's **exceptional teacher award** in 2018. This has been one of the most fruitful periods of education during my graduate tenure.

Teaching has a kind of rhythm to it. If you “rush the beat” or you are too ahead of the students, then they try to remember anything in order to survive the next test. However, they almost always end up crashing because the knowledge was built on a shallow foundation. If instead you “drag the beat” or don't teach to the speed of the students' learning, then you will inhibit their ability to grow and solidify their existing knowledge by connecting it to something new. In other words, part of learning something new involves re-learning something old; both suffer if the pacing of the class is sluggish. Like a record that is skipping, the class will feel awkward and confusing.

Fifteen minutes into the first class, I set the precedent that I teach through discussion.

Economics, in particular, has several counter-intuitive results that can only be truly taught by encouraging students to reason through them with you and the rest of the class. The discussion also helps to set alert me to the “rhythm”— the pacing— of the students’ learning style in the class.

For example, the first day of my Principles of Economics class is focused on Mankiw’s Ten Principles of Economics. Around the third principle, I often introduce the concept of a sunk cost through an in-class exercise to develop economic intuition. The problem involves someone making a decision about how much of their car to get fixed and includes information about how much they have already spent on the car. It is very common that a student will reason based on the sunk cost with their answer (although not always).

My role here as a teacher is to encourage the student to think, and show them the faults in their economic reasoning, without creating a feeling of isolation or resentment. If a teacher just answers by correcting the student, then the student will likely be discouraged from developing critical thinking and may even withdraw from future class participation.

My approach is to always consider a student’s proposition on its own basis. In this case, I know they have committed the sunk cost fallacy—but why does their view appear plausible? It is here that the teacher must become a student of their students.

Let me give an example dialogue to demonstrate how I concretely approach this problem. I begin by asking about the first of the Mankiw principles:

“What is the trade-off here?”

I usually will get a few answers: some students will consider the cost of maintenance versus the value of the car the trade-off, but some students will still consider the sunk-cost part of the maintenance. In that case, I can at least relate to their standpoint in the discussion (e.g. “Ok, you are saying we already spent X amount on the car. Why even spend another Y amount?!”).

There are also students who already know the answer (usually they are business, finance or economics students). In this case, I know they know the answer but I have to keep them interested in the class. This is where opening up for discussion is sometimes useful because it solves two different problems: students that are struggling with a concept get an opportunity to hear more elaboration on the concept, while students who are comfortable with the concept get an opportunity to articulate their own conception to fellow students and deepen their self-understanding.¹ I continue with the next principle.

“What is the opportunity cost here?”

Here, some students begin to change their mind. Now that we are considering opportunities, some students start to consider *actions* and *forward-thinking*. However, for some students, an opportunity cost may still be unclear; they may still hold the view that a cost means something that one physically pays for with money. The next principle usually gets to the heart of the problem:

“Individuals make this trade-off on the margin. What is the margin here?”

Now, I start to see the “cogs turning,” as the students begin to reason out the example. On the margin, the sunk cost has been incurred regardless of what decision is made.² But most importantly, students are reflecting on how they **had** thought about a concept and learning from themselves.

Again, even if I immediately gave the correct answer to the student’s response, and they remembered this and answered correctly any question on a future test or homework related to sunk-costs, the most valuable lesson would have been missed: developing one’s economic reasoning. What the foregoing example did was demonstrate a model

¹In this case, I would usually reserve the discussion for after the solution is given as a way of discussing the intuition behind the answer.

²Of course, it is still possible some students may still find the concept unclear but I can return to the concept in the subsequent classes.

of thinking that could be internalized by the students and then used when they come across. This is perhaps the most valuable skill for students to learn to check their self-understanding: can you restate a concept from class in your own words?

This approach requires a lot of sensitivity to my class's needs but I believe that is the best way for my students to learn.

One of the most challenging examples of this was during Hurricane Harvey. The storm hit Houston in the the first week of my Principles of Microeconomics and required major re-calibration of the class on my part. This was not a "snow day" in the sense that I could extend the deadlines but I had to restructure my class and meet a multitude of personal students' needs in a way that was fair to the integrity of the class. I was able to meet the challenge of this problem by working with several students who had exceptional situations and help give them a path to get up to speed with the rest of the class.

My teaching philosophy centers around sympathy, both for the student's path to learn but also in my approach to learning how the student learns and understands. My interests in teaching include macroeconomics, household finance and econometrics.