SHANTHI NATARAJ: STATEMENT OF TEACHING PHILOSOPHY

I believe in learning-by-doing. As a student, I have often felt that I understood a concept or could follow along as the professor completed a proof on the board – and yet, trying to work out a similar problem later that evening, I would be unable to apply what I thought I understood. Similarly, as a graduate student instructor, I found that many students would nod along as I worked through an example on the board, only to meet with silence when I asked a student to suggest the next step in solving the problem.

I have been a graduate instructor for two courses at Berkeley. The first course was an introductory course, entitled Introduction to Environmental Economics and Policy. The students were largely first-year undergraduates, and most of them did not plan to major in economics. The second course was an upper-level economics course in international trade. Despite the different audiences in the two courses, I found a number of learning-by-doing teaching methods that worked well in both classes. At the beginning of each discussion section, I asked students to work in groups or individually to complete a short activity. The activity usually drew on the previous week’s section, and required students to apply familiar concepts in a slightly different context. I walked around the room while the students completed the activities. By doing so, I learned which parts of the problems they found challenging, and could answer their questions one-on-one.

I also tried to incorporate real-world examples into discussion sections. I believe that students are more eager to learn, and gain a better understanding of theory, when they realize how that theory applies to real life. This is particularly true in economics, which employs complex mathematical constructs to describe our everyday behavior. In the introductory environmental economics course, for example, I gave the students excerpts from two recent, contradictory, reports on climate change. I then asked them to consider how the two writers’ assumptions about discount rates and the substitutability between different factors of production (two concepts we had been studying) affected their findings. In the international trade class, we spent time talking about the results from empirical studies of trade liberalizations, and comparing those results to predictions from different trade models.

I found both of my teaching experiences rewarding in different ways. In the international trade course, I had the opportunity to teach future economists the fundamentals of my primary field of research. The introductory course in environmental economics was more challenging, but in some ways more rewarding, because most of the students did not plan to become economists. They questioned my way of thinking, and looked with skepticism upon basic economic principles like setting marginal cost equal to marginal benefit. I was forced to develop different ways of explaining economic concepts, and in doing so, understood them more thoroughly myself. In my career, I look forward to a similar variety of challenging and fulfilling teaching experiences.