Drew Vollmer

Teaching Portfolio

Objectives and Methods

My objective as a teacher is simple: to help students master the economist's toolkit. Students should build models and scrutinize assumptions, not passively accept the ones in the textbook. They should analyze models and discover their implications, not memorize key theorems. And they should apply concepts in new settings, not repeat cookie-cutter problems.

My teaching methods are designed to help students acquire these skills. I used five methods as the instructor for intermediate microeconomics in Summer 2018.

1. Emphasizing the principles of modeling

   To help students build general modeling skills, I emphasize the structure of each model presented in class: the environment and assumptions, agents and their objectives, and the endogenous results we want to learn about. For example, I use the consumer model to illustrate the components of a model, then connect every subsequent model in the course (e.g. the producer model, monopoly) back to that common structure.

2. Applying concepts and reasoning to new settings

   Students often see a topic from class applied in only a few settings, like how risk is usually applied to choices between lotteries. But after graduation, students will need to recognize when the principles are relevant in new settings. For instance, students benefit when they can recognize that the analysis of risk and uncertainty also applies to firms facing uncertain demand. Building those connections is one of the goals of my problem set and exam questions. I used the example of a firm with uncertain demand on my final exam.

3. Getting practice and help in class

   After lecture, students often realize that they are confused and have to wait until office hours to ask questions. To give students more immediate help and feedback, I asked them to solve example problems as in-class exercises, sometimes in groups, and presented a solution afterwards. This helps in two ways. First, asking students to think through the problems promotes a deeper understanding than just copying my solution. And second, the problems let me check in with students, giving me a chance to help them and build a personal relationship.

4. Providing user-friendly background material

   Mathematics is an essential tool in economics, but it is not the main goal of economics courses. To make the course accessible and keep the focus on economic analysis, I

wrote a primer explaining all of the math needed for intermediate microeconomics in non-technical language. When possible, as for constrained optimization, I included step-by-step instructions for deriving a solution.

5. Giving the clearest explanations possible

   Providing clear explanations is a learned skill, and it can make or break a lecture. I make it a primary goal when planning and giving lectures. For instance, I plan how to explain each piece of a technical definition with a colloquial explanation. I also watch closely for student reactions, which tell me when to slow down and when to move on. For an example of my attempt to unpack a difficult topic, see the set of notes I wrote on the Cho-Kreps intuitive criterion for PhD microeconomics, which can be found on my website. The course instructor incorporated part of the notes into his lectures, and several of my course evaluations mention that lectures and explanations were clear.

Diversity, Equity, and Inclusion

My teaching strategies advance diversity, equity, and inclusion in two ways. The first is to provide support for students who are less prepared for college than their peers because of deep-seated disadvantages and discrimination. In-class practice gives me more time with students who need help, and I offer extra office hours—four hours each week during my course—to make sure that all students have a chance to ask questions. Background materials, like the primer I prepared on math, reduce the importance of differences in preparation.

The second way is to retain more students by making myself available and emphasizing the broad applications of course material. Some students are put off because they do not match the current demographics of the department. My hope is that spending more time with students, through in-class exercises and office hours, will affirm that they have a place. Other students reject economics because the topics are not important to them: why care about demand models but not inequality? I hope to engage more students by explaining how economic models can be used to study a vast array of questions. For example, students bored with demand models might find the same tools interesting when applied to college enrollment.

Evaluations and Improvement

You can browse all of my teaching evaluations, including student comments, on my website. My ratings for each course are

- ECON 205 (instructor): average rating of 4.93/5

- ECON 705 (TA): 6 of 8 rated "excellent" (best), 2 of 8 rated "good" (second-best)
- ECON 701 (TA): 7 of 10 rated "excellent" (best), 3 of 10 rated "good" (second-best)

I am taking several steps to improve as an instructor:

- Completing the Certificate in College Teaching certificate at Duke. In the program, I took several classes on running courses and designing course materials. I also participated in a teaching observation program.
- Learning from course evaluations. One common complaint in my intermediate microeconomics class was that problem sets did not count towards grades. I learned that students want recognition for their work on problem sets, and I plan to make them count in the future.
- Revising course materials. I followed a traditional structure for my microeconomics class, but would tweak it to emphasize types of analysis, like Nash equilibrium, that are critical in economics but not required for the major. I also want to keep developing creative, challenging questions for problem sets that let students apply course topics in new settings.

Experience

- Instructor, ECON 205D (Intermediate Microeconomics with Calculus), 2018

  Ran lecture and discussion, assigned problem sets, wrote and graded exams, and held office hours. 13 students (mainly economics majors).

- Teaching Assistant, ECON 701/705 (PhD Microeconomics), 2016 – 2017

  Ran weekly discussion sections and office hours, graded problem sets and exams, edited lecture notes, wrote exam questions, and gave feedback on draft exams. Coordinated with instructor each week about course schedule, problem sets, and questions on material. Coordinated with another TA weekly about discussion section content and grading. 701 had over 50 students (25 economics PhD students and 25 master's and other PhD students); 705 has 35 (25 and 10).

- Teaching Assistant, Regression Analysis (as an undergraduate), 2012

  Ran office hours and graded problem sets with one other TA. Met with faculty weekly to discuss problem sets and solutions. Course had about 60 students, mainly economics majors.

- Peer Tutor/Head Math Tutor (as an undergraduate), 2010 – 2013

Ran office hours for calculus I/II and intermediate macro, tutored one-on-one for anything and everything (most frequently intermediate macro and multivariable calculus). Organized the calculus tutoring schedule as head math tutor from Fall 2011 to Spring 2013.

Possible Courses

My expertise is in industrial organization and microeconomic theory. I would be able to teach

- Industrial organization (graduate and undergraduate)
- Microeconomics (undergraduate and graduate)
- Game theory (undergraduate)
- Econometrics and statistics (undergraduate)
- Economic principles (undergraduate)