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The Impact of Writing on the Student Performance in Economics [1]

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My PTS research project seeks to address the following question: In an increasingly technical subject like economics, can having the students do more writing actually improve student performance?

Over the last few decades, economics textbooks and lectures have become dominated by graphical and mathematical analysis. Calculus-based approaches now pervade even freshman economics classes at many institutions. Students often struggle mightily to master the technical material and its application, to the point where it seems to interfere with their ability to understand and use basic economic intuition. The “crank and grind” approach to teaching economics has resulted in writing giving way to problem sets, and most economics majors do very little actual application-oriented writing over the course of their economics training. Long-time professors at liberal arts colleges lament the inability of many new Ph.D.s to communicate basic economic ideas to their students. Many of us fear that we are educating a generation of specialists in mathematical and statistical technique who have no real feel for economics. And, in the process, we are shutting out of the economics major those who cannot easily master the technical material.

I am not a proponent of abandoning technical rigor for intuition: I happen to believe that the two go hand-in-hand. My hypothesis is that having the students do more intuitive applications of economic theory via essay writing—as I do in my Principles of Microeconomics courses—not only will improve their intuitive understanding of economic concepts, and thus overall performance, but will actually facilitate greater mastery of the technical material as well.

I plan to test this hypothesis with the following study. I will teach two comparably sized sections of Principles of Microeconomics during the same semester. In one of these sections, the students will write three essays that involve the application of economic analysis to issues in the world around them, as my Principles students have all been doing for the last couple of years. In the other section of the course, there will be no such essay assignments. The courses will be identical except for these essay assignments: The students in the two courses will receive the same lectures, have the same reading and problem set assignments, and take the same tests on the same dates. The sections will be taught at same basic time of day to make samples as consistent as possible. The tests will have some questions that are more strictly technical and others that are more strictly intuitive in order to allow me to get at the impact of the essay writing on technical ability, intuitive applications, and overall performance.

In order to remove potential bias from the grading process, each examination will be numbered. Only the course TA will know which number is assigned to which student, and thus

in which of the course sections each student is enrolled. There are some potential biases that could influence the results. For example, students enrolled in a 10 a.m. section might be more dedicated (on average) than those in an 11:30 a.m. section because they have to be on campus that much earlier in the day. However, there are various ways to control for this statistically. My hope, pending Human Subjects Committee approval, is that once the semester is over and grade data is matched with individuals, this can be combined with demographic data that will allow me to isolate the effect of the writing assignments on student grades. Even if I am not given permission to use student-specific data, I will still be able to use aggregates to accomplish similar (albeit less precise) controls. I expect the results of this study will be of interest to the Journal of Economic Education.

Groups audience:
President's Teaching Scholars Program

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