

EDUC 2360
Program Evaluation and Policy Analysis for Education
Spring 2008
Tuesdays and Thursdays, 10:30-11:50 PM
Dewey Seminar Room, Barus Hall

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1. Rationale and Objectives

Does retaining low-performing students in the same grade help or hinder their academic progress? Do after-school programs help troubled teenagers stay out of trouble? Does receiving a voucher to attend a private school improve student achievement? Or would we be better off giving families housing vouchers to move to a better neighborhood?

Sound education policymaking depends upon accurate information about the causal effects of alternative interventions and programs on student outcomes. It requires answers to all of these questions—and many more. Measuring the causal effects of programs remains the most difficult challenge facing education researchers, but ongoing advances in data collection and research methods provide unprecedented opportunities to develop the type of knowledge that can improve policy and practice in urban education.

This course offers an overview of education policy research with an emphasis on strategies for measuring causal impacts. It aims to make students critical consumers of program evaluations and to equip them with tools (including familiarity with the STATA statistical package) to design and carry out their own quantitative research. It will also expose students to the most up-to-date evidence on a wide range of education policy questions with pressing policy relevance.

2. Prerequisites

This course is designed primarily for students in the Urban Education Policy masters program and builds on the material covered in ED2320. It is also open to undergraduates who have completed ED 111, PS 160, or SOC 110 and desire an advanced course in education policy analysis. Students are expected to arrive in class with a solid understanding of how to interpret Ordinary Least Squares (OLS) regression results. We will review inferential statistics and regression analysis, but this review will not be adequate for students who do not already have a strong grounding in these subjects. A basic familiarity with the statistical software package STATA is also strongly recommended.

3. Assignments and Grading

Course grades will be determined as follows:

- Attendance and participation: 10%
- Three computer assignments: 30% (10% each)
- Take-home midterm: 30%
- Final paper: 30%

Final Paper Guidelines: There are two options for the final paper, which should be *no longer* than 20 pages in length. The first is to write a critical summary of the research literature on a policy or program of your choice. You should review the available evaluations on the topic, describe the approaches used, and explain how shortcomings in these studies could be addressed in future research. You should think of your paper not as a summary of results but as an evaluation of evaluations that includes a discussion of their implications for policymakers. The paper should include five sections:

1. 150-word abstract written for a lay audience.
2. History of the policy/program and the problem it is trying to address.
3. Description of program implementation and design.
4. Evaluation of existing evaluations and proposals for how they could be improved.
5. Summary of their implications for policymaking.

The second option is to carry out a program evaluation using data accessed through your internships or other sources. The analysis need not result in strong causal conclusions about the program's effectiveness but must acknowledge weaknesses in the evaluation design and suggest how these weaknesses could be addressed with better data. Because of the difficulty of completing a program evaluation during a single semester, I suspect that most students will select the first option for the final paper. However, the second option is available and encouraged for students who are in a position to do it well.

The timeframe for completing the paper is as follows:

Tuesday, February 26: submit a one paragraph description of your topic by email. (Your topic may change as you review the literature, but it will be helpful to get started early!)

Tuesday April 15: Submit (a) an annotated bibliography of studies you will include in your evaluation of evaluations with brief descriptions of their methods and main findings; or (b) a similar bibliography of the literature related to your evaluation topic and a brief description of your research design.

Monday May 5: Final papers due at noon.

4. Required Texts and Materials

The only required text for the course is Stock and Watson's *Introduction to Econometrics*, which we will reference regularly. Supplemental readings drawn from the media and scholarly literature will be posted on the course website.

5. Course Outline

<i>Section One: The Evaluation Problem and Randomized Experiments</i>	
Thur. January 24	Introduction: Course overview and foundations
Tue. January 29	The evaluation problem in education research
Thur. January 31	Randomized experiments in education research
Tue. February 5	Review of Ordinary Least Squares (OLS) regression
Thur. February 7	Randomized experiments in practice
Tue. February 12	Statistical power [CA1]
Thur. February 14	No class: UEP Speaker Series
Thur. February 21	Outcome measures in education research [CA1 due before class]
Tue. February 26	Extensions of OLS [CA2]
Thur. February 28	Mixing methods in education research
<i>Section Two: Estimating Causal Effects using Observational Data</i>	
Tue. March 4	Panel data: differences-in-differences
Thur. March 6	Panel data: fixed effects
Tue. March 11	Instrumental variables [CA2 due before class]
Thur. March 13	Instrumental variables in practice
Tue. March 18	Regression discontinuity designs
Thur. March 20	Propensity score matching
Tue. April 1	Midterm review
Thur April 3	No class: Take-home midterm
Mon. April 7	Take-home midterm due by Noon.
<i>Section Three: From Program Evaluation to Policymaking</i>	
Tue. April 8	Cost-benefit analysis [CA3]
Thur. April 10	Meta-analysis and the “What Works Clearinghouse”
Tue. April 15	Estimating teacher effectiveness
Thur. April 17	Evaluating charter schools
Tue. April 22	Evaluating early childhood education [CA3 due before class]
Thur. April 24	Conclusion

6. Readings [in progress; check the website for updates]

Section One: The Evaluation Problem and Randomized Experiments	
Thur. January 24	Introduction
Readings for this class: 1. Traub, "No Child Left Behind: Does it work?" (2002).	
Tue. January 29	The evaluation problem in education research
Readings for this class: 1. Course monograph 2. Orr, <i>Social Experiments</i> , pp. 1-33.	
Thur. January 31	Randomized experiments in education research
Readings for this class: 1. Orr, <i>Social Experiments</i> , pp. 35-67. 2. Boruch, "The Virtues of Randomness" (2002). 3. Field, "Are the Right Students Upward Bound?" (2007). 4. Recommended: Stock and Watson, pp. 468-492.	
Tue. February 5	OLS review
Readings for this class: 1. Review Stock and Watson, chapters 6-9 and/or notes on regression from ED2320. 2. Fryer and Levitt, "Understanding the Black-White Test Score Gap in the First Two Years of School" (2004).	
Thur. February 7	Randomized experiments in practice
Readings for this class: 1. Schanzenbach, "What Have Researchers Learned from Project STAR?" (2007). 2. Decker et al, "The Effects of Teach for America on Students: Findings from a National Evaluation" (2004).	
Tue. February 12	Statistical power
Reading for this class: 1. Orr, pp. 103-120.	
Thur. February 21	Outcome measures in education research
Readings for this class: TBA	
Tue. February 26	OLS extensions
Readings for this class: 1. Recommended: Stock and Watson, chapter 11.	
Thur. February 28	Mixing methods in education research
Readings for this class: TBA	

<i>Section Two: Estimating Causal Effects using Observational Data</i>	
Tue. March 4	Panel data: differences-in-differences
Readings for this class: <ul style="list-style-type: none"> 1. Course monograph 2. Jackson, "A Little Now for a Lot Later: A Look at the Texas Advanced Placement Incentive Program" (2007). 	
Thur. March 6	Panel data: fixed effects
Readings for this class: <ul style="list-style-type: none"> 1. Course monograph 2. Hanushek and Raymond, "Does School Accountability lead to Improved Student Performance?" (2005). 	
Tue. March 11	Instrumental variables
Reading for this class: <ul style="list-style-type: none"> 1. Course monograph 	
Thur. March 13	Instrumental variables in practice
Readings for this class: <ul style="list-style-type: none"> 1. Hoxby, "What do America's 'Traditional Forms of School Choice Teach us About School Choice Reforms?" (1998). 2. Howell et al, "School Vouchers and Academic Performance: Results from Three Randomized Field Trials" (2002). 	
Tue. March 18	Regression discontinuity designs
Readings for this class: <ul style="list-style-type: none"> 1. Course monograph. 2. Wong et al., "An Effectiveness-based Evaluation of Five State Pre-K Programs" (2008). 	
Thur. March 20	Propensity score matching
Readings for this class: <ul style="list-style-type: none"> 1. Course monograph. 2. Agodini and Dynarski, "Are Experiments the only Option? A Look at Dropout Prevention Programs" (2004). 	
Tue. April 1	Midterm review
Readings for this class: TBA	

<i>Section Three: From Program Evaluation to Policymaking</i>	
Tue. April 8	Cost-benefit analysis
Readings for this class: 1. Dee and West, "The Non-Cognitive Returns to Class Size" (2008).	
Thur. April 10	Meta-analysis and the "What Works Clearinghouse"
Readings for this class: TBA	
Tue. April 15	Estimating teacher effectiveness
Readings for this class: 1. Nye et al, "How Large are Teacher Effects?" (2004). 2. TBA	
Thur. April 17	Evaluating charter schools
Readings for this class: 1. Hoxby and Rockoff, "Findings from the City of Broad Shoulders" (2005). 2. Ladd and Bifulco, "Results from the Tar Heel State" (2005). 3. Hoxby and Murarka, "Methods of Assessing the Achievement of Students in Charter Schools" (2006).	
Tue. April 22	Evaluating early childhood education
Readings for this class: 1. Ludwig and Phillips, "The Benefits and Costs of Head Start" (2007). 2. TBA	