

## **Economics Analysis of Education Policy**

### **Instructors**

*Instructors:* Drs. Andrew McEachin and Isaac Oppen

*Email:* [mceachin@rand.org](mailto:mceachin@rand.org); [iopper@rand.org](mailto:iopper@rand.org)

*Phone:* 310-393-0411 x6194 (McEachin); 310-393-0411 x7513 (Oppen)

### **Course Description**

*Days:* Tuesday/Thursday

*Time:* 10:30am-12:00pm

*Location:* TBD

***This meeting is required.***

Why do we hold teachers and schools accountable for their students' achievement? How do the designs of the accountability systems impact educators' behavioral responses? We know teachers are an important part of students' success, but how can we create reliable and valid measures of teacher effectiveness? How do school choice policies affect students' educational outcomes? Why are achievement gaps so stubborn? These are some of the important questions that are hotly debated in the popular media as well as academic circles. Answers to these questions are especially important given that the current educational landscape is marked by decreasing resources and increasingly high-stakes, essentially expecting educators to produce more with less.

In this course, we will explore how many of these questions can be answered using basic economic theories and principles. The field of economics studies how individuals make choices in the presence of scarce resources. As such, it directly relates to the present economic reality faced by most families, educators, administrators, and policy-makers.

### **Student Learning Outcomes:**

- Improve their ability to evaluate and present papers that use quantitative techniques common in economics of education papers.
- Understand how to use basic economic theory to predict how policy affects education outcomes.
- Gain a broad understanding of the topics that economics of education researchers focus on.

### **Readings**

#### *Textbooks*

"Economics of Education" by Michael Lovenheim and Sarah Turner (Herein referred to as LT). ISBN:0716777045

Web Link: <http://www.macmillanlearning.com/Catalog/product/economicsofeducation-rentalonly-firstedition-lovenheim>

#### *Articles*

Most class will also require reading a number of empirical articles. These will be posted to the course website throughout the quarter.

### **Grading**

Component	Weight	Details
<b>Participation</b>	<b>30%</b>	<p>The class meetings will be approximately 25% lecture and 75% class discussion. The quality of class discussion will heavily depend on student participation. Students are expected to not only complete all of the weekly readings, but also come to class ready to have thorough discussions on the weekly readings and themes. As such, participation will be a big part of the students' final grade. It is therefore important that students attend class. If you do need to miss class (e.g. you are traveling for OJT) make sure to inform the instructors ahead of time, otherwise the absence will harm your participation grade.</p> <p>For most classes, students will be asked to prepare ~5 slides on the empirical journal article we asked them to prepare. We will then randomly choose one student to use these slides to guide the class through a thorough discussion of the week's readings.</p>
<b>Referee Report</b>	<b>30%</b>	<p>A big part of the course will be actively engaging with economics of education research papers. As you progress through your graduate studies and professional career, you will often have to critically review research briefs, articles, and reports. In this class, students will have the opportunity to write a referee report style summary of a NBER working paper. The paper will be 3 to 5 single spaced pages and cover the following material. It will be due in the 8<sup>th</sup> week of the course. Topics to be covered in the referee report (an example will be shared with the class):</p> <ul style="list-style-type: none"> <li>• Did the paper sufficiently cover the extant literature? Did the paper accurately situate the current manuscript within the prior literature? Does the paper appear to make a unique contribution?</li> <li>• Are the researcher questions well motivated by the literature review?</li> <li>• Do the authors use appropriate data to answer the researcher questions?</li> <li>• Do the authors use methods appropriate to answer the question and supported by the data? Are they motivated by theory? Do the authors Most interesting point(s): What are the one or two most interesting points or compelling ideas raised by these readings?</li> <li>• Are the results supported by the methods?</li> </ul>
<b>Final paper</b>	<b>40%</b>	<p>The main assignment for this course is an academic research-based paper or proposal on any educational policy or issue from an economic perspective. The paper can be completed individually or in pairs. The paper topic should be broad and well-known enough that there will be sufficient materials and resources to help you in formulating your economic analysis of the issue at hand, but also narrow enough to complete in a semester.</p> <p>The students have three options for the final paper. First, students can complete a research proposal outlining a future research project. The</p>

Component	Weight	Details
		<p>proposal will cover the appropriate literature review, data, and methods. Second, students can complete a literature review on an economics of education topic. Third, students can complete an empirical analysis (either original data or a replication study) for your final paper. It is highly recommended that students discuss possible topics with the professors in advance of starting the assignment.</p> <p>The paper assignment will be completed in two steps. The first step is a short 5 page paper that identifies and summarizes the economics of education topic you would like to explore for the final paper. The first paper is due <b>the beginning of class in Week 6</b>. The paper should include:</p> <ul style="list-style-type: none"><li>• Identification of the policy, problem, or practice under investigation (i.e., class-size reduction)</li><li>• Brief background on the relevant economic theory</li><li>• If conducting an empirical analysis, a discussion of the relevant data and statistical methods to be used</li><li>• A list of references</li></ul> <p>The second step is a final paper which should be 18-20 double-spaced pages (with a maximum of 25 pages), written in APA style, and include a complete list of references (not included in the page limit).</p>

**Late Assignments**

Late assignments will only be accepted in cases of extreme emergencies, and should be requested BEFORE the due date. The decision to accept late work is solely at the discretion of the instructor.

**Course Schedule**

<b>Topics</b>	
Week 1	Econometric Fundamentals & Education as an Investment
Week 2	Education as an Investment & Human Capital Vs. Signaling
Week 3	Money as an Input
Week 4	Teachers as an Input
Week 5	Teacher Labor Markets
Week 6	Peers
Week 7	Other Inputs (Principals, technology, etc.)
Week 8	Accountability
Week 9	School Choice
Week 10	Achievement Gaps

**Tentative Reading List (\*=a student leader will present the paper)**Week 1

- **Tuesday:**
  - LT chapters 1-3
- **Thursday:**
  - Chapter 6

Week 2

- **Tuesday:**
  - LT chapters 4 and 5
- **Thursday:**
  - \*Damon Clark and Paco Martorell. 2014. "The Signaling Value of a High School Diploma." *Journal of Political Economy*. 122(2): 282-318

Week 3

- **Tuesday:**
  - LT chapters 7 and 9 (chapter 8 covers school finance and could be useful to read for those who are less versed in school finance).
  - Jackson, C. Kirabo, Rucker C. Johnson, and Claudia Persico. 2016. "The Effects of School Spending on Educational and Economic Outcomes: Evidence from School Finance Reforms." *Quarterly Journal of Economics* 131(1).
- **Thursday:**

- \*Johnson, Rucker and C. Kirabo Jackson. “Reducing Inequality Through Dynamic Complementarity: Evidence from Head Start and Public School Spending.” NBER Working Paper 23489.

#### Week 4

- **Tuesday:**
  - Koedel, Cory, Kata Mihaly, and Jonah E. Rockoff. 2015. “Value-added modeling: A review.” *Economics of Education Review*, 47(1): 180-195
  - Kraft, Matthew A. (Forthcoming) “Teacher Effects on Complex Cognitive Skills and Social-Emotional Competencies.” *Journal of Human Resources*.
- **Thursday:**
  - \*Chetty, Raj, John Friedman, and Jonah E. Rockoff. 2014. "Evaluating Bias in Teacher Value-Added Estimates." *American Economic Review*, 104(9): 2593-2632.

#### Week 5

- **Tuesday:**
  - LT chapter 12
- **Thursday:**
  - \*Biasi, Barbara. 2018. “The Labor Market for Teachers Under Different Pay Schemes.” Working Paper.

#### Week 6

- **Tuesday:**
  - Sacerdote, Bruce. “Chapter 4 – Peer Effects in Education: How Might They Work, How Big Are They, and How Much Do We Know Thus Far?” 2011. *Handbook of the Economics of Education: Volume 3*.
- **Thursday:**
  - \*Imberman, Scott A., Adriana D. Kugler, and Bruce I. Sacerdote. “Katrina’s Children: Evidence on the Structure of Peer Effects from Hurricane Evacuees.” 2012. *American Economic Review*, 102(5): 2048-2082

#### Week 7

- **Tuesday:**
  - \*Billings, Stephen B., David J. Deming, and Stephen L. Ross (Forthcoming). “Partners in Crime.” *American Economic Journal: Applied Economics*.
- **Thursday:**
  - \*Chetty, Raj, Nathaniel Hendren, and Lawrence F. Katz. 2016. "The Effects of Exposure to Better Neighborhoods on Children: New Evidence from the Moving to Opportunity Experiment." *American Economic Review*, 106 (4): 855-902.
- 

#### Week 8

- **Tuesday:**
  - LT chapter 11;
  - Heinrich, C.J., & Marschke, G. (2010). Incentives and their dynamics in public sector performance management systems. *Journal of Policy Analysis and Management*, 29(1), 183-208.
- **Thursday:**

- \*Rouse, Cecilia Elena, Jane Hannaway, Dan Goldhaber, and David Figlio. 2013. "Feeling the Florida Heat? How Low-Performing Schools Respond to Voucher and Accountability Pressure." *American Economic Journal: Economic Policy*, 5 (2): 251-81.

### Week 9

- **Tuesday:**
  - LT chapter 10;
  - D. Epple, R. Romano, R. Zimmer, Chapter 3 - Charter Schools: A Survey of Research on Their Characteristics and Effectiveness, Editor(s): Eric A. Hanushek, Stephen Machin, Ludger Woessmann, Handbook of the Economics of Education, Elsevier, Volume 5, 2016, Pages 139-208, ISSN 1574-0692, ISBN 9780444634597, <https://doi.org/10.1016/B978-0-444-63459-7.00003-8>.
- **Thursday:**
  - \*Dobbie, W., and Roland G. Fryer (2015). "The Medium-Term Impacts of High-Achieving Charter Schools." *Journal of Political Economy*, 123(5), 985-1037.

### Week 10

- **Tuesday:**
  - Reardon, S. (2011). The widening academic achievement gap between the rich and the poor: New evidence and possible explanations [This Paper provides context];
  - \*Fryer, D.G., and Steven D. Levitt (2004). "Understanding the Black-White Test Score Gap in the First Two Years of School", *The Review of Economics and Statistics*, 86(2) 447-464.
- **Thursday:**
  - \*Hanushek, E.A., John F. Kain, and Steven G. Rivkin (2009). "New Evidence about *Brown v Board of Education*: The Complex Effects of School Racial Composition on Achievement." *Journal of Labor Economics*, 27(3), 349-383.