

Economics 551
Economics of Education

CONTACT INFORMATION

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COURSE GOALS

- 1.) Apply theoretical and empirical methods of economics to education policy.
Economics is a powerful framework for thinking about education policy. Economics focuses us on the incentives created by a policy and helps us to predict its intended and unintended consequences.
- 2.) Distinguish good empirical research from bad.
There are thousands of empirical studies and popular press pieces discussing education policy. This course helps you separate the wheat from the chaff by teaching you to read closely and critically. We will discuss the key challenges in education research and learn the best-practice methods that overcome them.
- 3.) Get firsthand experience doing policy-relevant research.
As an experiential education course, you will apply economic tools to the real world by writing a research paper that evaluates an education policy of interest.
- 4.) Improve your written communication skills.
We will focus on learning to write critically and concisely in the style used by economists, applying economic principles to key education policy questions.

Prerequisites

Econ 400, 410 and Econ 470 or 570 (or concurrent enrollment).

READINGS

All readings can be downloaded on-line or from Sakai. Many of the readings are taken from academic journals, and while challenging, were chosen to be accessible to undergraduate economics majors. Please do not despair if you are not able to understand every aspect of the paper. The reaction papers, described below, are intended to help focus your reading of these articles. I will provide guidance on which readings merit more focused attention and which readings should be read more lightly as background material.

We will draw material from the following texts:

- Borjas, G. J. (2000) *Labor Economics*, 2nd Ed., Irwin McGraw-Hill.
- Rosen, H.S. (2005) *Public Finance*, 7th Ed., McGraw-Hill Irwin.
- Hanushek, Machin and Woessman, eds. (2011,2016) *Handbook of Economics of Education*, Vol. 3-5. (Available at www.sciencedirect.com)

- Hanushek and Welch, eds. (2006) *Handbook of Economics of Education*, Vols. 1-2. (Available at www.sciencedirect.com)
- Ladd, H. F. and E. B. Fiske, eds. (2007) *Handbook of Research in Education Finance and Policy*, Lawrence Erlbaum Associates.
- Schneider, B., et al (2007) *Estimating Causal Effects Using Experimental and Observational Designs*, American Educational Research Association (<http://www.aera.net/Portals/38/docs/CausalEffects.pdf>).
- Brewer , D. J. and P. J. McEwan, eds. (2010) *Economics of Education*, Elsevier.

COURSE COMPONENTS

Grading

Reaction Papers	10%
Homework	5%
Midterm	25%
Term Paper	50%
Oral Presentation on Paper	10%

Reaction Papers

You will be asked to write reaction papers to articles denoted by * on the reading list. These will be due at the beginning of class and will be assigned at least 1 week prior. Four reactions papers will be assigned and the lowest score will be dropped. The papers are to be typed, preferably 1 page but no more than 1.5 pages double-spaced.

The first half should be a concise summary of the research described in the reading. It should answer the following questions:

1. What is the primary question/issue/hypothesis that the author wanted to address?
2. Why is the question interesting or important?
3. What data does the author use (if empirical paper)?
4. Give an intuitive description of the author's test or model.
5. What are the author's findings or conclusions?

The second half should be a critique of the paper. It may consider one or two of the following questions:

6. Are you convinced by the author's results/arguments? Why or why not?
7. Do you believe they found a causal relationship? Why or why not?
8. Did the results obtained justify the interpretation and conclusions?
9. Were appropriate controls used or did the approach adequately test the hypothesis?
10. Do you think the results could be biased in some way? Explain.

The above questions are also intended to help guide your reading of some of the more challenging articles in the syllabus. Though you will only be graded on the assigned reaction papers, you are encouraged to answer these questions for the other assigned readings, as they will provide a useful study guide for the exams and will help enable you to contribute to class discussions. They will also help you develop an understanding of the key elements of research papers in economics, provide models for your own economic writing and help you to synthesize the literature for your term paper.

Homework

I will assign one homework that will give you a chance to work with data and apply some of the empirical methods we discuss in class. The best way to understand econometrics is by applying it. Its approximated due date is Feb. 16.

Exams

There will be a midterm on **XX**. Please reserve this date now. There is no make-up midterm examination.

Term Paper

Students will write a paper (15-18 pages, double-spaced, 12-point font) that analyzes a topic in the economics of education. These deadlines must be met to receive full credit for the paper:

Proposal due	Jan. 31
Meet with instructor	Feb 6 to 10
Detailed outline and bibliography due	March 2
Draft due	March 30
Final paper due	April 27

Writing a quality term paper takes time and I have designed this to give you detailed feedback along the way. Please make use of office hours; I am here to help. More details on the expectations for the term paper will be provided.

The best way to find a topic is to start reading about current issues in education policy. Links to some useful websites can be found on the course webpage. The first lecture will also introduce some current areas of debate.

Paper Presentation

You will present your term paper to the class during the final exam date, for which you will be graded. The goal is to teach your classmates about your chosen policy area of interest using sound economic principles and to receive feedback on your research from your classmates and the instructor. More details on expectations for the presentations will be provided at a later date.

Class Participation

While you will not be given an explicit class participation grade, I *strongly* encourage class participation, and it can make a difference in borderline cases. Students are expected to attend class and read the assigned material prior to class. The quality of the class will greatly improve with student preparation.

You will also be given opportunities to present your research progress informally throughout the semester and opportunities to critique each others work.

POLICIES AND EXPECTATIONS

Submitting Assignments

Assignments should be submitted through Sakai. The system will accept assignments until the beginning of class (11am) on the due date. If you prefer, you may submit a hard copy of your assignment in class on the due date.

Late Work Policy

Due dates and times of assignments are firm. No late work will be accepted.

Computers and Cell Phones

Students may not use laptops, tablets, phones, or similar devices during the lecture. The impetus behind this rule is: First, your contemporaries have shown that they will engage, during class, in non-course activities on these devices. Second, such activity disrupts your classmates and disruptive behavior violates section II.C.1.k of the Honor Code. Third, it interferes with your learning (see <http://www.newyorker.com/tech/elements/the-case-for-banning-laptops-in-the-classroom>). Numerous studies show that “disconnected” students perform significantly better than their “connected” peers.

Academic Integrity

You are expected to be honest and honorable in your fulfillment of course conduct, course assignments, and course exams. Adherence to the honor code is required (<http://www.catalog.unc.edu/policies-procedures/honor-code/>)

The Writing Center

The Writing Center is located in the Student and Academic Services Building and offers personalized writing consultations as well as a variety of other resources. This could be a wonderful resource to help with your writing assignments in this course (and any assignments in your other courses). You do not need a complete draft of your assignment to visit; they can help you at any stage! You can chat with someone in the writing center or set up an appointment on their website (<http://writingcenter.unc.edu/>).

Preliminary Course Outline (Subject to Change)

Introduction

Brewer, D. J., et al “The Role of Economics in Education Policy Research,” in *Handbook of Research in Education Finance and Policy*. (download from Sakai)

Introduction to some of the current policy debates:

P.E. Peterson, M. B. Henderson, M.R. West and S. Barrows (2017) “Ten-Year Trends in Public Opinion from the Ed Next Poll”, *Education Next* 11(1). (<http://educationnext.org/ten-year-trends-in-public-opinion-from-ednext-poll-2016-survey/>)

Education Issues to Watch in 2017: <https://edsources.org/2017/education-issues-to-watch-in-2017-and-a-guess-on-what-to-expect/574483>

PART I: EDUCATIONAL PRODUCTION

Theory and Overview of Educational Production

Hanushek, E. A. (2006) “School Resources,” *Handbook of Economics of Education*, Vol 2. (www.sciencedirect.com)

Rice, J. K and A. E. Schwartz “Toward an Understanding of Productivity in Education,” in *Handbook of Research in Education Finance and Policy*, chp 8. (download from Sakai)

Krueger, A. (1998) “Reassessing the View that American Schools Are Broken,” *Federal Reserve Bank of New York Economic Policy Review*, 4(1). (<http://www.ny.frb.org/research/epr/98v04n1/9803krue.pdf>)

Review of Econometric Methods

Your econometrics textbook is a great resource, and I will also provide some lecture notes on key topics.

Teacher Effectiveness

*Goldhaber, D. and D. Brewer (1997) “Why Don’t Schools and Teachers Seem to Matter? Assessing the Impact of Unobservables in Educational Productivity.” *Journal of Human Resources*, 32(3): 505-523. ([JSTOR](http://www.jstor.org))

Goldhaber, D. (2002) “The Mystery of Good Teaching.” *Education Next*, 2 (Spring): 50-55. (<http://educationnext.org/the-mystery-of-good-teaching/>)

Jackson, K., J. Rockoff and D. Staiger (2014) “Teacher Effects and Teacher-Related Policies” *Annual Review of Economics* 6: 801-825. (https://www0.gsb.columbia.edu/faculty/jrockoff/papers/Jackson_Rockoff_Staiger_2014.pdf)

Some Articles on Teacher Pay in North Carolina:

<https://www.carolinajournal.com/opinion-article/truth-misstated-on-teacher-pay/>

<http://www.ncpolicywatch.com/2016/09/08/why-nc-is-not-measuring-teacher-pay-properly-and-how-we-should-do-it/>

<http://wunc.org/post/fact-check-gov-mccrorys-claims-teacher-pay#stream/0>

Market for Teachers

Hoxby, C.M. (1996) "How Teachers' Unions Affect Education Production," *The Quarterly Journal of Economics*, 111(3): 671-718. ([JSTOR](#))

Corcoran, S.; W. Evans, and R. Schwab (2004). "Changing Labor Market Opportunities for Women and the Quality of Teachers, 1957-2000." *American Economic Review* 94(2): 230-35. ([JSTOR](#))

Angrist, Joshua and Jonathan Guryan (2004). "Teacher Testing, Teacher Education, and Teacher Characteristics." *American Economic Review* 94(2): 241-246. ([JSTOR](#))

Hoxby, C. M. and A. Leigh (2004) "Pulled Away or Pushed Out? Explaining the Decline of Teacher Aptitude in the United States," *AEA Papers and Proceedings*, 94(2): 236-240. (<http://econrsss.anu.edu.au/~aleigh/pdf/Teacher%20Quality.pdf>)

Finding What Works in Education

Schneider, B., et al. (2007), chp 2. (download from Sakai)

Cook, Thomas (2001). "Sciencephobia." *Education Next* (Fall): 63-68. (<http://educationnext.org/sciencephobia/>)

Angrist, Joshua (2004). "American Education Research Changes Tack." *Oxford Review of Economic Policy* 20(2): 198-212. (download from Sakai)

Class Size: Experimental Evidence

*Krueger, Alan (1999). "Experimental Estimates of Education Production Functions." *Quarterly Journal of Economics* 114(2): 497-532. ([JSTOR](#))

Ritter, Gary W. and Boruch, Robert F. (1999). "The Political and Institutional Origins of a Randomized Controlled Trial on Elementary School Class Size: Tennessee's Project STAR." *Educational Evaluation and Policy Analysis* 21(2): 111-125. ([JSTOR](#))

NC Policy Watch: <http://www.ncpolicywatch.com/2016/11/14/new-rules-lower-class-sizes-force-stark-choices-threatening-tas-specialty-education-positions/>

Class Size: Observational Evidence

Schneider, et al (2007), chp 3. (download from Sakai)

Boozer, M. and Rouse, C. (2001) "Intraschool Variation in Class Size: Patterns and Implications" *Journal of Urban Economics*, 50:163-189. ([Sciencedirect](#))

Hanushek, Eric (1997) "Assessing the Effects of School Resources on Student Performance: An Update." *Educational Evaluation and Policy Analysis* 19(2): 141-164. ([JSTOR](#))

Krueger, Alan (2003). "Economic Considerations and Class Size." *The Economic Journal*, 113(485): 34-63. ([JSTOR](#))

Hattie, J. (2005) "The paradox of reducing class size and improving learning outcomes," *International Journal of Educational Research*, 43(6): 387-425.
(<http://www.sciencedirect.com/science/article/B6VDF-4KSD5C2-1/2/1fa19b1a9a5a4308d48b031fdc2eb409>)

Peers

Lazear, Edward (2001). "Educational Production." *Quarterly Journal of Economics*, 116:3, pp. 777-803. ([JSTOR](#))

Fryer, R. G. (2006) "Acting White," *Education Next*, 1 (Winter): 53-59.
(<http://educationnext.org/actingwhite/>)

Figlio, D. N. (2007) "Boys Named Sue: Disruptive Children and their Peers," *Education Finance and Policy*, 2(4): 376-394. ([JSTOR](#))

Hattie, J., (2002) "Classroom composition and peer effects," *International Journal of Educational Research*, 37(5): 449-481.
(<http://www.sciencedirect.com/science/article/B6VDF-49CRM6T-1/2/9a69a3ccbd693fa1494ec0b44efe59e>)

Achievement Gaps

Reardon, S.F., Robinson, J.P., & Weathers, E.S. (Forthcoming). Patterns and Trends in Racial/Ethnic and Socioeconomic Academic Achievement Gaps. In H. A. Ladd & E. B. Fiske (Eds.), *Handbook of Research in Education Finance and Policy* (Second ed.). Lawrence Erlbaum. (<http://cepa.stanford.edu/content/patterns-and-trends-raciaethnic-and-socioeconomic-academic-achievement-gaps-1>)

Figlio, D. N. (2008) "School Reforms and Improved Life Outcomes for Disadvantaged Children", in *Pathways to Self-Sufficiency: Getting Ahead in an Era Beyond Welfare Reform*. (download from Sakai)

Fryer, R. G. and S. 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.
(http://scholar.harvard.edu/files/fryer/files/rest_vol86_2.pdf)

Early Childhood

Blau and Currie (2006) "Pre-school, day care and after school care: who's minding the kids?" in *Handbook of Economics of Education, Vol. 2*. (www.sciencedirect.com)

*Currie and Thomas (1995) "Does Head Start Make a Difference?" *The American Economic Review*, 85(3):341-364. ([JSTOR](#))

Magnuson, K., C. J. Ruhm, and J. Waldfogel (2007) “Does prekindergarten improve school preparation and performance?”, *Economics of Education Review*, 26(1):33-51. ([JSTOR](#))

Ludwig, J and D. L. Miller (2007). “Does Head Start Improve Children's Life Chances? Evidence from a Regression Discontinuity Design,” *The Quarterly Journal of Economics*, 122(1): 159-208. ([JSTOR](#))

Armor, D. (2014) “The Evidence on Universal Preschool: Are Benefits Worth the Costs?”, *Policy Analysis, Cato Institute* <https://object.cato.org/sites/cato.org/files/pubs/pdf/pa760.pdf>

Heckman, J. (2011) “The Economics of Inequality: The Value of Early Childhood Education”, *American Educator* <http://files.eric.ed.gov/fulltext/EJ920516.pdf>

PART II: INVESTMENT IN EDUCATION

Private Investment in Education—Theory

Borjas (2000), chp 7, pp 228-41. (download from Sakai)

Borjas (2000), chp 7, pp 249-55. (download from Sakai)

Goldin, C. (2003) “The Human Capital Century,” *Education Next*, 3(1). (<http://educationnext.org/the-human-capital-century/>)

Private Investment in Education—Empirical Evidence (Natural Experiments)

Angrist, J.D and A.B. Krueger (1991) “Does Compulsory School Attendance Affect Schooling and Earnings?” *The Quarterly Journal of Economics*, 106(4): 979-1014. ([JSTOR](#))

Ashenfelter, O. and A. Krueger (1994) “Estimates of the Economic Returns to Schooling from a New Sample of Twins,” *American Economic Review*, 84(5): 1157-73. ([JSTOR](#))

Leonhardt, D. (2014) “Is college worth it? Clearly, new data say”, *New York Times, The Upshot* <https://www.nytimes.com/2014/05/27/upshot/is-college-worth-it-clearly-new-data-say.html?partner=rss&emc=rss&smid=tw-nytimes&r=2>

Ozick, A. (2014) Should everyone go to college? *Forbes* <http://www.forbes.com/sites/modeledbehavior/2014/05/29/should-everyone-go-to-college/#5f51262d2ead>

Public Investment in Education

Rosen (2006), chp 4. (download from Sakai)

Taylor “Government's Role in Primary and Secondary Education” (1999) *Federal Reserve Bank of Dallas Economic Review*. (<http://www.dallasfed.org/research/er/1999/er9901b.pdf>)

Corcoran, S. P. and W.N. Evans “Equity, Adequacy and the Evolving State Role in Education Finance,” in *Handbook of Research in Education Finance and Policy*. (download from Sakai)

Guin, et al (2007) "Do districts fund schools fairly?" *Education Next*,
(<http://educationnext.org/do-districts-fund-schools-fairly/>)

Financing Education – Public finance in a federal system

Rosen (2006), ch 20. (download from Sakai)

Card, D. and A. Payne (2002) "School Finance Reform, the Distribution of School Spending, and the Distribution of Student Test Scores," *Journal of Public Economics*, 83(2002): 49-82.
(<http://davidcard.berkeley.edu/papers/school-finance-reform.pdf>)

Hoxby, Caroline (2001). "All School Finance Equalizations Are Not Created Equal," *Quarterly Journal of Economics* 116 (4): 1189-1231. ([JSTOR](#))

C. K. Jackson, R. C. Johnson and C. Persico (2016) "The Effects of School Spending on Educational and Economic Outcomes: Evidence from School Finance Reforms," *The Quarterly Journal of Economics*, 131(1): 157-218
(http://socrates.berkeley.edu/~ruckerj/QJE_resubmit_final_version.pdf) Education Next version of the article: <http://educationnext.org/boosting-education-attainment-adult-earnings-school-spending/>

*Black, S. (1999) "Do Better Schools Matter? Parental Valuation of Elementary Education," *Quarterly Journal of Economics*, 114(2): 577-599. ([JSTOR](#))

PART III: CURRENT POLICIES/EDUCATION REFORMS

This will evolve depending on time and student interests. Possible topics include:

- My current work with Aucejo, Coate and Mozenter "Teacher Effectiveness and Classroom Composition"
- Desegregation
- Accountability: From No Child Left Behind to Every Student Succeeds
- School choice: Charter schools and private school vouchers
- Race to the Top
- Teacher merit pay
- Common Core Standards