LPO 8110: Economics of Education

Peabody College, Department of Leadership Policy and Organizations

Spring 2021 Syllabus

Meeting time and location:

Monday, 1:50-4:40 pm, TBD

Instructor:

Carolyn Heinrich, Professor of Public Policy, Education and Economics

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Office location: 202D Payne Hall

Office hours: By appointment

Course description:

This course is a core course in the Ph.D. program in Leadership and Policy Studies, focusing on economic theory, econometric methods and related social sciences research to investigate economic issues in education. We begin in this course with theory and research that views education as an investment in the future productivity of individuals and economies and that assesses the value of and returns to education. We next turn to the production of education, considering the different inputs into education, and examine the role of education in economic growth (domestically and globally). We also explore the economics of education in early childhood, K-12 education and higher education, with special attention to topics of current policy interest and debate. The course continues with a discussion of the organization of education and the role of incentives in improving organizational and educational effectiveness. We then turn to research on education markets, school quality and choice and consider the influence of peers and the educational environment as well. Finally, we explore various education reforms and efforts to increase accountability in education. While we give considerable attention to the growing role of econometric methods in understanding and assessing educational policies and interventions, we also draw other disciplinary perspectives and critical race theory into our discussions.

Optional course book (available as an e-book for rent or purchase):

Economics of Education, Michael Lovenheim and Sarah Turner, Macmillan Learning, 2018 (see https://store.macmillanlearning.com/us/digital/intro/ebooks)

This book could be a helpful reference for everyone, but I particularly recommend renting this book if you are "rusty" in your economics training or if a more basic introduction to the topics we will study in this course would be helpful to you.

Course requirements and evaluation:

Course grades will be based on the following (as described in detail below):

Weekly discussion and class participation (including discussion leads): 15%

Assignment #1 (due Feb. 22): 2-page critique of education production function for framing and guiding education research, 10%

Assignment #2 (due March 8): Annotated bibliography and paper outline, 15%

Assignment #3: Concise critique of an educational reform evaluation (working with another class member, due April 12): 20%

Assignment #4: Final paper (due April 30) and short in-class presentation (April 26): 40%

Class participation:

Each week, you are expected to read and come well-prepared to discuss the assigned readings. In addition, partnering with another class member, you will choose a class session (from the starred sessions below) and take the lead in facilitating a discussion/activity during that class period that will promote reflection and sharing of insights from the readings of the day. The quality and profundity of your participation and engagement during our class sessions will depend on your commitment to "consuming" the readings and will determine your **class participation** grade.

John Bryson (U. of Minnesota) offers four "hallmarks of good participation" that I recommend to you: (1) risk-taking (i.e., presenting an opposing view or a different interpretation of readings/information); (2) listening (i.e., trying to understand what others are saying and why they are saying it); (3) bringing in your own work-related and other experiences when relevant to the discussions; and (4) monitoring your own participation in terms of both "airtime" and quality.

Two-page critique of education production function for framing and guiding education research

The education production function is a foundational theory/conceptual tool for the economic study of education. What do you see as intuitive or useful about the education production function for framing your own research agenda or intellectual pursuits, and in what ways do you find it to be limiting or unconstructive? This assignment is intended in part to get you started in thinking about the research you will pursue in this class and present in a final paper.

Annotated bibliography and final paper outline:

You will develop an annotated bibliography on a question in the economics of education that interests you (and which you intend to address in the final paper). The annotated bibliography

and outline should show how you plan to conduct research on this particular question. The bibliography should succinctly review the literature on this topic and the data available for analysis, providing just enough description of each item included to show how why it is important to your chosen topic.

Concise critique of an evaluation of an educational reform/intervention:

For this critique, you will work with another classmate to identify an evaluation of educational reform or intervention of interest to you. This can be a local, state, national or international reform, program or intervention, and the evaluation can be of any form/design—qualitative, quantitative, mixed methods, short-term or long-term, process or impact, etc. In the short paper, you will be critiquing the evaluation of the reform/program/intervention: (1) What was the focus of the evaluation? (2) Did you learn whether the program or intervention was effective or worked (or *how* it worked) to achieve its stated objectives? (3) Were the design and methods applied in the evaluation adequate to obtain valid answers to the evaluation questions? (4) If you identify shortcomings of the evaluation, what would be your recommendations to improve future evaluation efforts of a similar reform or intervention? The critique should be approximately 5-6 pages (double-spaced, 1" margins), not including tables, figures and references.

Final paper:

The final paper can be written on a topic in the economics of education of your choosing. In general, your paper should include the following components: (1) clearly define the issue, question or problem you are addressing; (2) describe the framework or theories you are using to approach this issue/question/problem; (3) present your arguments and/or analysis and the evidence that supports them; (4) draw conclusions and make recommendations (as appropriate), referencing the evidence that supports them. If you would like to propose an alternative structure for the paper, you are welcome to set a meeting with me to discuss this. **The final paper (due April 30)** should be between 10 (min.) and 20 (max.) pages (double-spaced, 1" margins), not including tables, figures and references. **On April 26, you will have 10 minutes to present your work and findings to the class, inclusive of any Q&A time you would like to allow.**

For the final paper (and the annotated bibliography and outline), you may also choose to undertake this work with a classmate and submit joint products. A large share of scholarly research is undertaken in collaboration with others who bring differing skills and strengths to the work, and thus, I offer you the opportunity to partner in the core work of this class.

Honor Code and Diversity and Inclusion:

For this course, you are bound by the terms of the Vanderbilt Honor Code. Any breach of academic honesty, including cheating, plagiarism, or failing to report a known or suspected violation of the Code will be reported to the Honor Council. In particular, papers must assign credit to the sources you use. Material borrowed from another—quotations, paraphrases, key words, or ideas—must be credited following appropriate citation procedures (footnotes or parenthetical citation and bibliography).

You can view the full details of the honor code at the following link: http://www.vanderbilt.edu/student_handbook/the-honor-system#honorcode

In group work, you are jointly responsible for ensuring that your work is in compliance with the honor code. That is, all group members are responsible for ensuring that each individual's contributions to the product that is submitted for grading do not violate the honor code.

You are expected to submit all assignments by the specified date and time. If there are extenuating circumstances that prevent you from turning in an assignment on time, please communicate with me as soon as possible and in advance of the specified deadline. I understand that many of us are personally and professionally affected by the Covid-19 pandemic, systemic racism, and other socio-political issues that we are grappling with in our society. I will be as supportive of your needs as possible but also strongly encourage you to utilize the resources offered at Vanderbilt University to support your mental and physical health and well-being.

Vanderbilt University supports an inclusive learning environment where diversity and individual differences are understood, respected, appreciated, and recognized as a source of strength.

Title IX Confidentiality Statement: Vanderbilt faculty must report allegations of sexual misconduct and intimate partner violence to the Title IX Coordinator.

Course outline:

January 25

1. Introduction to the Economics of Education

Blaug, M. 1985. Where Are We Now in the Economics of Education? *Economics of Education Review*, 4(1):17–28.

Dominic J. Brewer, Guilbert C. Hentschke and Eric R. Ride. 2008. The Role of Economics in Education Policy Research. Ch. 2 in *Handbook of Research in Education Finance and Policy*, edited by Helen F. Ladd and Edward B. Fiske, Routledge, New York, pp. 23-41.

Ladson-Billings, Gloria. 1998. Just what is critical race theory and what's it doing in a nice field like education? *International Journal of Qualitative Studies in Education*, 11:1, 7-24, DOI: 10.1080/095183998236863

Lavecchia, Adam; Liu, Heidi; Oreopoulos, Philip. 2016. Behavioral Economics of Education: Progress and Possibilities. (*Handbook of the Economics of Education, Volume 5*, 2016, Pages 1–74 and NBER Working Paper 20609).

February 1

2. Investing in human capital and the returns to education

Psacharopoulos, George and Harry Anthony Patrinos. 2004. Human capital and rates of return. Ch. 1 in the *International Handbook on the Economics of Education*, edited by Geraint Johnes, and Jill Johnes, pp. 1-57.

McMahon, Walter W. 2004. The social and external benefits of education. Ch. 6 in the International Handbook on the *Economics of Education*, edited by Geraint Johnes, and Jill Johnes, pp. 211-259.

Trostel, P., I. Walker, and P. Woolley, 2002. Estimates of the economic return to schooling for 28 countries. *Labour Economics*, 9 (1) (2002), pp. 1–16.

Ashenfelter, Orley and Alan Krueger 1994. Estimates of the Economic Return to Schooling from a New Sample of Twins. *The American Economic Review*, Vol. 84, No. 5, pp. 1157-1173.

Kuka, Elira, Na'ama Shenhav, and Kevin Shih. 2020. "Do Human Capital Decisions Respond to the Returns to Education? Evidence from DACA." *American Economic Journal: Economic Policy*, 12 (1): 293-324.

February 8

*3. Critical race theory, educational inequality and relationship of education to economic growth

Richard Milner. 2007. Race, Culture, and Researcher Positionality: Working Through Dangers Seen, Unseen, and Unforeseen. *Educational Researcher*, Vol. 36, No. 7, pp. 388–400.

David Gillborn, Paul Warmington & Sean Demack. 2018. QuantCrit: education, policy, 'Big Data' and principles for a critical race theory of statistics. *Race Ethnicity and Education*, 21:2, 158-179, DOI: 10.1080/13613324.2017.1377417 P.

Ewert S, Sykes BL, Pettit B. 2014. The Degree of Disadvantage: Incarceration and Inequality in Education. *The ANNALS of the American Academy of Political and Social Science*, 651(1):24-43.

Eric A. Hanushek and Dennis D. Kimko. 2000. Schooling, Labor-Force Quality, and the Growth of Nations. *The American Economic Review*, Vol. 90, No. 5, pp. 1184-1208.

Stephan Klasen. 2002. Low Schooling for Girls, Slower Growth for All? Cross-Country Evidence on the Effect of Gender Inequality in Education on Economic Development. *The World Bank Economic Review*, Vol. 16, No. 3, pp. 345-373.

February 15

*4. Education, wages and the signaling value of education

Andrew Weiss, Human Capital vs. Signaling Explanations of Wages, *The Journal of Economic Perspectives*, Vol. 9, No. 4 (Autumn, 1995), pp. 133-154

John H. Tyler, Richard J. Murnane and John B. Willett. 2000. Estimating the Labor Market Signaling Value of the GED. *The Quarterly Journal of Economics*, Vol. 115, No. 2, pp. 431-468.

Joseph G. Altonji and Charles R. Pierret. 2001. Employer Learning and Statistical Discrimination. *The Quarterly Journal of Economics*, Vol. 116, No. 1, pp. 313-350.

Carolina Arteaga. 2018. The effect of human capital on earnings: Evidence from a reform at Colombia's top university. *Journal of Public Economics*, Volume 157: 212-225.

February 22

5. Production of education and resources for production

Jennifer King Rice and Amy Ellen Schwartz. 2008. Toward an Understanding of Productivity in Education. Ch. 8 in *Handbook of Research in Education Finance and Policy*, edited by Helen F. Ladd and Edward B. Fiske, Routledge, New York, pp. 131-146.

Eric A. Hanushek. 1986. The Economics of Schooling: Production and Efficiency in Public Schools. *Journal of Economic Literature*, Vol. 24, No. 3, pp. 1141-1177.

Alan B. Krueger. 1999. Experimental Estimates of Education Production Functions. *The Quarterly Journal of Economics*, Vol. 114, No. 2, pp. 497-532.

Todd, P., & Wolpin, K. (2003). On the Specification and Estimation of the Production Function for Cognitive Achievement. The Economic Journal, 113(485), F3-F33.

Assignment #1 due: Critique of education production function for framing and guiding education research

March 1

*6. Early childhood education

Drew Bailey, Greg J. Duncan, Candice L. Odgers & Winnie Yu. 2017. Persistence and Fadeout in the Impacts of Child and Adolescent Interventions, *Journal of Research on Educational Effectiveness*, 10:1, 7-39.

Katherine Magnuson, Greg J. Duncan. 2016. Can Early Childhood Interventions Decrease Inequality of Economic Opportunity? *RSF: The Russell Sage Foundation Journal of the Social Sciences*, 2 (2) 123-141.

Jens Ludwig & Douglas L Miller. 2007. Does Head Start Improve Children's Life Chances? Evidence from a Regression Discontinuity Design. *The Quarterly Journal of Economics*, 122(1), pages 159-208.

Lipsey M. W., Weiland C., Yoshikawa H., Wilson S. J., Hofer K. G. (2015). The prekindergarten age-cutoff regression-discontinuity design: Methodological issues and implications for application. *Educational Evaluation and Policy Analysis*, Vol. 37 no. 3: 296-31.

March 8

*7. K-12 education inputs

Greenwald, Rob, Hedges, Larry V.; Laine, Richard D. 1996. The Effect of School Resources on Student Achievement. *Review of Educational Research*, Vol.66 (3), p.361-96.

Chingos, Matthew M. (2013). Class Size and Student Outcomes: Research and Policy Implications, *Journal of Policy Analysis and Management*, 32 (2): 411-438.

Boyd, Donald J., Pamela L. Grossman, Hamilton Lankford, Susanna Loeb and James Wyckoff. 2009. Teacher Preparation and Student Achievement. *Educational Evaluation and Policy Analysis*, Vol. 31, No. 4 (Dec., 2009), pp. 416-440.

Martorell, Paco, Kevin Stange, and Isaac McFarlin Jr, (2016). Investing in schools: capital spending, facility conditions, and student achievement, *Journal of Public Economics*, 140 (2016) 13–29.

Carter, Prudence L., Skiba, Russell, Arredondo, Mariella I, Pollock, Mica. 2017. You Can't Fix What You Don't Look At: Acknowledging Race in Addressing Racial Discipline Disparities. *Urban Education*, Vol.52 (2), p.207-235

Assignment #2: Annotated bibliography and final paper outline due by start of class

March 15

*8. Organization and finance in education

Sean P. Corcoran and William N. Evans. 2008. Equity, Adequacy and the Evolving State Role in Education Finance. Ch. 19 in in *Handbook of Research in Education Finance and Policy*, edited by Helen F. Ladd and Edward B. Fiske, Routledge, New York, pp. 332-356.

C. Kirabo Jackson, Rucker Johnson, Claudia Persico. 2016. The Effect of School Finance Reforms on the Distribution of Spending, Academic Achievement, and Adult Outcomes. The *Quarterly Journal of Economics* (2016), 157–218.

Enrique Alemán, Jr. 2006. Is Robin Hood the "Prince of Thieves" or a Pathway to Equity? Applying Critical Race Theory to School Finance Political Discourse. *Educational Policy*, Volume 20 Number 1: 113-142.

Steven G. Craig, Scott A. Imberman and Adam Perdue. 2015. Do administrators respond to their accountability ratings? The response of school budgets to accountability grades. *Economics of Education Review*, Volume 49, pp. 55–68.

March 22

*9. Education markets, school quality and choice

Ladd, Helen F. 2002. "School Vouchers: A Critical View." *Journal of Economic Perspectives*, 16(4): 3-24.

Caroline M. Hoxby. 2000. Does Competition among Public Schools Benefit Students and Taxpayers? *American Economic Review, Vol. 90, No. 5, pp. 1209-1238*.

Jesse Rothstein Does Competition among Public Schools Benefit Students and Taxpayers? Comment. *American Economic Review*, Vol. 97, No. 5 (Dec., 2007), pp. 2026-2037.

Cullen, Julie Berry, Brian A. Jacob, and Steven Levitt. 2006. The effect of school choice on participants: Evidence from randomized lotteries. *Econometrica* 74.5: 1191-1230.

Atila, Abdulkadiroglu, Parag A. Pathak, and Christopher R. Walters. 2018. Free to Choose: Can School Choice Reduce Student Achievement? *American Economic Journal: Applied Economics*, 10(1): 175–206

March 29

*10. Peer effects and the educational environment

Lazear, Edward P. 2001. Educational Production. *The Quarterly Journal of Economics*, 1 August, Vol.116 (3), pp.777-803.

Steinberg, Matthew P. and Johanna Lacoe. 2018. Reforming School Discipline: School-Level Policy Implementation and the Consequences for Suspended Students and Their Peers. *American Journal of Education*, 125:1, 29-77

Reardon, Sean F., "The widening socioeconomic status achievement gap: new evidence and possible explanations," and Burdick-Will, Julia, Jens Ludwig, Stephen Raudenbush, Robert Sampson, Lisa Sanbonmatsu, and Patrick Sharkey, "Converging Evidence for Neighborhood

Effects on Children's Test Scores: An Experimental, Quasi-Experimental and Observational Comparison," in Greg Duncan & Richard Murnane (Eds.) Whither Opportunity: Rising Inequality, Schools, and Children's Life Chances, New York: Russell Sage, 2011.

Zimmer, Ron W; Toma, Eugenia F. 2000. Peer effects in private and public schools across countries. *Journal of Policy Analysis and Management*, Vol.19(1), pp.75-92.

April 5

*11. Higher education: demand and supply-side economics

Gordon C. Winston. 1999. Subsidies, Hierarchy and Peers: The Awkward Economics of Higher Education. *The Journal of Economic Perspectives*, Vol. 13, No. 1, pp. 13-36.

Shaun R. Harper, Lori D. Patton, Ontario S. Wooden. 2009. Access and Equity for African American Students in Higher Education: A Critical Race Historical Analysis of Policy Efforts. *The Journal of Higher Education*, Volume 80, Number 4, pp. 389-414.

Calcagno, Carlos, Thomas Bailey, Davis Jenkins, Gregory Kienzl, Timothy Leinbach. 2008. Community college student success: What institutional characteristics make a difference? *Economics of Education Review* 27: 632–645.

David J. Deming, Claudia Goldin, and Lawrence F. Katz. 2012. The For-Profit Postsecondary School Sector: Nimble Critters or Agile Predators? *Journal of Economic Perspectives*, Volume 26, Number 1, pp 139–164.

Martha Bailey and Susan Dynarski. 2011. "Inequality in College Entry and Completion" in Greg Duncan & Richard Murnane (Eds.) *Whither Opportunity: Rising Inequality, Schools, and Children's Life Chances*, New York: Russell Sage.

April 12

12. Value-added modeling and evaluating educational effectiveness

Scott Condie, Lars Lefgren and David Sims. 2014. Teacher heterogeneity, value-added and education policy. *Economics of Education Review*, 40: 76–92.

Chetty, Raj, John N. Friedman, and Jonah E. Rockoff. 2014. "Measuring the Impacts of Teachers I: Evaluating Bias in Teacher Value-Added Estimates." *American Economic Review*, 104(9): 2593-2632.

Chetty, Raj, John N. Friedman, and Jonah E. Rockoff. 2014. "Measuring the Impacts of Teachers II: Teacher Value-Added and Student Outcomes in Adulthood." *American Economic Review*, 104(9): 2633-79.

Nicholas A. Bowman, Sanga Kim, Laura Ingleby, David C. Ford and Christina Sibaouih. 2018. Improving College Access at Low-Income High Schools? The Impact of GEAR UP Iowa on Postsecondary Enrollment and Persistence. *Educational Evaluation and Policy Analysis*, Vol. 40, No. 3, pp. 399–419.

Critique of an evaluation of an educational reform/intervention due at the start of class

April 19

13. Education reform and accountability

Jacob, Brian A. 2005. Accountability, incentives and behavior: the impact of high-stakes testing in the Chicago Public Schools. *Journal of Public Economics*, Volume 89, Issue 5, 761–796.

Dee, Thomas S; Jacob, Brian; Schwartz, Nathaniel L 2013. The Effects of NCLB on School Resources and Practices. *Educational Evaluation and Policy Analysis*, vol. 35 no. 2, 252-279.

Hanley Chiang. 2009. How Accountability Pressure on Failing Schools Affects Student Achievement. *Journal of Public Economics*, Volume 93, Issues 9–10, pp. 1045–1057.

Li Feng, David Figlio and Tim Sass 2018. School accountability and teacher mobility. *Journal of Urban Economics*, 103 (2018) 1–17.

April 26

14. Student presentations

Final paper due April 30