

EDUCATION AND GROWTH
Bachelor's Degree in International Studies. UC3M.
Syllabus and Readings
Academic year 2019-2020

I.- Introduction

1.- International indicators in Education

Human capital indicators: Gross and Net enrolment rates, Indicators on educational expenditures and the stock of human capital. Human Development Index.

2.- Education and Economic Growth

Human capital and economic growth: Is there any causal relationship? Is school quality driving countries' economic growth or is it that richer countries have better education systems?

The role of education in technology adoption, growth, and economic convergence.

II.-The Demand for Education

3.- Education Demand

Why do some individuals decide to study after finishing compulsory education? Which are the factors explaining the demand for education?

The Human Capital Model and its implications. Education as a Consumption Good. The Signaling Model. Intergenerational transmission of inequality.

Empirical implications of the models. Determinants of individual education investments: socio-economic background and employment perspectives after graduation.

4.- The Economic Returns to Education

Are there economic returns to investments in education? Are there too many university graduates (over-education)?

Mincer Earnings Equation. Effects of educational attainment on labor market outcomes. Applications.

III.- The Production of Education

5.- Educational Costs

Which are the costs of studying?

Educational Costs and Expenditures. Public and Private Expenditure on Education. Educational Costs Functions. Economies of Scale and Scope in Education.

6.- The Production of Education

How is school quality measured? Which are the factors explaining school quality? How can we explain the fact that two students with the same number of years of education acquire different levels of human capital? Which is the impact on school quality of increasing class size? Which are the determinants of school dropout?

School inputs and student achievement: definitions and measures. International measures. The Determinants of School Quality. Impact of Coleman Report. Education Production functions and estimates using the Value Added Model.

Effects on quality of education of public spending, class size, peer-group effects, teachers' quality, school quality, tracking policies, etc.

IV.- The Financing of Education

7.- The Financing of Compulsory Education

Reasons for state intervention in education: compulsory, free and publicly produce education.

State and Local funding of publicly provided education. School vouchers: models and experiments. Publicly financed Private Education. Equity and Efficiency. School choice issues. Which are the effects of different school systems and school choice programs on equality of opportunity?

8.- The Financing of Higher Education

How may an increase in university fees affect equity and efficiency in higher education?

Fees, scholarships, loans and taxes. International experiences across OECD countries. The Financing of Public Universities.

This syllabus can be found in Aula Global as well as problem sets and class notes on different topics of the course.

Course evaluation: 100% of final grade will come from continuous assessment, as follows:

- 40% of final grade: class presentations by students on the papers/topics proposed by the lecturer for this purpose. The final assignment of papers to students is decided by the lecturer, taking into account students' preferences and an adequate balance of the different topics in the course. In order to make this assignment, students should state their most preferred paper in the way indicated by the lecturer. If the lecturer does not hear from the student by the date and in the way indicated by the lecturer, the student will not be graded in this part of the course. Further information and material about this will be provided through Aula Global.

- 50% of final grade: two mid-term tests to be done in the lecture class and announced in advance.

- 10% of final grade: attendance to the classes and participation with comments and questions in other students' presentations.

Main references:

- Book "Economía de la educación". Editorial Síntesis, Madrid, 2001. M^a Jesús San Segundo.
- References for each topic will be presented in the lectures along the course, covering some parts of the syllabus not included in the book, and they will be uploaded in Aula Global.

Problem sets: problem sets will be uploaded in Aula Global along the course and problem set solving (voluntary) is very useful for the successful completion of the course.

BIBLIOGRAPHY

BOOKS:

- San Segundo (2001), M. "Economía de la Educación", Ed. Síntesis, Madrid.
- Hanushek, E., y F. Welch, editores (2006): "Handbook of the Economics of Education". Volumen 1-5. North Holland.
- Hanushek, E., S. Machin, y L. Woessmann. Editors (2011): "Handbook of the Economics of Education", Volumen 3. North Holland.
- Johnes, G. (1995), "Economía de la Educación", Ministerio de Trabajo y Seguridad Social, Madrid.
- Moreno Becerra, J.L. (1998). "Economía de la Educación", Pirámide, Madrid.
- Oroval, E. y Escardibul, J. (1998), "Economía de la Educación", Oikos Nomos, Ecuentero, Madrid.
- Barr, N. (1996), "Medios de financiación alternativos para la enseñanza superior", en Oroval, E. (editor), *Economía de la Educación*, Ariel.
- Becker, G. S. (1972). "Inversión en formación profesional", en Blaug, M. (ed), *Economía de la Educación*, Tecnos.
- Becker, Gary S. (1964): "Human capital: a theoretical and empirical analysis, with special reference to education". Columbia University Press, New York.
- Blaug, M. (1983). "El status empírico de la teoría del capital humano: una panorámica ligeramente desilusionada", en Toharía, L. (comp.), *El mercado de trabajo: teorías y aplicaciones*, Alianza Universidad Textos.
- Friedman, M. (1962). *Capitalism and Freedom*, The University of Chicago Press.
- Mincer, Jacob (1974): "Schooling, experience and earnings". Columbia University Press, New York.

ARTICLES:

- Aaronson, D., L. Barrow, W. Sander (2007): "Teachers and Student Achievement in the Chicago Public High Schools", *Journal of Labor Economics*, vol. 25, no. 1, pp. 95-135.
- Angrist, Joshua y Alan B. Krueger (1991): "Does compulsory school attendance affect schooling and earnings", *Quarterly Journal of Economics*, 106, 979-1014.
- Angrist, J. and V. Lavy (1999): "Using Maimonides' rule to estimate the effect of class size on scholastic achievement", *Quarterly Journal of Economics*, 114 (2), 533-575.
- Ashenfelter, Orley and Cecilia E. Rouse (1998): "Income, schooling and ability: evidence from a new sample of identical twins", *Quarterly Journal of Economics*, 113, 253-284.
- Blaug, M. (1996). "¿Dónde estamos actualmente en la economía de la educación?", en Oroval, E. (ed), *Economía de la Educación*, Ariel.

- Böhlmark, A., and M. Lindahl (2008): "Does School Privatization Improve Educational Achievement? Evidence from Sweden's Voucher Reform" *IZA Discussion Paper* No. 3691
- Card, David (1993): "Using Geographical Variation in College Proximity to Estimate the Return to Schooling", NBER W.P., n° 4483.
- Card and Krueger (1996): "Labor Market effects of school quality: theory and evidence." *Working paper #357*. Industrial relation section. Princeton University.
- Card y Krueger (1996): "School resources and student outcomes: An overview of the literature and new evidence from North and South Carolina." *The Journal of Economic Perspectives*, vol. 10, n.4, pp. 31-50.
- Chapman (1997) "Conceptual Issues and the Australian Experience with Income Contingent Charges for Higher Education" *The Economic Journal*, 107, 738-751.
- Chetty, Friedman, and Rockoff (2011): "The long-term impacts of teachers: teacher value-added and student outcomes in adulthood". NBER Working Paper 17699.
- Ding, W., and S. F. Lehrer (2007) "Do Peers affect Student Achievement in China's Secondary Schools?", *The Review of Economics and Statistics*, May 2007, 89(2): 300–312.
- Duflo, E., P. Dupas, and M. Kremer (2011): "Peer Effects, Teacher Incentives, and the Impact of Tracking: Evidence from a Randomized Evaluation in Kenya", *American Economic Review*, 101(5): 1739–74.
- Ehrenberg, R. and Smith, R. (1991). *Modern Labor Economics*, 4th. edition, Harper Collins.
- Eckstein, Z. y K. I. Wolpin (1999): "Why Youths Drop Out of High School: The Impact of Preferences, Opportunities, and Abilities", *Econometrica*, 67 (6), 1295-1340.
- Griliches, Zvi (1977), "Estimating the Returns to Schooling: Some Econometric Problems", *Econometrica*, 45, 1-22.
- Griliches, Zvi (1979), "Sibling models and data in economics: beginnings of a survey", *Journal of Political Economy*, 87, S37-S65.
- Gottschalk, P. (1997), "Inequality, Income Growth, and Mobility: The Basic Facts," *Journal of Economic Perspectives*, 11(2), 21–40.
- Hanushek (1986): "The economics of schooling: Production and Efficiency in Public Schools." *Journal of Economic Literature*, 24, 1141-1177.
- Hanushek, E., and L. Woessmann (2008): "The Role of Cognitive Skills in Economic Development" *Journal of Economic Literature*, 46:3, 607-668.
- Hanushek, E., y L. Woessmann (2009): "Do Better Schools Lead to More Growth? Cognitive Skills, Economic Outcomes, and Causation". *NBER Working Paper* No. 14633
- Harmon, Colm y Ian Walker (1995): "Estimates of the economic return to schooling for the United Kingdom", *American Economic Review*, 85, 1278-1286.
- Hoxby, C. (1996): "Are Efficiency and Equity in School Finance Substitutes or Complements?" *Journal of Economic Perspectives* 10, pp. 51-72
- Hsieh C., and M. Urquiola (2006): "The effects of generalized school choice on achievement and stratification: Evidence from Chile's voucher program", *Journal of Public Economics*, 90, 1477-1503.
- Kramarz, F., S. Machin, and A. Ouazad (2009): "What Makes a Test Score? The Respective Contributions of Pupils, Schools and Peers in Achievement in English Primary Education", Centre for the Economics of Education Discussion Papers, *Paper No' CEEDP0102*.
- Krueger (1999): "Experimental Estimates Of Education Production Functions." *The Quarterly Journal of Economics*, MIT Press, vol. 114(2), pages 497-532.
- Maoz, Y.D. and O. Moav (1999). "Intergenerational Mobility and the Process of Development," *Economic Journal*, Royal Economic Society, vol. 109(458), pages 677-97, October.
- Núñez, C. (1992). *La fuente de la riqueza. Educación y Desarrollo Económico en la España Contemporánea*, Alianza.
- OCDE (varios años). *Education at a glance. OECD indicators*, París.

- Rivkin S. G., E. A. Hanushek, and J. F. Kain (2005): "Teachers, Schools, and Academic Achievement", *Econometrica*, Vol. 73, NO.2, pp. 417-458.
- Schultz, T. (1972). "Inversión en capital humano", en Blaug, M. (comp.).
- Stinebrickner, R. and T. R. Stinebrickner (2008): "The Causal Effect of Studying on Academic Performance" *The B.E. Journal of Economic Analysis and Policy*: Vol. 8 (2008): Iss.1 (Frontiers), Article 14.
- Weale, M. (1996), "Una evaluación crítica de los análisis de las tasas de rendimiento", en Oroval, E, (editor), *Economía de la Educación*, Ariel.
- "The Effect of Attending a Small Class in the Early Grades on College-Test Taking and Middle School test Results: Evidence from Project STAR". Krueger and Whitmore (2001), *The Economic Journal*.
- "How Does Your Kindergarten Classroom Affect Your Earnings? Evidence From Project STAR" Chetty, et. al. (2011).
- "The Elite Illusion: Achievement Effects At Boston And New York Exam Schools". Abdulkadiroglu, Angrist, and Pathak (2014), *Econometrica*.
- "Teacher Quality in Educational Production: Tracking, Decay, and Student Achievement ", J. Rothstein (2010). *Quarterly Journal of Economics* 125(1): 175-214.
- "The long-term impacts of teachers: teacher value-added and student outcomes in adulthood", Chetty, Friedman, and Rockoff (2011), NBER Working Paper 17699.
- "Teacher Incentives and Student Achievement: Evidence from New York City Public Schools" R. Fryer, *Journal of Labor Economics*, 31 (2) 373-427, 2013.
- Dobbie and Fryer (2013): "Getting Beneath the Veil of Effective Schools: Evidence from New York City". *American Economic Journals: Applied Economics*.
- Fryer (2014): "Injecting Charter Schools best practices into traditional public schools: evidence from field experiments" *Quarterly Journal of Economics*.
- Fryer R, Dobbie W. (2013) "Getting Beneath the Veil of Effective Schools: Evidence from New York City." *American Economic Journal: Applied Economics*. 2013;5(4):28-60.
- Todd, P, and K. Wolpin (2003) "On The Specification And Estimation Of The Production Function For Cognitive Achievement". *Economic Journal*, 113, F3-F33
- Boardman A., and Richard J. Murnane (1979): "Using Panel Data to Improve Estimates of the Determinants of Educational Achievement". *Sociology of Education*, Vol. 52, No. 2, pp. 113-121.
- Krueger y Whitmore (2001): "The Effect of Attending a Small Class in the Early Grades on College-test Taking and Middle School Test Results: Evidence from Project Star", *The Economic Journal*, Vol. 111, No. 468, pp. 1-28.
- Card, D., and Laura Giuliano (2016): "Can Tracking Raise the Test Scores of High- Ability Minority Students?" *American Economic Review* 106(10): 2783-2816.
- Abdulkadiroglu, Pathak, and Walters (2017): "Free to Choose: Can School Choice Reduce Student Achievement?" *mimeo*. Versión actualizada del NBER Working Paper 21839.
- Hanushek E. A., M. Piopiunik, and S. Wiederhold (2014) "The Value of Smarter Teachers: International Evidence on Teacher Cognitive Skills and Student Performance" NBER Working Paper 20727.
- Jackson, C. K., 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* (2016), 157-218.
- Benhabib, J. and Spiegel, M.M. (1994), "The Role of Human Capital in Economic Development: Evidence from Aggregate Cross-Country Data". *Journal of Monetary Economics*, 34, 143-173.
- Gibbons, S., S. McNally, and M. Viarengo (2018): "Does Additional Spending Help Urban Schools? An Evaluation Using Boundary Discontinuities". *Journal of the European Economic Association* 16(5):1618-1668.