

Eric A. Hanushek

Paul and Jean Hanna Senior Fellow
Stanford University

Contact

Hoover Institution Stanford
University Stanford, CA 94305
(650) 722-1600
e-mail: hanushek@stanford.edu
home page: <https://hanushek.stanford.edu>

Education

1965 B.S. (Distinguished Graduate) U.S. Air Force Academy
1968 Ph.D. (Economics) Massachusetts Institute of Technology Thesis:
"The Education of Negroes and Whites"

Learned Societies

American Economic Association
American Education Finance Association
(Board of Directors, 2006-2009)
Association for Public Policy Analysis and Management
(Policy Council, 1981-85; vice president, 1986-87; president, 1988-89) Econometric Society
Society of Labor Economists (Fellow, 2006)
American Educational Research Association (Fellow, 2008-)
International Institute of Public Finance

Honors

- Yidan Prize for Education Research, 2021
- Fellow, International Academy of Education, 1997 (Board of Directors, 2002- 2008)
- Fellow, Society of Labor Economists, 2006
- Member, National Academy of Education, 2006
- Fellow, American Educational Research Association, 2008
- Fordham Prize for Excellence in Education (distinguished scholarship), 2004

Military Experience

1965-74 US Air Force (Captain)

Academic Experience

2000-	Paul and Jean Hanna Senior Fellow, Hoover Institution, Stanford University <ul style="list-style-type: none">• Professor (by courtesy) of Education (2001-)• Senior Fellow (by courtesy), Stanford Center for International Development [SCID], Stanford Institute for Economic Policy Research [SIEPR], (2003-2023)• Professor (by courtesy) of Economics (2004-2007)
2023-	Founder, Africa Fellows in Education Program , Global Education Analytics Institute
2020-	Member, Council of Luminaries, Yidan Foundation
2019-	Chairman, Hoover Education Success Initiative, Stanford University
2019-	Co-Director, International Comparative Educational Policy Laboratory, ifo Institute
2003-	Chairman, Executive Board, Texas Schools Project, University of Texas at Dallas
2000-2024	Senior Research Fellow, University of Texas at Dallas
1995-	Research Associate, National Bureau of Economic Research
2006-	Research Professor, Ifo Institute for Economic Research (University of Munich)
2013-	Research Fellow, IZA Institute of Labor Economics
2008-	Member, Management Team, Center for Analysis of Longitudinal Data in Education Research (CALDER)
2008-	Area coordinator, Economics of Education, CESifo Research Network
2017-2018	John H. Makin Visiting Scholar, American Enterprise Institute (AEI)
2013-2016	Member, Council of Academic Advisers, American Enterprise Institute
1999-2015	Member, Koret Task Force on K-12 Education, Hoover Institution, Stanford University
2006-2008	Member, Scientific Advisory Council, Ifo Institute for Economic Research
1978-2000	Professor of Economics and Political Science, University of Rochester <ul style="list-style-type: none">• Founding Director, W. Allen Wallis Institute of Political Economy (1991-99)• Professor of Public Policy (1992-2000)• Senior Research Associate, Rochester Center for Economic Research (1984-2000; Director, 1994-99)• Chairman, Department of Economics (1982-87; 1988-90; 1991-93)
1999-2000	Distinguished Visiting Fellow, Hoover Institution, Stanford University
1994	Visiting Fellow, Australian National University
1975-1978	Associate Professor, Department of Economics and Institution for Social and Policy Studies, Yale University
1974	Lecturer, Virginia Polytechnic Institute (Reston Campus)
1968-1973	Associate Professor of Economics, U.S. Air Force Academy (Assistant Professor, 1969-71; Instructor, 1968-69)
1970-1971	Research Associate, J.F. Kennedy School of Government, Harvard University

Government Experience

2019-2023	Member, National Assessment Governing Board
2011-2013	Commissioner, Equity and Excellence Commission , U.S. Department of Education
2004-2010	Member, Board of Directors, National Board for Education Sciences Chair, 2008-2010

2008-2010	Member, Council of Economic Advisors, California
2007	Member, Governor's Commission for a College Ready Texas, Texas
2006	Chair, NCLB Growth Model Pilot Peer Review, U.S. Department of Education
2005-2008	Member, Governor's Committee on Education Excellence , California
2002-2006	Member, Independent Review Panel, National Assessment of Title I, U.S. Department of Education
2001-2005	Member, NCES Finance Technical Review Committee, U.S. Department of Education
2002	Member, Advisory Council on Education Statistics, U.S. Department of Education
1994-1998	Member, Board of Economic Advisors, New York State Assembly
1994-1995	Member, Technical Panel on Trends and Issues in Retirement Savings, Advisory Council on Social Security
1987-1995	Consultant, U.S. Department of Education
1986-1989	Consultant, U.S. Commission on Civil Rights
1987-1989	Chairman, Technical Advisory Panel, Congressional Budget Office
1985-1987	Member, Panel of Economic Advisers, Congressional Budget Office
1983-1985	Deputy Director, Congressional Budget Office
1974	Systems Analyst, Military Airlift Command, U.S. Air Force
1973-1974	Senior Economist, Cost of Living Council
1971-1972	Senior Staff Economist, Council of Economic Advisers

Other Experience

2023	President, Global Education Analytics Institute
2015-	Global Economic Adviser, LearnCapital
2011-2015	Director, CollegeSpring (formerly SEE College Prep)
2010-2015	Member, Education Reform Advisory Group, George W. Bush Institute
2010-2015	Director, GreatSchools
2007-2015	Member, Review Board for Broad Prize for Urban Education
2007	Member, Committee on Social Science Research Evidence on Racial Diversity in Schools , National Academy of Education
2000-2001	Member, Committee on Scientific Principles of Education Research , National Academy of Sciences/National Research Council
2000	Member, Historic Preservation Commission, Town of Brighton, NY
1998-2001	Member, Panel on Data and Methods for Measuring the Effects of Changes in Social Welfare Programs , National Academy of Sciences/National Research Council
1992-1998	Member, Committee on National Statistics, National Academy of Sciences/National Research Council
1993-1997	Chairman, Panel on Retirement Income Modeling , National Academy of Sciences/National Research Council
1990-1994	Chairman, Panel on the Economics of Educational Reform (PEER)

1984-1995	Consultant, The World Bank
1992	Chairman, Blue Ribbon Commission on Monroe County Finances, Monroe County, NY
1988-1991	Chairman, Panel to Evaluate Microsimulation Models for Social Welfare Programs , National Academy of Sciences/National Research Council
1977-1983	Consultant, Mathematica Policy Research
1976-1978	Member, Mayor's Task Force on Education, New Haven, CT
1975-1977	Senior Research Associate, Institute for Demographic and Economic Studies
1975-1977	Consultant, Abt Associates
1972-1974	Member, RFF-Academy for Contemporary Problems, Metropolitan Governance Research Committee
1969-1973	Consultant, The Rand Corporation

Invited Lectures

Goldsmith Lecture, Australian National University, 2023

IIMA-SRK Annual Lecture, Indian Institute of Management Ahmedabad, 2020

Leaders and Luminaries Lecture, University of Texas at Dallas, 2019

City University Distinguished Lecture, City University of Hong Kong, 2018

Spring Distinguished Speaker, Crane Center, The Ohio State University, 2016

Vilfredo Pareto Lecture, Collegio Carlo Alberto, 2013

Harris Lecture, Clemson University, 2013

Waino Pihl Lecture, Wayne State University, 2012

Distinguished Scholar Lecture, Martin School of Public Policy, University of Kentucky, 2010

Giblin Lecture, University of Tasmania, 2009

Hannah Lecture, Michigan State University, 2009

Gilbert Memorial Lecture, University of Rochester, 2008

Spencer Foundation Distinguished Lecture, Association for Public Policy Analysis and Management, 2005

Sweat Lecture, Georgia State University, 2005

Birger Lecture, Tufts University, 2005

Lee Hysan Lecture, Chinese University of Hong Kong, 2004

Askwith Lecture, Harvard University, 2003

Reilly Lecture, Louisiana State University, 2002

Mullen Lecture, University of Maryland, Baltimore County, 1999

Saks Memorial Lecture, Vanderbilt University, 1996

Editorial Activities

2024-	Editorial Board, AEFP Live Handbook
2016-	Editorial Board, <i>Chinese Economics of Education Review</i>
2015-	Editorial Advisory Board, <i>Journal of Professional Capital and Community</i>
2007-	Associate Editor, <i>Journal of Human Capital</i>
2005-	Editorial Board, <i>Education Finance and Policy</i>
2000-	Editorial Board, <i>Education Next</i>
1982-	Editorial Board, <i>Economics of Education Review</i>
2013-2024	Co-Editor, <i>CESifo Economic Studies</i>
1978-2015	Advisory Editor, <i>Social Science Research</i>
2004-2010	Co-editor, <i>Education Policy Series</i> , International Academy of Education/International Institute for Educational Planning, UNESCO
2002-2008	Editorial Board, <i>Fundamentals of Educational Planning</i> , UNESCO
2003-2007	Associate Editor, <i>Economic Bulletin</i>
1995-2002	Associate Editor, <i>Review of Economics and Statistics</i>
1997-2001	Editorial Board, <i>Educational Evaluation and Policy Analysis</i>
1994-2001	Editorial Board, <i>Journal of Policy Analysis and Management</i>
1994-1996	Editorial Board, <i>Socio-Economic Planning Sciences</i>
1991-1997	Associate Editor, <i>Regional Science and Urban Economics</i>
1990-1995	Editorial Board, <i>Journal of Economic Education</i>
1992-1995	Advisory Board, <i>American Journal of Education</i>
1990-1994	Co-editor, <i>Journal of Human Resources</i>
1987-1989	Associate Editor, <i>Evaluation Review</i>

Publications

Books and Monographs

[Handbook of the Economics of Education, Volume 7](#). (co-editor with Stephen J. Machin and Ludger Woessmann). Amsterdam: North Holland. 2023.

[Handbook of the Economics of Education, Volume 6](#). (co-editor with Stephen J. Machin and Ludger Woessmann). Amsterdam: North Holland. 2023.

[Handbook of the Economics of Education, Volume 5](#). (co-editor with Stephen J. Machin and Ludger Woessmann). Amsterdam: North Holland. 2016.

[Universal Basic Skills: What countries stand to gain](#). (with Ludger Woessmann). Paris: OECD Publishing, 110 pages. 2015.

[The Knowledge Capital of Nations: Education and the Economics of Growth](#). (with Ludger Woessmann). Cambridge, MA: MIT Press, 262 pages. 2015.

[Endangering Prosperity: A Global View of the American School](#). (with Paul E. Peterson and Ludger Woessmann). Washington, DC: Brookings Press, 147 pages. 2013.[Handbook of the Economics of Education, Volume 4](#). (co-editor with Stephen J. Machin and Ludger Woessmann). Amsterdam: North Holland, 708 pages. 2011.

[Handbook of the Economics of Education, Volume 3](#). (co-editor with Stephen J. Machin and Ludger

Woessmann). Amsterdam: North Holland, 616 pages. 2010.

[**Schoolhouses, Courthouses, and Statehouses: Solving the Funding-Achievement Puzzle in America's Public Schools**](#). (with Alfred A. Lindseth). Princeton University Press, 432 pages. 2009.

[**Handbook of the Economics of Education, Volume 2**](#). (co-editor with Finis Welch). Amsterdam: North Holland, 742 pages. 2006.

[**Handbook of the Economics of Education, Volume 1**](#). (co-editor with Finis Welch). Amsterdam: North Holland, 700 pages. 2006.

[**Courting Failure: How School Finance Lawsuits Exploit Judges' Good Intentions and Harm our Children**](#). (editor). Stanford: Education Next Books, 366 pages. 2006.

[**Institutional Models in Education: Legal Framework and Methodological Aspects for a New Approach to the Problem of School Governance**](#). (co-editor with Enrico Gori, Daniele Vidoni and Charles Glenn). Nijmegen, Netherlands: Wolf Legal Publishers, 243 pages. 2006.

[**The Economics of Schooling and School Quality - Volume II: Efficiency, Competition, and Policy**](#). (editor). London: Edward Elgar Publishing Ltd.. 2003.

[**The Economics of Schooling and School Quality - Volume I: Labor Markets, Distribution, and Growth**](#). (editor). London: Edward Elgar Publishing Ltd., 976 pages. 2003.

[**Assessing Policies for Retirement Income: Needs for Data, Research, and Models**](#). (co-editor with Constance F. Citro). Washington, DC: National Academy Press, 256 pages. 1997.

[**Improving America's Schools: The Role of Incentives**](#). (co-editor with Dale W. Jorgenson). Washington, DC: National Academy Press, 280 pages. 1996.

[**Assessing Knowledge of Retirement Behavior**](#). (co-editor with Nancy L. Maritato). Washington, DC: National Academy Press, 288 pages. 1996.

[**Modern Political Economy: Old Topics, New Directions**](#). (co-editor with Jeffrey S. Banks). New York: Cambridge University Press, 283 pages. 1995.

[**Making Schools Work: Improving Performance and Controlling Costs**](#) Washington, DC: The Brookings Institution, 200 pages. 1994.

[**Educação Rural: Lições do Edurural**](#). (with João Batista F. Gomes Neto, Ralph W. Harbison, and Raimundo Hélio Leite). São Paulo: Editora da Universidade de São Paulo, 236 pages. 1994.

[**Educational Performance of the Poor: Lessons from Rural Northeast Brazil**](#). (with Ralph W. Harbison). New York: Oxford University Press, 362 pages. 1992.

[**Improving Information for Social Policy Decisions: The Uses of Microsimulation Modeling - Volume II: Technical Papers**](#). (co-editor with Constance F. Citro). Washington, DC: National Academy Press, 368 pages. 1991.

[**Improving Information for Social Policy Decisions: The Uses of Microsimulation Modeling - Volume I: Review and Recommendations**](#). (co-editor with Constance F. Citro). Washington, DC: National Academy Press, 360 pages. 1991.

[**Statistical Methods for Social Scientists**](#). (with John E. Jackson). New York: Academic Press, 374 pages. 1977.

[**Education and Race: An Analysis of the Educational Production Process**](#) Lexington, MA:D.C. Heath, 176 pages. 1972.

Articles

[The Effects of Comprehensive Educator Evaluation and Pay Reform on Achievement.](#) (with Jin Luo, Andrew Morgan, Minh Nguyen, Ben Ost, and Steven G. Rivkin, Ayman Shakeel). *Journal of Urban Economics*. Forthcoming.

[Attracting and Retaining Highly Effective Educators in Hard-to-Staff Schools.](#) (with Andrew J. Morgan, Minh Nguyen, Ben Ost, and Steven G. Rivkin). *American Economic Journal: Economic Policy*. Forthcoming.

[The Future of U.S. Education \(and the Country\): Thomas Sowell on Education.](#) In Steven J. Davis and Glenn Loury (ed.). *The Sowell Legacy: Ideas, Impact, And Intellectual Freedom*, Hoover Institution Press. Forthcoming.

[The Pandemic in Perspective: US Learning Losses in the Twenty-First Century.](#) *Hoover Education Success Initiative*. September 2025.

[Patience and Subnational Differences in Human Capital: Regional Analysis with Facebook Interests.](#) (with Lavinia Kinne, Pietro Sancassani, and Ludger Woessmann). *Economic Journal*. September 2025.

[State Differences in Pathways to School Leadership and in Achievement Growth.](#) (with Steven G. Rivkin, Wes Austin, Bengie Chen, Dan Goldhaber, Kris Holden, Cory Koedel, Helen Ladd, Jin Luo, Eric Parsons, Gregory Phelan, Tim Sass, and Mavzuna Tureava). *Economics of Education Review*. September 2025.

[Understanding Trends in Chinese Skill Premiums, 2007-2018.](#) (with Yuan Wang and Lei Zhang). *Journal of Comparative Economics*, 53 (June), 584–608. June 2025.

[School Finance and the Courts: Equity and Adequacy.](#) In Douglas N. Harris (ed.). *AEFP Live Handbook*. March 2025.

[Age and Cognitive Skills: Use It or Lose It.](#) (with Lavinia Kinne, Frauke Withöft, and Ludger Woessmann). *Science Advances*, 11(10). March 2025.

[The Power of Performance Pay: Smarter teacher retention and accelerated student achievement in Dallas.](#) (with Minh Nguyen, Ben Ost, and Steven Rivkin). *Education Next*, 25(2). February 2025.

[United States: The Size and Variation of the Pandemic Learning Losses.](#) (with Bradley Strauss). In Nuno Crato and Harry Patrinos (ed.). *Improving National Education Systems After COVID-19: Moving Forward After PIRLS 2021 and PISA 2022*, Springer, 189-203. October 2024.

[Toward a Potential Grand Bargain for the Nation.](#) (with G. William Hoagland, Douglas Holtz-Eakin, Glenn Hubbard, Maya MacGuineas, Richard V. Reeves, Robert D. Reischauer, Gerard Robinson, Isabell V. Sawhill, Diane Schanzenbach, Richard Schmalensee, Michael R. Strain, and C. Eugene Steuerle). *Grand Bargain Committee*. July 2024.

[Contexts of Convenience: Generalizing from Published Evaluations of School Finance Policies.](#) (with Danielle V. Handel). *Evaluation Review*, 48(3), 461–494. June 2024.

[Testing.](#) (with Annika B. Bergbauer and Ludger Woessmann). *Journal of Human Resources*, 59(2), 349-388. 2024

[A Global Perspective on US Learning Losses.](#) (with Bradley Strauss). *Hoover Education Success Initiative*. February 2024.

[Global Universal Basic Skills: Current Deficits and Implications for World Development.](#) (with Sarah Gust and Ludger Woessmann). *Journal of Development Economics*, 166, 103205. January 2024.

[Performance Information and Personnel Decisions in the Public Sector: The Case of School Principals.](#) (with Julie Berry Cullen, Gregory Phelan, and Steven G. Rivkin). *Journal of Human Resources*, 59(1). January 2024.

[Some Evolving Issues in K–12 Education](#). In Michael J. Boskin (ed.). *American Federalism Today: Perspectives on Political and Economic Governance*, 179–202. January 2024.

[Fixing Schools Through Finance](#). In Stephen L. Bowen and Margaret E. Raymond (ed.). *A Nation at Risk* +40, Stanford, CA: Hoover Institution, 161–179. December 2023.

[Incidence and Outcomes of School Finance Litigation: 1968–2021](#). (with Matthew Joyce-Wirtz). *Public Finance Review*, 56(6), 741–781. November 2023.

[Academic mobility in U.S. public schools: Evidence from nearly 3 million students](#). (with Wes Austin, David Figlio, Dan Goldhaber, Tara Kilbride, Cory Koedel, Jaeseok Sean Lee, Jin Lou, Umut Özek, Eric Parsons, Steven G. Rivkin, Tim R. Sass, Katharine O. Strunk). *Journal of Public Economics*, 228, 105016. November 2023.

[U.S. School Finance: Resources and Outcomes](#). (with Danielle Victoria Handel) in Eric A. Hanushek, Stephen Machin and Ludger Woessmann (ed.). *Handbook of the Economics of Education*, Vol. 7, Amsterdam: North Holland, 143–226. August 2023.

[The Economic Cost of the Pandemic: State by State](#). Hoover Education Success Initiative. January 2023.

[Long-run Trends in the U.S. SES-Achievement Gap](#). (with Jacob D. Light, Paul E. Peterson, Laura M. Talpey, and Ludger Woessmann). *Education Finance and Policy*, 17(4), 608–640. October 2022.

[Patience, Risk-Taking, and Human Capital Investment across Countries](#). (with Lavinia Kinne, Philipp Lergetporer, and Ludger Woessmann). *Economic Journal*, 132 (646), pp. 2290–2307. May 2022.

[The Basic Skills Gap](#). (with Ludger Woessmann). *Finance & Development*, 59(2), pp. 50–53. April 2022.

[Residential Location and Education in the United States](#). (with Kuzey Yilmaz). In Charles K.Y. Leung (ed.). *Handbook of Real Estate and Macroeconomics*, Edward Elgar Publishing, pp. 106–136. April 2022.

[The Political Economy of ILAs in Education: The Role of Knowledge Capital in Economic Growth](#). (with Ludger Woessmann). *International Handbook of Comparative Large-Scale Studies in Education*, Springer. November 2021.

[Budgeting During and For Recovery](#). In Margaret E. Raymond (ed.). *How to Improve our Schools in the Post-COVID Era*, Stanford, CA: Hoover Institution. May 2021.

[Does the World Change for Teachers?](#) In Margaret E. Raymond (ed.). *How to Improve our Schools in the Post-COVID Era*, Stanford, CA: Hoover Institution. May 2021.

[Addressing Cross-national Generalizability in Educational Impact Evaluation](#). *International Journal of Educational Development*, 80, 102318. January 2021.

[United States: The Uphill Schools' Struggle](#). In Nuno Crato (ed.). *Improving a Country's Education: PISA 2018 Results in 10 Countries*, Cham, Switzerland: Springer, pp. 227–247. December 2020.

[The Economic Impacts of Learning Losses](#). (with Ludger Woessmann). *Organisation for Economic Co-operation and Development*. September 2020.

[Test-Based Accountability in Distressed Times](#). (with Chester E. Finn Jr.). *The State Education Standard*, September 20(3), pp. 13–17. September 2020.

[A quantitative look at the economic impact of the European Union's educational goals](#). (with Ludger Woessmann). *Education Economics*, 28(3), 225–244. May 2020.

[Education, Knowledge Capital, and Economic Growth](#). (with Ludger Woessmann). In Steve Bradley and Colin Green (ed.). *Economics of Education*, 2nd Edition, London: Academic Press, pp. 171–182. February 2020.

[The Unavoidable: Tomorrow's Teacher Compensation](#). Hoover Education Success Initiative. January 2020. December 2025

[Quality Education and Economic Development](#). In Brajesh Panth and Rupert Maclean (ed.). *Anticipating and Preparing for Emerging Skills and Jobs: Key Issues, Concerns, and Prospects*, Singapore: Springer, pp. 25-32. January 2020.

[Education Production Functions](#). in Steve Bradley and Colin Green (ed.). *Economics of Education*, 2nd Edition , London: Academic Press, pp. 161-170. January 2020.

[The Value of Smarter Teachers: International Evidence on Teacher Cognitive Skills and Student Performance](#). (with Marc Piopiunik and Simon Wiederhold). *Journal of Human Resources*, 54(4), pp. 857-899. December 2019.

[Knowledge Capital and Economic Growth](#). (with Ludger Woessmann). In Rolf Becker (ed.). *Research Handbook on the Sociology of Education*, Cheltenham, UK: Edward Elgar Publishing, pp. 476-497. October 2019.

[The Fall of Educational Productivity and Policy Paralysis](#). In Lindsay M. Burke and Jonathan Butcher (ed.). *The Not-So-Great Society*, Washington, DC: Heritage Foundation, pp. 45-51. October 2019.

[The Achievement Gap Fails to Close: Half Century of testing shows persistent divide between haves and have-nots](#). (with Paul E. Peterson, Laura M. Talpey, and Ludger Woessmann). *Education Next*, 19(3), pp. 8-17. May 2019.

[Testing, Accountability and the American Economy](#). *ANNALS of the American Academy of Political and Social Science*, 683, 110-128. May 2019.

[Do Smarter Teachers Make Smarter Students? International Evidence on Teacher Cognitive Skills and Student Performance](#). (with Marc Piopiunik and Simon Wiederhold). *Education Next*, 19(2) , pp. 57-64. February 2019.

[Volkswirtschaftliche Folgen von Bildungsarmut: Was ein Entwicklungsziel „Grundkompetenzen für alle“ erreichen könnte](#). (with Ludger Woessmann). In Gudrun Quenzel and Klaus Hurrelmann (ed.). *Handbuch Bildungsarmut*, Springer VS, pp. 547-554. January 2019.

[Education and the Growth-Equity Trade-off](#). In Charles Hulten and Valerie Ramey (ed.). *Education, Skills and Technical Change: Implications for Future U.S. GDP Growth*, Chicago: University of Chicago Press, pp. 293-312. January 2019.

[Missouri's Economic Future Lies with School Reform](#). *Missouri Policy Journal*, 6, pp. 23- 38. June 2018.

[Economic Gains from Educational Reform by US States](#). (with Jens Ruhose and Ludger Woessmann). *Journal of Human Capital*, 11(4), pp. 447-486. December 2017.February 2017.

[For Long Term Economic Development, Only Skills Matter](#). *IZA World of Labor*, 343. January 2017.

[Skills, Mobility, and Growth](#). (with Ludger Woessmann). In Alexandra Brown, David Buchholz, Daniel Davis, and Arturo Gonzalez (ed.). *Economic Mobility: Research & Ideas on Strengthening Families, Communities & the Economy*, St. Louis, MO: Federal Reserve Bank of St. Louis and the Board of Governors of the Federal Reserve System, pp. 423-449. December 2016.

[School Resources and Student Achievement: A Review of Cross-Country Economic Research](#). (with Ludger Woessmann). In Monica Rosén, Kajsa Yang Hansen, and Ulrika Wolff (ed.). *Cognitive Abilities and Educational Outcomes: A Festschrift in Honour of Jan-Eric Gustafsson*, Springer, pp. 149-171. December 2016.

[Dynamic Effects of Teacher Turnover on the Quality of Instruction](#). (with Steven G. Rivkin and Jeffrey C. Schiman). *Economics of Education Review*, 55, pp. 132-148. December 2016.

[Will more higher education improve economic growth?](#) *Oxford Review of Economic Policy*, 32(4), pp. 538-552. October 2016.

[Education Reform](#). In Scott W. Atlas, Jesús Fernández-Villaverde, Eric A. Hanushek, Edward P. Lazear, Lee Ohanian, Joshua D. Rauh, and Frank A. Wolak. *Economic Policy Challenges Facing California's Next*

Governor, Stanford, CA: Hoover Institution Press, pp. 19-23. October 2016.

[Education and the Nation's Future](#). In George P. Shultz (ed.). Blueprint for America, Stanford, CA: Hoover Institution Press, pp. 89-108. July 2016.

[It Pays to Improve School Quality](#). (with Jens Ruhose and Ludger Woessmann). Education Next, 16(3) , pp. 16-24. June 2016.

[Knowledge Capital, Growth, and the East Asian Miracle](#). (with Ludger Woessmann). Science, 351(6271), pp. 344-345. January 2016.

[What Matters for Achievement: Updating Coleman on the Influence of Families and Schools](#). Education Next, 16(2), pp. 22-30. January 2016.

[School human capital and teacher salary policies](#). Journal of Professional Capital and Community, 1(1), pp. 23-40. January 2016.

[The Preschool Debate: Translating Research into Policy](#). In Ingrid Gould Ellen, Edward L. Glaeser, Eric A. Hanushek, Matthew E. Kahn, and Aaron M. Renn. The Next Urban Renaissance: How Public-Policy Innovation and Evaluation Can Improve Life in America's Cities, New York: Manhattan Institute for Policy Research, pp. 25-40. September 2015.

[Land Use Controls, Fiscal Zoning, and the Local Provision of Education](#). (with Kuzey Yilmaz). Public Finance Review, 49(5), pp. 559-585. September 2015.

[Why Standard Measures of Human Capital are Misleading](#). KDI Journal of Economic Policy, 37(2), pp. 22-39. June 2015.

[The Economic Impact of Educational Quality](#). (with Ludger Woessmann). In Pauline Dixon, Steve Humble, and Chris Counihan (ed.). Handbook of International Development and Education, Cheltenham, UK: Edward Elgar Publishing, pp. 6-19. May 2015.

[Economics of Education](#). In Paul B. Baltes and Neil J. Smelser (ed.). International Encyclopedia of the Social and Behavioral Sciences, vol. 6, Amsterdam: Elsevier Science, pp. 4200-4208. April 2015.

[Returns to Skills around the World: Evidence from PIAAC](#). (with Guido Schwerdt, Simon Wiederhold, and Ludger Woessmann). European Economic Review, 73, pp. 103-130. January 2015.

[Finding the Right Focus](#). In María de Ibarrola and D.C. Phillips (ed.). Leaders in Educational Research, Rotterdam: Sense Publishers, pp. 93-105. September 2014.

[Achievement Gap](#). In Denis C. Phillips (ed.). Encyclopedia of Educational Theory and Philosophy, Los Angeles: SAGE Reference, pp. 4-7. June 2014.

[Is Location Fate? Distributional Aspects of Schooling](#). In Gregory K. Ingram and Daphne A. Kenyon (ed.). Education, Land, and Location, Cambridge, MA: Lincoln Institute of Land Policy, pp. 25-61. June 2014.

[U.S. Students from Educated Families Lag in International Tests](#). (with Paul E. Peterson and Ludger Woessmann). Education Next, 14(4), pp. 8-18. May 2014.

[Institutional Structures of the Education System and Student Achievement: A Review of Cross-country Economic Research](#). (with Ludger Woessmann). In Rolf Strietholt, Wilfried Bos, Jan-Eric Gustafsson, and Monica Rosen (ed.). Educational Policy Evaluation through International Comparative Assessments, Munster, Germany: Waxman, pp. 145-175. April 2014.

[Borrowing Constraints, College Aid, and Intergenerational Mobility](#). (with Charles Ka Yui Leung and Kuzey Yilmaz). Journal of Human Capital, 8(1), pp. 1-41. March 2014.

[Boosting Teacher Effectiveness](#). In Chester E. Finn Jr. and Richard Sousa (ed.). What lies ahead for America's

children and their schools, Stanford, CA: Hoover Institution Press, 23-35. January 2014.

[School resources and educational outcomes in developing countries: A review of the literature from 1990 to 2010.](#) (with Paul W. Glewwe, Sarah D. Humpage, and Renato Ravina). In Paul Glewwe (ed.). *Education Policy in Developing Countries*, Chicago: University of Chicago Press, pp. 13-64. December 2013.

[Economic Growth in Developing Countries: The Role of Human Capital.](#) *Economics of Education Review*, 37, pp. 204–212. December 2013.

[Schools and location: Tiebout, Alonso, and governmental finance policy.](#) (with Kuzey Yilmaz). *Journal of Public Economic Theory*, 15(6), pp. 829-855. December 2013.

[Financing Schools.](#) In John Hattie and Eric M. Anderman (ed.). *International Guide to Student Achievement*, New York: Routledge, pp. 134-136. October 2013.

[Does School Autonomy Make Sense Everywhere? Panel Estimates from PISA.](#) (with Susanne Link and Ludger Woessmann). *Journal of Development Economics*, 104, pp. 212-232. September 2013.

[School Leaders Matter: Measuring the impact of effective principals.](#) (with Gregory F. Branch and Steven G. Rivkin). *Education Next*, 13(1), pp. 62-69. January 2013.

[Do Better Schools Lead to More Growth? Cognitive Skills, Economic Outcomes, and Causation.](#) (with Ludger Woessmann). *Journal of Economic Growth*, 17(4), pp. 267-321. December 2012.

[The Cost of Ignorance.](#) In Norberto Bottani and Daniele Checchi (Ed.). *La Sfida Della Valutazione*, Bolgna, IT: Società Editrice il Mulino, pp. 39-46. November 2012.

[Schooling, Educational Achievement, and the Latin American Growth Puzzle.](#) (with Ludger Woessmann). *Journal of Development Economics*, 99(2), pp. 497-512. November 2012.

[Is the U.S. catching up? International and state trends in student achievement.](#) (with Paul E. Peterson and Ludger Woessmann). *Education Next*, 12(4), pp. 24-33. September 2012. [The Distribution of Teacher Quality and Implications for Policy.](#) (with Stephen G. Rivkin). *Annual Review of Economics*, 4, pp. 131-157. September 2012.

[The Role of International Assessments of Cognitive Skills in the Analysis of Growth and Development.](#) (with Ludger Woessmann), In Matthias von Davier, Eugenio Gonzalez, Irwin Kirsch, and Kentaro Yamamoto (Ed.). *The Role of International Large-Scale Assessments: Perspectives from Technology, Economy, and Educational Research*, Dordrecht, Netherlands: Springer, pp. 47-65. August 2012.

[Achievement growth: International and state trends in student achievement.](#) (with Paul E. Peterson and Ludger Woessmann). PEPG Report No. 12-03. July 2012.

[Education quality and economic growth.](#) (with Ludger Woessmann). World Bank, Washington, DC, 27 pages. May 2012.

[A flawed analysis of unrepresentative state achievement data.](#) *Educational Policy*, 26(3), pp. 360-368. May 2012.

[Grinding the Antitesting Ax: More bias than evidence behind NRC panel's conclusions.](#) *Education Next*, pp. 49-55. March 2012.

[The Economic Benefit of Educational Reform in the European Union.](#) (with Ludger Woessmann). *CESifo Economic Studies*, 58(1), pp. 73–109. January 2012.

[Urban education, location, and opportunity in the United States.](#) (with Kuzey Yilmaz). In Nancy Brooks, Kieran Donaghy, and Gerrit-Jan Knaap (ed.). *Oxford Handbook of Urban Economics and Planning*, Oxford: Oxford University Press, pp. 583-615. September 2011.

[Are U.S. Students Ready to Compete?](#) (with Paul E. Peterson, Ludger Woessmann, and Carlos Xabel Lastra-

Anadón). *Education Next*, 11(4), pp. 51-59. September 2011.

[Private Schools and Residential Choices: Accessibility, Mobility, and Welfare](#). (with Sinan Sarpça and Kuzey Yilmaz). *B.E. Journal of Economic Analysis & Policy (Contributions)*, 11(1) article 44, pp. 1-32. August 2011.

[Globally Challenged: Are U.S. Students Ready to Compete?](#) (with Paul E. Peterson, Ludger Woessmann, and Carlos Xabel Lastra-Anadón). *PEPG Report No. 11-03*, Cambridge, MA: Program on Education Policy and Governance, Harvard University. August 2011.

[How Much Do Educational Outcomes Matter in OECD Countries?](#) (with Ludger Woessmann). *Economic Policy*, 26(67), pp. 427-491. July 2011.

[Valuing Teachers: How Much is a Good Teacher Worth?](#) *Education Next*, 11(3), pp. 40-45. June 2011. [The Economic Value of Higher Teacher Quality](#). *Economics of Education Review*, 30(3), pp. 466-479. June 2011.

[Teaching Math to the Talented: Which Countries - and States - are Producing High-Achieving Students?](#) (with Paul E. Peterson and Ludger Woessmann). *Education Next*, pp. 10-18. April 2011.

[Paying Teachers Appropriately](#). In Darrel Drury and Justin Baer (ed.). *The American Public School Teacher: Past, Present, and Future*, (Cambridge, MA: Harvard Education Press), pp. 109-118. March 2011.

[Sample Selectivity and the Validity of International Student Achievement Tests in Economic Research](#). (with Ludger Woessmann). *Economics Letters*, 110(2), pp. 79-82. February 2011.

[The Economics of International Differences in Educational Achievement](#). (with Ludger Woessmann) in Eric A. Hanushek, Stephen Machin and Ludger Woessmann (ed.). *Handbook of the Economics of Education*, Vol. 3, Amsterdam: North Holland, pp. 89-200. January 2011.

[How well do we understand achievement gaps?](#) *Focus*, 27(2), pp. 5-12. December 2010.

[U.S. Math Performance in Global Perspective: How Well Does Each State Do at Producing High-Achieving Students?](#). (with Paul E. Peterson and Ludger Woessmann). *PEPG Report No. 10-19*, Cambridge, MA: Program on Education Policy and Governance, Harvard University. November 2010.

[An Evidence-Based World](#). In Koret Task Force. *American Education in 2030: An Assessment by Hoover Institution's Koret Task Force on K-12 Education*, Stanford, CA: Hoover Institution. October 2010.

[The Difference is Teacher Quality](#). in Karl Weber (ed.). *Waiting for "Superman": How We Can Save America's Failing Public Schools*. New York: Public Affairs, pp. 81-100. September 2010.

[An Effective Teacher in Every Classroom: A lofty goal, but how to do it](#). (with Kati Haycock). *Education Next*, 10(3), pp. 46-52. July 2010.

[The Quality and Distribution of Teachers under the No Child Left Behind Act](#). (with Steven G. Rivkin). *Journal of Economic Perspectives*, 24(3), pp. 133-150. June 2010.

[Generalizations about Using Value-Added Measures of Teacher Quality](#). (with Steven G. Rivkin). *American Economic Review*, 100(2), pp. 267-271. May 2010.

[Education Production Functions: Developed Countries Evidence](#). in Dominic J. Brewer and Patrick J. McEwan (ed.). *Economics of Education* (Amsterdam: Elsevier), pp. 132-136. February 2010.

[Education and Economic Growth](#). (with Ludger Woessmann) in Dominic J. Brewer and Patrick J. McEwan (ed.). *Economics of Education* (Amsterdam: Elsevier, 2010), pp. 60-67. February 2010.

[The High Cost of Low Educational Performance: The Long-Run Impact of Improving PISA Outcomes](#). (with Ludger Woessmann). Paris: Organization for Economic Cooperation and Development, pp. 1-55. January 2010.

[Teacher Deselection](#). In Dan Goldhaber and Jane Hannaway (ed.). *Creating a New Teaching Profession*,

Washington, DC: Urban Institute Press, pp. 165-180. November 2009.

[Does Pollution Increase School Absences?](#) (with Janet Currie, E. Megan Kahn, Matthew Neidell, and Steve G. Rivkin). *Review of Economics and Statistics*, 91(4), pp. 683-694. November 2009.

[Many Schools Are Still Inadequate: Now what?](#) (with Alfred A. Lindseth and Michael A. Rebell). *Education Next*, 9(4), pp. 49-56. September 2009.

[School Policy: Implications of Recent Research for Human Capital Investments in South Asia and Other Developing Countries](#). *Education Economics*, 17(3), pp. 291-313. September 2009.

[New Evidence about Brown v. Board of Education: The Complex Effects of School Racial Composition on Achievement](#). (with John F. Kain and Steven G. Rivkin). *Journal of Labor Economics*, 27(3), pp. 349-383. July 2009.

[Quality-Consistent Estimates of International Schooling and Skill Gradients](#). (with Lei Zhang). *Journal of Human Capital*, 3(2), pp. 107-143. June 2009.

[Harming the Best: How Schools Affect the Black-White Achievement Gap](#). (with Steven G. Rivkin). *Journal of Policy Analysis and Management*, 29(3), pp. 366-393. June 2009.

[The Economic Value of Education and Cognitive Skills](#). In Gary Sykes, Barbara Schneider and David N. Plank (eds.). *Handbook of Education Policy Research*, New York: Routledge, pp. 39-56. June 2009.

[Getting Down to Facts: School Finance and Governance in California](#). (with Susanna Loeb and Anthony Bryk). *Education Finance and Policy*, 3(1), pp. 1-19. December 2008.

[The Role of Cognitive Skills in Economic Development](#). (with Ludger Woessmann). *Journal of Economic Literature* 2008, 46(3), pp. 607-668. September 2008.

[Do Students Care about School Quality? Determinants of Dropout Behavior in Developing Countries](#). (with Victor Lavy and Kohtaro Hitomi). *Journal of Human Capital*, 2(1), pp. 69-105. August 2008.

[What Do Cost Functions Tell Us About the Cost of an Adequate Education?](#) (with Robert Costrell and Susanna Loeb). *Peabody Journal of Education*, 83(2), pp. 198-223. June 2008.

[Incentives for Efficiency and Equity in the School System](#). *Perspektiven der Wirtschaftspolitik*, 9 (Special Issue), pp. 5-27. May 2008.

[Education and Economic Growth: It's not Just Going to School but Learning That Matters](#). (with Dean T. Jamison, Eliot A. Jamison and Ludger Woessmann). *Education Next*, 8(2), pp. 62-70. March 2008.

[The Effects of Education Quality on Mortality Decline and Income Growth](#). (with Eliot A. Jamison and Dean T. Jamison). *Economics of Education Review*, 26(2), pp. 772-789. December 2007.

[The Single Salary Schedule and Other Issues of Teacher Pay](#). *Peabody Journal of Education*, 82(4), pp. 574-586. October 2007.

[The Alchemy of 'Costing Out' an Adequate Education](#). In Martin R. West and Paul E. Peterson (eds.). *School Money Trials: The Legal Pursuit of Educational Adequacy*, Washington, D.C.: Brookings Institution Press, pp. 77-101. August 2007.

[Charter School Quality and Parental Decision Making with School Choice](#). (with John F. Kain, Steven G. Rivkin, and Gregory F. Branch). *Journal of Public Economics*, 91(5-6), pp. 823-848. June 2007.

[The Confidence Men: Selling Adequacy, Making Millions](#). *Education Next*, 7(3), pp. 73-78. June 2007.

[Some U.S. Evidence on how the Distribution of Educational Outcomes can be Changed](#). In Ludger Woessmann and Paul E. Peterson (ed.). *Schools and the Equal Opportunity Problem*, Cambridge, MA: MIT Press, pp. 159-190. June 2007.

Pay, Working Conditions, and Teacher Quality. (with Steven G. Rivkin). *Future of Children*, 17(1), pp. 69-96. March 2007.

The Economic Benefits of Improved Teacher Quality. In Nils C. Soquel and Pierre Jaccard (ed.). *Governance and Performance of Education Systems*, Dordrecht, Netherlands: Springer, pp. 107-135. January 2007.

School Resources. In Eric A. Hanushek and Finis Welch (Ed.). *Handbook of the Economics of Education*, Volume 2, Amsterdam: North Holland, pp. 865-908. October 2006.

Is There Hope for Expanded School Choice? In Robert C. Enlow and Lenore T. Ealy. *Liberty and Learning: Milton Friedman's Voucher Idea at Fifty*, Washington, DC: Cato Institute, pp. 67-79. September 2006.

The Complementarity of Tiebout and Alonso. (with Kuzey Yilmaz). *Journal of Housing Economics*, 16(2), pp. 243-261. August 2006.

Alternative School Policies and the Benefits of General Cognitive Skills. *Economics of Education Review*, 25(4), pp. 447-462. August 2006.

Introduction: Good Intentions Captured – School Funding Adequacy and the Courts. in Eric A. Hanushek (ed.). *Courting Failure: How School Finance Lawsuits Exploit Judges' Good Intentions and Harm Our Children*, Stanford, CA: Education Next Books, pp. xiii-xxxii. May 2006.

Science Violated: Spending Projections and the "Costing Out" of an Adequate Education. in Eric A. Hanushek (ed.). *Courting Failure: How School Finance Lawsuits Exploit Judges' Good Intentions and Harm Our Children*, Stanford, CA: Education Next Books, pp. 257-311. May 2006.

Early Returns from School Accountability. (with Margaret E. Raymond). in Paul E. Peterson (ed.). *Generational Change: Closing the Test Score Gap*, Lanham, MD: Rowman and Littlefield, pp. 143-166. April 2006.

School Accountability and Student Performance. (with Margaret E. Raymond). *Regional Economic Development*, Federal Reserve Bank of St. Louis, 2(1) , pp. 51-61. March 2006.

Does Educational Tracking Affect Performance and Inequality? Differences-in-Differences Evidence across Countries. (with Ludger Woessmann). *The Economic Journal*, 116(150),pp. C63-C76. March 2006.

More Accountability or More Resources: The US Experience with NCLB. (with Margaret E. Raymond). In Enrico Gori, Daniele Vidoni, Eric A. Hanushek and Charles Glenn (ed.). *Institutional Models in Education: Legal Framework and Methodological Aspects for a New Approach to the Problem of School Governance*, (Nijmegen, Netherlands: Wolf Legal Publishers), pg. 69-80. March 2006.

Teacher Compensation. in Paul E. Peterson (ed.). *Reforming Education in Florida*, pp. 149-163. March 2006.

The Economic Value of Improving Public Schools. *Proceedings of Federal Reserve Bank of Cleveland Research Conference*, November 18-19, 2004, Cleveland: Federal Reserve Bank of Cleveland, pp. 59-72. November 2005.

Pseudo-Science and a Sound Basic Education: Voodoo Statistics in New York. *Education Next*, 5(4). September 2005.

Economic Outcomes and School Quality. *Education Policy Series*, Volume 4. Paris: International Institute for Educational Planning and International Academy of Education}. September 2005.

The Economics of School Quality. *German Economic Review*, 6(3), pp. 269-286. August 2005.

Education and Training. (with Michael Mertaugh). In Nicholas Barr (ed.). *Labor Markets and Social Policy in Central and Eastern Europe: The Accession and Beyond*, Washington, DC: The World Bank, pp. 207-251. June 2005.

Why Quality Matters in Education. *Finance and Development*, 42(2), pp.15-19. June 2005.

[Does School Accountability Lead to Improved Student Performance?](#) (with Margaret E. Raymond). *Journal of Policy Analysis and Management*, 24(2), pp. 298-327. March 2005.

[Teachers, Schools, and Academic Achievement.](#) (with Steven G. Rivkin and John F. Kain). *Econometrica*, 73(2), pp. 417-458. March 2005.

[Why the Federal Government Should be Involved in School Accountability.](#) *Journal of Policy Analysis and Management*, 24(1), pp. 168-172. January 2005.

[United States Lessons about School Accountability.](#) CESifo DICE Report, 2(4), pp. 27-32. December 2004.

[The Revolving Door.](#) (with John F. Kain and Steven G. Rivkin). *Education Next*, 4(1), pp. 77-82. November 2004.

[Disruption versus Tiebout Improvement: The Costs and Benefits of Switching Schools.](#) (with John F. Kain and Steven G. Rivkin). *Journal of Public Economics*, 88(9), pp. 1722-1746. August 2004.

[The Toughest Battleground: Schools.](#) In Mark A. Wynne, Harvey Rosenblum and Robert L. Formaini (ed.). *The legacy of Milton and Rose Friedman's Free to Choose: Economic liberalism at the turn of the twenty first century*, Dallas, TX: Federal Reserve Bank of Dallas, pp. 21-35. June 2004.

[Shopping for Evidence Against School Accountability.](#) (with Margaret E. Raymond). In William J. Fowler, Jr. (ed.). *Developments in School Finance: 2003*, (Washington, DC: National Center for Education Statistics), pp. 119-130. May 2004.

[The Effect of School Accountability Systems on the Level and Distribution of Student Achievement.](#) (with Margaret E. Raymond). *Journal of the European Economic Association*, 2(2-3), pp. 406-415. May 2004.

[What If There Are No 'Best Practices'?](#) *Scottish Journal of Political Economy*, 51(2), pp. 156-172. May 2004.

[How to Improve the Supply of High Quality Teachers.](#) (with Steven G. Rivkin). *Brookings Papers on Education Policy: 2004*, pp. 7-44. March 2004.

[Why Public Schools Lose Teachers.](#) (with John F. Kain and Steven G. Rivkin). *The Journal of Human Resources*, 39(2), pp. 326-354. March 2004.

[Opportunities, Race, and Urban Location: The Influence of John Kain.](#) (with Edward L. Glaeser and John M. Quigley). *Journal of Urban Economics*, 56(1). January 2004.

[Economic Analysis of School Quality.](#) *European Economy: Quality and Efficiency in Education, Special Report No 3*. Brussels: Directorate-General for Economic and Financial Affairs, European Commission, pp. 29-48. January 2004.

[Redistribution through Education and Other Transfer Mechanisms.](#) (with Charles Ka Yui Leung and Kuzey Yilmaz). *Journal of Monetary Economic*, 50(8), pp. 1719-1750. November 2003.

[Efficiency and Equity in Schools around the World.](#) (with Javier A. Luque). *Economics of Education Review*, 22(5), pp. 481-502. October 2003.

[Does Peer Ability Affect Student Achievement?](#) (with John F. Kain, Jacob M. Markman, and Steven G. Rivkin). *Journal of Applied Econometrics*, 18(5), pp. 527-544. October 2003.

[High Stakes Research.](#) (with Margaret E. Raymond). *Education Next*, 3(3), pp. 48-55. August 2003.

[Lessons about the Design of State Accountability Systems.](#) (with Margaret E. Raymond). In Paul E. Peterson and Martin R. West (ed.). *No Child Left Behind? The Politics and Practice of Accountability*, Washington, DC: Brookings, pp. 126-151. June 2003.

[Does Public School Competition Affect Teacher Quality?](#) (with Steven G. Rivkin). In Caroline Minter Hoxby (ed.). *The Economics of School Choice*, Chicago: University of Chicago Press, pp. 23-47. June 2003.

[Improving Educational Quality: How Best to Evaluate Our Schools](#). (with Margaret E. Raymond). In Yolanda Kodrzycki (ed.). *Education in the 21st Century: Meeting the Challenges of a Changing World*, Boston, MA: Federal Reserve Bank of Boston, pp. 193-224. May 2003.

[Lost Opportunity](#). *Education Next*, 3(2), pp. 84-87. April 2003.

[The Failure of Input-based Schooling Policies](#). *The Economic Journal*, 113, pp. 64-98. February 2003.

[Inferring Program Effects for Specialized Populations: Does Special Education Raise Achievement for Students with Disabilities](#). (with John F. Kain and Steven G. Rivkin). *Review of Economics and Statistics*, 84(4), pp. 584-599. November 2002.

[The Seeds of Growth](#). *Education Next*, 2(3), pp. 10-17. September 2002.

[The Importance of School Quality](#). In Paul E. Peterson (ed.). *Our Schools and Our Future: Are We Still at Risk?* (Stanford, CA: Hoover Institution Press), pp. 141-173. May 2002.

[Teacher Quality](#). In Lance T. Izumi and Williamson M. Evers (ed.). *Teacher Quality*, (Stanford: Hoover Institution Press), pp. 1-12. April 2002.

[Evidence, Politics, and the Class Size Debate](#). In Lawrence Mishel and Richard Rothstein (ed.). *The Class Size Debate*, Washington, DC: Economic Policy Institute, pp. 37-65. April 2002.

[Publicly Provided Education](#). in Alan J. Auerbach and Martin Feldstein (ed.). *Handbook of Public Economics* (Amsterdam: North-Holland, 2002), pp. 2045-2141. February 2002.

[Will Quality of Peers Doom Those Left in the Public Schools?](#) in Paul T. Hill (ed.). *Choice with Equity*, pp. 121-140. February 2002.

[Sorting out accountability systems](#). (with Margaret E. Raymond). In Williamson M. Evers, Herbert J. Walberg (Eds.). *School Accountability*, pp. 75-104. January 2002.

[The Confusing World of Educational Accountability](#). (with Margaret E. Raymond). *National Tax Journal*, 54(2), pp. 365-384. June 2001.

[Black-white Achievement Differences and Governmental Interventions](#). *American Economic Review*, 91(2), pp. 24-28. May 2001.

[Schooling, Inequality, and the Impact of Government](#). (with Julie A. Somers). In Finis Welch (ed.). *The Causes and Consequences of Increasing Inequality*, Chicago: University of Chicago Press, pp. 169-199. May 2001.

[Spending on Schools](#). In Terry Moe (ed.). *A Primer on American Education*, Stanford, CA: Hoover Institution Press, pp. 69-88. May 2001.

[Deconstructing RAND](#). *Education Matters*, 1(1), pp. 65-70. April 2001.

[Schooling, Labor Force Quality, and the Growth of Nations](#). (with Dennis D. Kimko). *American Economic Review*, 90(5), pp. 1184-1208. December 2000.

[Smaller Classes, Lower Salaries? The Effects of Class Size on Teacher Labor Markets](#). (with Javier Luque). In Sabrina W.M. Laine and James G. Ward (ed.). *Using What We Know: A Review of the Research on Implementing Class-Size Reduction Initiatives for State and Local Policymakers*, Oak Brook, Ill.: North Central Regional Educational Laboratory, pp. 35-51. June 2000.

[The Evidence on Class Size](#). in Susan E. Mayer and Paul E. Peterson (ed.). *Earning and learning: How schools matter*, Washington, DC: Brookings Institution, pp. 131-168. July 1999.

[Some Findings from an Independent Investigation of the Tennessee STAR Experiment and from Other Investigations of Class Size Effects](#). *Educational Evaluation and Policy Analysis*, 21(2), pp. 143-163. June 1999.

Budgets, Priorities, and Investment in Human Capital. In Marvin H. Kosters (ed.). *Financing College Tuition: Government Policies and Educational Priorities*, Washington, DC AEI Press, pp. 8-27. January 1999.

Adjusting for Differences in the Costs of Educational Inputs. in William J. Fowler, Jr. (ed.). *Selected Papers in School Finance, 1997-1999*, pp. 17-27. January 1999.

Conclusions and Controversies about the Effectiveness of School Resources. *FRBNY Economic Policy Review*, 4(1), pp. 11-28. March 1998.

Understanding the 20th Century Growth in U.S. School Spending. (with Steven G. Rivkin). *Journal of Human Resources*, 31(1), pp. 34-68. December 1997.

Outcomes, Incentives, and Beliefs: Reflections on Analysis of the Economics of Schools. *Educational Evaluation and Policy Analysis*, 19(4), pp. 301-308. November 1997.

Incentives Are Key to Improved Schools. *Forum for Applied Research and Public Policy*, 12(3), pp. 62-67. September 1997.

Health and Schooling: Evidence and Policy Implications for Developing Countries. (with João Batista Gomes-Neto, Raimundo Hélio Leite, and Roberto Cláudio Frota-Bezerra). *Economics of Education Review*, 16(3), pp. 271-282. June 1997.

Assessing the Effects of School Resources on Student Performance: An Update. *Educational Evaluation and Policy Analysis*, 19(2), pp. 141-164. June 1997.

Applying Performance Incentives to Schools for Disadvantaged Populations. *Education and Urban Society*, 29(3), pp. 296-316. May 1997.

The Productivity Collapse in Schools. In William J. Fowler, Jr. (ed.). *Developments in School Finance, 1996*, Washington, DC: National Center for Educational Statistics, U.S. Department of Education, pp. 183-195. February 1997.

Analytical Framework for Retirement Policy Decisions. (with Constance F. Citro). In Michael S. Gordon, Olivia S. Mitchell, and Marc M. Twinney (ed.). *Positioning Pensions for the Twenty-first Century*, Philadelphia: University of Pennsylvania Press, pp. 209-219. January 1997.

Aggregation and the Estimated Effects of School Resources. (with Steven G. Rivkin and Lori L. Taylor). *Review of Economics and Statistics*, 78(4), pp. 611-627. December 1996.

A More Complete Picture of School Resource Policies. *Review of Educational Research*, 66(3), pp. 397-409. October 1996.

Measuring Investment in Education. *Journal of Economic Perspectives*, 10(4), pp. 9-30. October 1996.

The Identification of School Resource Effects. (with Steven G. Rivkin and Lori L. Taylor). *Education Economics*, 4(2), pp. 105-125. August 1996.

Rationalizing School Spending: Efficiency, Equity, and Externalities, and Their Connection to Rising Expenditure. In Victor Fuchs (ed.). *Individual and Social Responsibility: Child Care, Education, Medical Care, and Long-Term Care in America*, University of Chicago Press/NBER, pp. 59-91. January 1996.

Improving School Performance While Controlling Costs. in William J. Fowler, Jr. (ed.). *Developments in School Finance, 1995*, pp. 111-122. January 1996.

School Resources and Student Performance. In Gary Burtless (ed.). *Does Money Matter? The Effect of School Resources on Student Achievement and Adult Success*, Washington, D.C.: The Brookings Institution, pp. 43-73. January 1996.

Efficiency-Enhancing Investments in School Quality. (with João Batista Gomes Neto and Ralph W. Harbison). In Nancy Birdsall and Richard H. Sabot (ed.). *Opportunity Foregone: Education in Brazil*, Washington, DC: December 2025

Inter-American Development Bank, pp. 385-424. January 1996.

[Interpreting Recent Research on Schooling in Developing Countries](#). World Bank Research Observer, 10(2), pp. 227-246. August 1995.

[Who Chooses to Teach and Why?](#) (with Richard Pace). *Economics of Education Review*, 14(2), pp. 101-117. June 1995.

[The \(Dis\)Incentive to Settle Personal Injury Cases](#). (with Michael J. Wolkoff). *New York State Bar Journal*, 67(3), pp. 52-56. March 1995.

[The Quest for Equalized Mediocrity: School Finance Reform without Consideration of School Performance](#). In Lawrence O. Picus and James L. Wattenbarger (ed.). *Where Does the Money Go? Resource Allocation in Elementary and Secondary Schools*, Thousand Oaks, CA: Corwin Press, pp. 20-43. January 1995.

[The Economics of Structured Judgments Under CPLR Article 50-B](#). (with Michael J. Wolkoff). *Buffalo Law Review*, 43(2), pp. 563-582. January 1995.

[Production Functions in Education](#). In T. Husén and T. N. Postlethwaite (ed.). *The International Encyclopedia of Education*, Oxford: Pergamon Press, pp. 4059-4070. January 1995.

[Outcomes, Costs, and Incentives in Schools](#). In Board on Science, Technology, and Economic Policy, National Research Council. *Improving the Performance of America's Schools*, Washington, DC: National Academy Press, pp. 28-51. January 1995.

[A Jaundiced View of "Adequacy" in School Finance Reform](#). *Educational Policy*, 8(4), pp. 460-69. December 1994.

[The Causes and Consequences of Grade Repetition: Evidence from Brazil](#). (with João Batista Gomes-Neto). *Economic Development and Cultural Change*, 43(1), pp. 117-148. October 1994.

[Education Production Functions](#). In Torsten Husén and T. Neville Postlethwaite (ed.). *International Encyclopedia of Education*, 2nd Edition, Volume 3, Oxford: Pergamon, pp. 1756-1762. June 1994.

[Estimating the Effects of Proposed Legislation: The Case for Model Validation](#). (with Constance F. Citro). *Chance*, 7(2), pp. 31-40. March 1994.

[Understanding Entry into the Teaching Profession](#). (with Richard R. Pace). In Ronald G. Ehrenberg (ed.). *Choices and Consequences: Contemporary Policy Issues in Education*, Ithaca, NY: ILR Press, pp. 12-28. January 1994.

[Investimentos Autofinanciáveis em Educação](#). (with João Batista Gomes-Neto, Raimundo H. Leite, and Ralph W. Harbison). *Cadernos de Pesquisa*, 85, pp. 11-25. October 1993.

[Can Equity Be Separated from Efficiency in School Finance Debates?](#) In Emily P. Hoffman (ed.). *Essays on the Economics of Education*, Kalamazoo, MI: Upjohn Institute, pp. 35-73. January 1993.

[Improving Educational Outcomes While Controlling Costs](#). (with Steven G. Rivkin and Dean T. Jamison). *Carnegie-Rochester Conference Series on Public Policy* 37, pp. 205-238. December 1992.

[The Trade-off Between Child Quantity and Quality](#). *Journal of Political Economy*, 100(1), pp. 84-117. February 1992.

[When School Finance 'Reform' May Not Be Good Policy](#). *Harvard Journal on Legislation*, 28(2), pp. 423-456. May 1991.

[Concepts of Educational Efficiency and Effectiveness](#). (with Marlaine E. Lockheed). In Torsten Husén and T. Neville Postlethwaite (ed.). *International Encyclopedia of Education*, Supplementary Volume 2, Oxford: Pergamon. January 1991.

[School Performance and Educational Policy Making](#). In Gary Libecap (ed.). *The Education and Quality of the*

American Labor Force, Greenwich, CT: JAI Press, pp. 65-94. January 1991.

Commercial Land Use Regulation and Local Government Finance. (with John M. Quigley). American Economic Review, 19(2), pp. 176-180. May 1990.

The Policy Research Markets. Journal of Policy Analysis and Management, 9(2), pp. 147-154. April 1990.

Alternative Assessments of the Performance of Schools: Measurement of State Variations in Achievement. (with Lori L. Taylor). The Journal of Human Resources, 25(2), pp. 179-201. March 1990.

Social Science Research and Policy: A Review Essay. Journal of Human Resources, pp. 46-51. January 1990.

Reforming Educational Reform. (with John E. Chubb). In Henry Aaron (ed.). *Setting National Priorities*, Washington, DC: The Brookings Institution, pp. 213-247. January 1990.

Expenditures, Efficiency, and Equity in Education: The Federal Government's Role. American Economic Review, 79(2), pp. 46-51. May 1989.

The Impact of Differential Expenditures on School Performance. Educational Researcher, 18(4), pp. 45-51. May 1989.

Improving Educational Efficiency in Developing Countries: What Do We Know? (with Marlaine E. Lockheed). Compare, 18(1), pp. 21-37. January 1988.

Non-Labor-Supply Responses to the Income Maintenance Experiments. In Alicia H. Munnell (ed.). *Lessons from the Income Maintenance Experiments*, Boston, MA: Federal Reserve Bank of Boston and the Brookings Institution, pp. 106-121. January 1987.

Formula Budgeting: The Economics and Analytics of Fiscal Policy under Rules. Journal of Policy Analysis and Management, 6(1), pp. 3-19. October 1986.

The Economics of Schooling: Production and Efficiency in Public Schools. Journal of Economic Literature, 49(3), pp. 1141-1177. September 1986.

Alternative Poverty Measures and the Allocation of Federal Benefits. (with Roberton Williams). in U.S. Bureau of the Census. Conference on the Measurement of Noncash Benefits, Proceedings, Volume I, Washington, DC: U.S. Bureau of the Census, pp. 104-125. January 1986.

Life-Cycle Earning Capacity and the OJT Investment Model. (with John M. Quigley). International Economic Review, 26(2), pp. 365-385. June 1985.

Sources of Black-White Earnings Differences. Social Science Research, 11(2), pp. 103-126. June 1982.

The Determinants of Housing Demand. (with John M. Quigley). In J.V. Henderson (ed.). *Research in Urban Economics*, Vol. II. (Greenwich, CT: JAI Press), pp. 221-242. January 1982.

Alternative Models of Earnings Determination and Labor Market Structure. Journal of Human Resources, 16(2), pp. 238-259. April 1981.

Education Policy Research-An Industry Perspective. Economics of Education Review, 1(2), pp. 193-224. February 1981.

Consumption Aspects. (with John M. Quigley). In Katherine L. Bradbury and Anthony Downs (ed.). *Do Housing Allowances Work?* Washington, D.C.: The Brookings Institution, pp. 185-240. January 1981.

What is the Price Elasticity of Housing Demand? (with John M. Quigley). Review of Economics and Statistics, 62(3), pp. 449-454. August 1980.

Conceptual and Empirical Issues in the Estimation of Educational Production Functions. The Journal of Human

Resources, 14(3), pp. 351-388. May 1979.

[The Dynamics of the Housing Market: A Stock Adjustment Model of Housing Consumption](#). (with John M. Quigley). Journal of Urban Economics, 6(1), pp. 90-111. January 1979.

[The Dynamics of Postwar Industrial Location](#). (with Byung Nak Song). Review of Economics and Statistics, 60(4), pp. 515-522. November 1978.

[An Explicit Model of Intra-Metropolitan Mobility](#). (with John M. Quigley). Land Economics, 54(4), pp. 411-429. November 1978.

[Implicit Investment Profiles and Intertemporal Adjustments of Relative Wages](#). (with John M. Quigley). American Economic Review, 68(1), pp. 67-79. March 1978.

[Ethnic Income Variations: Magnitudes and Explanations](#). American Ethnic Groups , Washington, D.C.: The Urban Institute, pp. 139-156. January 1978.

[Housing Market Disequilibrium and Residential Mobility](#). (with John M. Quigley). In Eric A. Moore and William A.V. Clark (ed.). Population Mobility and Residential Change, Evanston, IL: Northwestern University Press. January 1978.

[The Volunteer Military and the Rest of the Iceberg](#). Policy Sciences, 8(3), pp. 343-361. September 1977.

[The Demand for Local Public Service: An Exploratory Analysis](#). In John E. Jackson (ed.). Public Needs and Private Behavior in Metropolitan Areas, Cambridge, MA: Ballinger, pp. 121-138. January 1975.

[Learning by Observing the Performance of Schools](#). In Robert A. Wallhaus (ed.). New Directions for Institutional Research, Measuring and Increasing Academic Productivity, No. 8 (San Francisco: Jossey-Bass), pp. 17-38. January 1975.

[Model Specification, Use of Aggregate Data, and the Ecological Correlation Fallacy](#). (with John E. Jackson and John F. Kain). Political Methodology, pp. 89-107. December 1974.

[Efficient Estimators for Regressing Regression Coefficients](#). The American Statistician, 28(2), pp. 66-67. May 1974.

[The High Cost of Graduate Education in the Military](#). Public Policy, 21(4), pp. 525-552. September 1973.

[Regional Differences in the Structure of Earnings](#). Review of Economics and Statistics, 55(2), pp. 204-213. May 1973.

[On the Value of 'Equality of Educational Opportunity' as a Guide to Public Policy](#). (with John F. Kain). In Frederick Mosteller and Daniel P. Moynihan (ed.). On Equality of Educational Opportunity, (New York: Random House), pp. 116-145. June 1972.

[Teacher Characteristics and Gains in Student Achievement: Estimation Using Micro-Data](#). American Economic Review, 61(2), pp. 280-288. May 1971.

[The Value of Teachers in Teaching](#). RM-6362-CC/RC, Santa Monica: The Rand Corporation. January 1970.

[The Production of Education, Teacher Quality, and Efficiency](#). in U.S. Office of Education. Do Teachers Make a Difference? Washington, D.C.: Government Printing Office, pp. 79-99. January 1970.

[Voting Behavior in the 1960 Colorado Presidential Election](#). (with John C. Ries, John E. Coblenz, and John F. Kain). Rocky Mountain Social Science Journal, 3(1), pp. 82-95. April 1966.

Current Working Papers

[The Effects of Comprehensive Educator Evaluation and Pay Reform on Achievement](#). (with Jin Luo, Andrew Morgan, Minh Nguyen, Ben Ost, and Steven G. Rivkin, Ayman Shakeel). National Bureau of Economic

Research, NBER Working Paper No. 31073. Forthcoming.

[Out-of-School Learning: Subtitling vs. Dubbing and the Acquisition of Foreign-Language Skills.](#) (with Frauke Baumeister and Ludger Woessmann). National Bureau of Economic Research, NBER WP 33984. July 2025.

[From farm schools to city factories: Assessing the quality of Chinese rural schools.](#) (with Le Kang, Xueying Li, and Lei Zhang). National Bureau of Economic Research, NBER WP 34005. July 2025.

[Adjusters and Casualties: The Anatomy of Labor Market Displacement.](#) (with Simon Janssen, Jacob D. Light, and Lisa K. Simon). National Bureau of Economic Research, NBER Working Paper No. 33667. May 2025.

[The Lasting Impacts of Middle School Principals.](#) (with Andrew J. Morgan, Steven G. Rivkin, Jeffrey C. Schiman, Ayman Shakeel, and Lauren Sartain). National Bureau of Economic Research, NBER Working Paper No. 32642. July 2024.

[Balancing Federalism: The Impact of Decentralizing School Accountability.](#) (with Patricia Saenz-Armstrong and Alejandra Salazar). National Bureau of Economic Research, NBER Working Paper No. 32351. April 2024.

[Where Do STEM Graduates Stem From? The Intergenerational Transmission of Comparative Skill Advantages.](#) (with Babs Jacobs, Guido Schwerdt, Rolf van der Velden, Stan Vermeulen, and Simon Wiederhold). National Bureau of Economic Research, NBER Working Paper No. 31186. April 2023.

[Can Greater Access to Education Be Inequitable? New Evidence from India's Right to Education Act.](#) (with Chirantan Chatterjee and Shreekanth Mahendiran). NBER Working Paper No. 27377, National Bureau of Economic Research. Jun-20.

[Estimating the Effect of Leaders on Public Sector Productivity: The Case of School Principals.](#) (with Gregory F. Branch and Steven G. Rivkin). NBER Working Paper 17803, National Bureau of Economic Research. Jan-12.

[The Market for Teacher Quality.](#) (with John F. Kain, Daniel M. O'Brien, and Steven G. Rivkin). NBER Working Paper 11154, National Bureau of Economic Research. Feb-05.

Notes/Comments/Op-Eds

[Prescriptions For Left-Behind Schools.](#) defining idea. 2025.

[An 8 percent lifetime 'tax' is coming for students.](#) Washington Post. November 2025.

[The Looming \\$90 Trillion Cost of Learning Loss — and the Policy Solutions to Address It.](#) (with Christy Hovanetz). The 74. November 10, 2025.

[The Pandemic Didn't Break American Education; It's Been in Crisis Since 2013.](#) The 74. September 10, 2025.

[What D.C. is proving about teacher salaries.](#) (with Margaret E. Raymond). Washington Post. June 2025.

[Use it or lose it: How cognitive skills change with age.](#) (with Lavinia Kinne, Frauke Witthoeft, Ludger Woessmann). VoxEU. April 2025.

[Use It or Lose It! How Age Affects Cognitive Skills.](#) The 74. 2025.

[Good Teachers Hold the Key to Learning Loss Recovery.](#) Education Next. September 2024.

[Patience and the North-South divide in student achievement in Italy and the US.](#) (with Lavinia Kinne, Pietro Sancassani, Ludger Woessmann). EconPol Forum, 25(3), 53-56. May 2024.

[A world unprepared: Missing skills for development.](#) (with Sarah Gust and Ludger Woessmann). EconPol Forum, 25, 43-46. March 2024.

Generation Lost: The Pandemic's Lifetime Tax. Education Next. October 2023.

[U.S. School Finance: Resources and Outcomes](#). (with Danielle V. Handel). Cato Research Briefs in Economic Policy. July 2023.

[Student test scores are down, and it isn't just because of COVID shutdowns](#). (with David J. Armor). The Hill. July 2023.

[Where STEM graduates stem from: The intergenerational transmission of comparative skill advantages](#). (with Babs Jacobs, Guido Schwerdt, Rolf van der Velden, Stan Vermeulen, and Simon Wiederhold). VoxEU. June 2023.

[A world unprepared: Missing skills for development](#). (with Sarah Gust and Ludger Woessmann). VoxEU. December 2022.

[A simple and complete solution to the learning loss problem](#). Policy Brief, Stanford Institute for Economic Policy Research, Stanford University. Nov-22.

[Notes on Trends in the U.S. Income-Achievement Gap](#). (with Jacob Light, Paul E. Peterson, Laura M. Talpey, and Ludger Woessmann). (web publication). Jun-22.

[The intergenerational transmission of cognitive skills](#). (with Babs Jacobs, Guido Schwerdt, Rolf van der Velden, Stan Vermeulen, and Simon Wiederhold). VoxEU. 22-Feb-22.

[Permanent Economic Damage from Learning Losses](#). (with Ludger Woessmann). National Review Capital Matters. Sep-20.

[Students have already been saddled with economic losses from school closures](#). (with Ludger Woessmann). The Hill. 10-Sep-20.

[The real costs of closing schools and what can be done to address them](#). (with Ludger Woessmann). Teresa and Alexandre Soares dos Santos - Education Initiative. 29-Sep-20.

[Can greater access to education be inequitable?](#) (with Chirantan Chatterjee and Shreekanth Mahendirian). Ideas for India. 10-Aug-20.

[Patience, risk-taking, and international differences in student achievement](#). (with Lavinia Kinne, Philipp Lergetporer, Ludger Woessmann). VoxEU. 2-Aug-20.

[Finding the Best Teachers for Post-Pandemic Schools](#). Wall Street Journal. 26-Aug-22.

[Unintended consequences to education for all: India's Right to Education Act](#). (with Chirantan Chatterjee and Shreekanth Mahendirian). VoxEU. 23-Jul-20.

[Preparing all students to succeed during COVID-19 pandemic](#). Washington Times. 25-Jun-20.

[Teacher Pay Raises Aren't Enough: Adding evaluation would make all the difference for improving schools](#). Education Week. 4-Nov-19.

[Teacher Strikes Are Not Going To Help California's Students](#). Eureka. 21-Aug-19.

[Budget 2019 needs to have a holistic view on where education in India needs to go](#). (with Chirantan Chatterjee). The Indian Express. 3-Jul-19.

[US achievement gaps hold steady in the face of substantial policy initiatives](#). (with Paul E. Peterson, Laura M. Talpey, and Ludger Woessmann). VoxEU. 15-Apr-15.

[The War on Poverty Remains a Stalemate](#). (with Paul E. Peterson). Wall Street Journal. 18-Mar-19.

Too much self-interested choice? Phi Delta Kappan. 26-Oct-18.

Testing with accountability improves student achievement. (with Annika B. Bergbauer and Ludger Woessmann). VoxEU. 18-Sep-18.

Ohio can play offense with the AI revolution by investing in quality education. Cleveland.com. 29-Aug-18.

What Do Test Scores Really Mean for the Economy? Education Week, 37(34), 29. 4-Jun-18.

Every State's Economic Future Lies with School Reform. AEI Report, American Enterprise Institute. May-18.

The Future of Teacher Quality in California Is in Doubt--and That Also Puts California's Economic Outlook in Jeopardy. Eureka. 17-Aug-17.

Emulating Germany's Apprenticeship System Won't Make America Great Again. The World Post. 23-Jun-17.

Apprenticeship Programs in a Changing Economic World. Brookings Institution, Brown Center Chalkboard. 28-Jun-17.

American Teachers Unions Oppose Innovative Schools—in Africa. Wall Street Journal. 10-Mar-17.

Student Achievement and Every State's Economic Future. Real Clear Education. 29-Apr-16.

Linking Large-Scale Reading Assessments: Comment. Measurement: Interdisciplinary Research and Perspectives, 14(1), pp. 27-29. 2016.

Can Schools Be Saved? Hope and Despair. The Atlantic. 30-Dec-15.

Education's Double Helix. Past as Prologue: The National Academy of Education at 50 --Members Reflect, Washington, DC: National Academy of Education, pp. 309-312. 2015.

Time in Education: Introduction. Economic Journal, 125, pp. F394-F396. November.

Achieving Universal Basic Skills. Real Clear Education. 4-Nov-15.

Education Quality for Economic Development. Conferencia Internatcional Educação e Desenvolvimento Escola e Sociede, Lisboa: Fundação Calouste Gulbenkian, pp. 23-32. October 2015.

Foreward [to Carl Bistany and Stephanie Gruner Buckley, Last Bell]. Last Bell: Breaking the gridlock in education reform, London: Profile Books, pp. xi-xiv. 2015.

Teach the World: Why the UN Sustainable Development Goals Should Focus on Education. (With Ludger Woessmann). Foreign Affairs. 20-Aug-15.

Teach all young people universal basic skills by 2030 – it will give huge boost to GDP. (with Ludger Woessmann). The Conversation UK. 18-May-15.

Universal basic skills should become the primary development goal. (with Ludger Woessmann). VoxEU. 24-May-15.

An Evaluation System Linked to Retention and Reward Is Vital. Room for Debate, New York Times, 2-Mar. Mar-15.

Not Enough Value to Justify More of the Same. Room for Debate, New York Times. 26-Mar-15.

The UFT's wasteful class-size push: Research says teacher quality trumps quantity. New York Daily News. 14-Dec-14.

How Teachers Unions Use 'Common Core' to Undermine Reform. Wall Street Journal. 1-Jul-14.

More Easily Firing Bad Teachers Helps Everyone. Room for Debate, New York Times. 11-Jun-14.

There Is No War On Teachers. USA Today. 11-Jun-14.

[The Economic Relevance of Early Childhood Development](#). In Jörg F. Maas, Simone C. Ehmig, Carolin Seelmann (Ed.). *Prepare for Life! Raising Awareness for Early Literacy Education*, Stiftung Lesen, Mainz, DE, pp. 249-253. 2014.

[Why the U.S. Results on PISA Matter](#). Education Week, Vol. 33, Issue 15, Pp. 20-21. 8-Jan-14.

[Higher Grades, Higher GDP](#). Hoover Digest, No. 1 (Winter), pp. 75-78. Winter 2014.

[America's schools earn a 'C' on their report card](#). (with Paul E. Peterson). The Daily Caller. 6-Dec-13.

[Schools improve when leaders stop rationalizing mediocrity](#). (with Paul E. Peterson). Washington Examiner. 5-Dec-13.

[Wisconsin Falters](#). (with Paul E. Peterson). WI Magazine, 22(3), 26-29. Nov-13.

[Spinning America's Report Card](#). (with Paul E. Peterson). Wall Street Journal. 7-Nov-13.

[Playing in the Right League](#). (with Paul E. Peterson). Huffington Post. 28-Oct-13.

[A Distraction from Real Education Reform](#). U.S. News and World Report. 28-Oct-13.

[Upgrade U.S. skills or pay the price](#). (with Paul E. Peterson). New York Daily News. 9-Oct-13. [The Vital Link of Education and Prosperity](#). (with Paul E. Peterson). The Wall Street Journal. 11-Sep-13.

[Fixing our schools could fix our debt crisis, too](#). (with Paul E. Peterson). FoxNews.com. 13-Sep-13.

[Rescue the future by fixing our schools](#). (with Mike Honda). The Hill. 6-Jun-13.

[Don't Get Lost – Focus on Quality](#). NORRAG News, 48, pp. 22-23. Apr-13.

[The Education Quality Imperative](#). The Politics of Growth, Stability and Reform, London: Policy Network and Global Progress, 121-124. 2013.

[Use of value added in teacher policy measures](#). Focus, 29(2), pp. 25-26. Fall/Winter 2012-13.

[Why Educators' Wages Must Be Revamped Now](#). Education Week, 32(20) , pp. 28-29, 31. 6-Feb-13.

[Dual Education: Europe's Secret Recipe?](#) CESifo Forum, 13(3), pp. 29-32. Autumn 2012.

[Fewer school days is the worst of budget options for California](#). San Jose Mercury News. 20-Jul-12.

[Education is the Key to a Healthy Economy](#). (with George P. Shultz). Wall Street Journal. 1-May-12.

[Low-Performing Teachers Have High Costs](#). Education Next, 12(3). Summer 2012.

[Misplaced Optimism and Weighted Funding](#). Education Week, 31(26), pp. 28,36. 28-Mar-12.

[Teacher ratings are a vital step forward](#). New York Daily News. 24-Feb-12.

[Math Matters](#). Hoover Digest, No. 1. 2011.

[Allowing local schools to make more decisions may work in developed countries but is questionable in developing countries](#). (with Susanne Link, and Ludger Woessmann). VoxEU. 9-Jan-12.

[Vocational education facilitates entry into the labour market but hurts employment at older ages](#). (with Ludger Woessmann and Lei Zhang). VoxEU. 21-Nov-11.

[Why Can't American Students Compete with the Rest of the World?](#) (with Paul E. Peterson). Newsweek, pp. 42-45. 5-Sep-11.

[Overview of the Symposium on Performance Pay for Teachers](#). (with Ludger Woessmann). Economics of Education Review, 30(3), pp. 391-393. Jun-11.

Recognizing the Value of Good Teachers. Education Week, 30(27), pp. 34-35. 6-Apr-11.

Saving the schools: Why more money is not the answer. New York Post. 1-Apr-11.

Education reform solves state's budget crisis. (with George P. Shultz). San Francisco Chronicle, p. F-6. 10-Apr-11.

The "War on Teachers" Is a Myth. Hoover Digest, No. 1. 2011.

Why Is It So Hard To Make Teachers Better? Defining Ideas. 30-Jan-11.

Viewpoints: Test evaluation put teachers on the spot. Sacramento Bee. 12-Nov-10.

There is no 'War on Teachers'. Wall Street Journal. 19-Oct-10.

UFT wrong to fight Joel Klein's attempt to release teacher data, says leading education researcher. New York Daily News. 27-Oct-10.

Cry Wolf! This Budget Crunch Is for Real. Education Week, 29(32), pp. 32-40. May-10.

Total Student Load: Maybe worth a longer look, but hardly a revolution. (A review of The Secret of TSL: The revolutionary discovery that raises school performance, by William G. Ouchi). Education Next, 10(2), pp. 84-85. Spring 2010.

The Choice Movement and the Courts. (with Alfred A. Lindseth). School Choice Advocate , Foundation for Educational Choice. Feb-10.

Building on No Child Left Behind. Science, 326, pp. 802-803. Nov-09.

Judicial Funding Mandates Related to Education Sharply Decline. (with Alfred A. Lindseth). State Courts Project, Federalist Society. Fall 2009.

Poor student learning explains the Latin American growth puzzle. (with Ludger Woessmann). VoxEU. 14-Aug-09.

An F in Effectiveness. (with Alfred A. Lindseth). Hoover Digest, No. 3, pp. 43-47.

Performance-Based Funding. Defining Ideas, 1, pp. 101-105. 2009.

California Needs to Make Wiser Use of School Funding. (with Alfred A. Lindseth). San Francisco Chronicle, p. A-15. 17-Jun-09.

The Effectiveness of Court-Ordered Funding of Schools. (with Alfred A. Lindseth). Education Outlook, No. 6 (Washington, DC: American Enterprise Institute). May-09.

John Forest Kain (1935-2003). In Steven N. Durlauf and Lawrence E. Blume (eds.). The New Palgrave Dictionary of Economics, Basingstoke: Palgrave Macmillan. 2008.

Getting down to facts: School finance and governance in California. (with Susanna Loeb and Anthony S. Bryk). Institute for Research on Education Policy and Practice, Stanford University. Sep-07.

A numbers game: Consultants sell legislatures school studies and collect millions. Arkansas Democrat-Gazette, Perspective, pp. 93, 98. 17-Jun-07.

Is the 'Evidence-Based Approach' a Good Guide to School Finance Policy? Paper commissioned by Washington Learns. Mar-07.

Milton Friedman's Unfinished Business. Hoover Digest, No. 1, pp. 42-49. Winter 2007.

The Court's Gift to Spitzer. The New York Sun. 28-Nov-06.

The Cost of an 'Adequate' Education. The Wall Street Journal, p. A19. 9-Oct-06.

Choice, Charters, and Public School Competition. Economic Commentary, Federal Reserve Bank of Cleveland, March 15, 2006.

[Comment \[on Murnane, Willett, Bub, and McCartney\]](#). In Gary Burtless and Janet Rothenberg Pack(ed.). Brookings-Wharton Papers on Urban Affairs, Washington, DC: Brookings Institution, pp. 128-131. 2006.

[Remedial Math: Rather than Spend More on Schools, We Should Spend More Wisely](#). The New Democrat, 7(6) , pp. 25-27. November/December 1995.

[Education and the Economy: Our School Performance Matters](#). Education Week, 24(21). 2-Feb-05.

[Developing Value-Added Measures for Teachers and Schools](#). (with Caroline M. Hoxby). Reforming Education in Arkansas, (Stanford: Hoover Institution Press), pp. 99-104. 2005.

[Rewarding Teachers](#). (with Caroline M. Hoxby). Reforming Education in Arkansas, (Stanford: Hoover Institution Press), pp. 155-166. 2005.

[Our School Performance Matters](#). Journal of Education, 185(3), pp. 1-6. Nov-04.

[Learn Lessons of the Past..](#) The Australian. 26-Aug-04.

[The Underrepresentation of Minority Faculty in Higher Education: Panel Discussion](#). American Economic Review, 94(2), pp. 304-306. May-04.

[It's not how much, but how you spend the money on schools](#). Salt Lake Tribune. 18-Apr-04.

[How to Determine Who is a Quality Teacher](#). (with Lewis C. Solmon, Philip Bigler, Lee S. Shulman, and Herbert J. Walberg). In Lewis C. Solmon and Tamara W. Schiff (ed.) .Talented Teachers: The Essential Force for Improving Student Achievement, Greenwich, CT: Information Age Publishing, pp. 49-85. 2004.

[Same Amount of Money Should Yield Better Results](#). San Jose Mercury News, p. 1P, 3P. 23-Nov-03.

[Potential Gains and Losses in Education](#). World and I, pp. 30-35. Sep-03.

[A False Schools 'Fix'..](#) New York Post. 30-Jun-03.[End Class-Size Straightjacket](#). Los Angeles Times, p. M2. 27-Apr-03.

[An Enormous Opportunity](#). Arkansas Democrat-Gazette. 1-Apr-03.

[Public School Finance and Urban School Policy: General versus Partial Equilibrium Analysis](#). In William G. Gale and Janet Rothenberg Pack (ed.). Brookings-Wharton Papers on Urban Affairs, Washington, DC: Brookings Institution, pp. 171-176. 2003.

[Comment \[on Krueger and Heckman\]](#). In Benjamin M. Friedman (ed.). Inequality in America: What Role for Human Capital Policies? Cambridge, MA: MIT Press, pp. 252-269. 2003.

[Teacher quality and teacher salaries](#). Policy Brief, Stanford Institute for Economic Policy Research, Stanford University. Nov-02.

[Introduction to the JHR's Special Issue on Designing Incentives to Promote Human Capital](#). (with James Heckman, Derek Nea). The Journal of Human Resources, 37(4), Autumn, pp. 693-695. 2002.

[Comment \[on Galiani and Schargrodsky\]](#). Economia, 2(2), Spring 2002, pp. 302-305. Apr-02.

[The Sequel: RAND versus RAND](#). Education Matters, 1(1), Spring, pp. 68-69. 2001.

[Efficiency and Equity in Education](#). NBER Reporter, National Bureau of Economic Research, p. 15-19. 2001.

[The Truth about Teacher Salaries and Student Achievement](#). In Williamson M. Evers, LanceT. Izumi, and Pamela A. Riley (ed.). School Reform: The Critical Issues, (Stanford, CA: Hoover Institution Press), pp. 174-175. 2001.

[Teacher quality and school reform](#). (with Steven G. Rivkin). Education Finance Research Consortium, The Teaching Workforce, Symposium Proceedings, Albany: Center for Policy Research, Rockefeller College, University of Albany, pp. 81-99. 2001.

[Money Alone Will Not Fix Bad Schools](#). New York Daily News. January 2001.

[Further Evidence on the Effects of Catholic Secondary Schooling](#). in William G. Gale and Janet Rothenberg Pack (ed.). Brookings-Wharton Papers on Urban Affairs, (Washington, DC: Brookings Institution, 2000), pp. 194-197. 2000.

[Class Size Reduction: Good Politics, Bad Education Policy](#). High School Magazine, 6(4), p.44. January 1999.

[Improving Student Achievement: Is Reducing Class Size the Answer?](#) Policy Brief, Progressive Policy Institute. June 1998.

[Are Resources Important?](#) Journal of Negro Education, 66(3), Summer, pp. 289-303. 1997.

[Review of Cohn and Johnes](#). Economics of Education Review, 16(3), pp. 346-347. June 1997.

[Why True Reform of Schools is so Unlikely](#). Jobs and Capital, (Milken Institute for Jobs and Capital Formation), 6, Winter, pp.23-27. 1997.

[Discussion \[of Kain and Singleton\]](#). New England Economic Review, pp. 111-114. May 1996.

[Making Schools Work: The Economics of School Reform](#). in Robert Berne (ed.). Study on Cost-Effectiveness in Education, (New York: New York State Board of Regents). 1996.

[Comment on Chapters Two, Three, and Four](#). in Helen Ladd (ed.). Holding Schools Accountable: Performance-Based Reform in Education, Washington, DC: Brookings Institution, pp. 128-136. 1996.

[Moving Beyond Spending Fetishes](#). Educational Leadership, 53(3), pp. 60-64. November 1995.

[Making Schools Work: Spending and Student Achievement](#). Heartland Policy Study No. 68, The Heartland Institute. September 1995.

[Schools Need Incentives, Not More Money](#). Wall Street Journal. October 1994.

[Making America's Schools Work: This Time Money is Not the Answer](#). Brookings Review, Fall, pp. 10-13. 1994.

[Education Investment and Education Reform](#). Jobs and Capital, (Milken Institute for Jobs and Capital Formation) 3 (Fall), pp. 36-38. 1994.

[Money Might Matter Somewhere: A Response to Hedges, Laine, and Greenwald](#). Educational Researcher, 23(4), pp. 5-8. May 1994.

[Microsimulation Models for Social Welfare Programs: An Evaluation](#). (with Constance F. Citro). Focus, Institute for Research on Poverty, University of Wisconsin—Madison, Winter, p. 13-21. December 1993.

[Comment \[on Manski\]](#). in Charles T. Clotfelter and Michael Rothschild. Studies of Supply and Demand in Higher Education, (Chicago: University of Chicago Press), pp. 57-60. 1993.

[Review \[of McPherson and Schapiro\]](#). Economics of Education Review , 12(2), pp. 187-188. 1993.

[Bringing Educational Measurement into the Age of Newton](#). (with C. Eugene Steuerle and Robert H. Meyer). Policy Bites, The Urban Institute. October 1991.

[Will More Spending Fix Unequal Schools?](#) Detroit News. October 1991.

[Testing Economic Knowledge](#). Journal of Economic Education, 22(3), Summer, pp. 273-75. 1991.

[Schools in the 1990s: The Opportunities and Risks Facing Texas and Other States](#). in Gerald P. O'Driscoll, Jr. and Stephen P.A. Brown (ed.). The Southwest Economy in the 1990s: A Different Decade, (Boston: Kluwer

Academic Publishers), pp. 39-43.

[Review of "The Green Book".](#) Journal of Policy Analysis and Management, 1989 Edition, 8(4), Fall, pp. 691-694. 1989.

[Overview of Federal Involvement in Education.](#) in National Economic Commission, Staff Papers, Background Papers, and Major Testimony, pp. 329-333. March 1989.

[American Domestic Priorities.](#) in John Quigley and Daniel Rubinfeld (ed.). American Domestic Priorities, (Berkeley, CA: Univ. of California Press), pp. 154-160. 1985.

[The Continuing Hope: A Rejoinder.](#) Journal of Policy Analysis and Management, 1(1), pp. 53-54. Autumn 1981.

[Throwing Money at Schools.](#) Education Week. November 1981.

[Comment \[on Apgar\].](#) in Gregory K. Ingram (ed.). Residential Location and Urban Housing Markets, NBER Studies in Income and Wealth, No. 45. (NY: National Bureau of Economic Research), pp. 173-180. 1977.

[Review \[of Sewell and Hauser\].](#) Journal of Human Resources, 11(3), Summer, pp. 420-422. 1976.

[Comment \[on Levin\].](#) in Joseph T. Froomkin, Dean T. Jamison, and Roy Radner (ed.). Education as an Industry, (New York: National Bureau of Economic Research), pp. 191-196. 1976.

[Price Data and Data Systems.](#) (with Paul G. Clifford, Eric Hanushek, and Elaine Gilde). Office of Economic Stabilization, Historical Working Papers on the Economic Stabilization Program, Volume II. Washington, D.C.: Government Printing Office. 1974.

[Review of Susan E. Mayer, What Money Can't Buy: Family Income and Children's Life Chances.](#) Journal of Policy Analysis and Management, 17(2), pp. 535-538. Summer 1998.

General Testimony

["The Pandemic Should Lead Us to Rethink School Policy,"](#) Testimony before the Committee on Health, Education, Labor and Pensions (HELP), United States Senate, September 18, 2025

["School Outcomes, Teacher Shortages, and the Current Equity Crisis",](#) Testimony before the U.S. Commission on Civil Rights, November 15, 2024

["School Finance and School Outcomes",](#) Finance Committee of the Ohio Senate, May 17, 2021

["School Finance and School Outcomes: The Role of Incentives",](#) Texas School Finance Commission, February 22, 2018

["Ohio's Economic Future",](#) Ohio Senate Education Committee, January 31, 2018

["Testimony on School Finance and the Courts,"](#) Washington State Senate Law and Justice Committee, May 28, 2015

["Testimony for the House and Senate Education Committees,"](#) Kansas Legislature, February 3, 2014

["Struggling Schools, Principals, and Teachers,"](#) testimony before the Legislative Finance Committee, New Mexico Legislature, July 18, 2013

["Testimony for the House Finance and Appropriations Committee,"](#) State of Ohio, December 5, 2012

["Testimony before the Senate Finance Committee,"](#) State of Ohio, December 5, 2012

["Alternate Economic Futures for the United States,"](#) U.S. Senate Committee on Health, Education, Labor and Pensions, March 8, 2012

["Testimony for the House and Senate Education Committees,"](#) Ohio Legislature, March 10, 2011

["Improving Teacher Quality,"](#) Senate Committee on Education, Texas Legislature, Austin, TX, July 20, 2010.

["Testimony for the Select Committee on Public School Finance Weights, Allotments & Adjustments,"](#) Texas Legislature, San Antonio, TX, May 19, 2010.

"The importance of improved data access in Texas," House Committee on Public Education, *Texas House of Representatives*, July 16, 2008

"Students First: Reforming California Schools," California Senate Education Committee, April 30, 2008

"What is Success and How do We Achieve It?" *High School Completion and Success Initiatives Council [TX]*, February 15, 2008

"Performance Incentives for Teachers and Administrators," Senate Select Committee on Education Reform & Public School Finance, *Texas State Senate*, February 27, 2006.

School Finance Proposals: The Koret Task Force Recommendations," House Select Committee on Public School Finance, *Texas House of Representatives*, February 18, 2004

"Thinking about School Finance in Texas," Testimony before the Subcommittee on Cost Adjustments for the House Select Committee on Public School Finance, *Texas House of Representatives*, October 22, 2003. [reprinted in Chris Patterson (ed.), *Putting the Sides Together: Twelve Perspectives on Texas Public School Finance* (Texas Public Policy Foundation, December 2003)]

"Arkansas Student Accountability and Educational Accountability Act of 2003," Testimony before the Education Committee, *House of Representatives, State of Arkansas*, March 26, 2003.

"The Structure and Funding of Special Education," Testimony before The President's Commission on Excellence in Special Education, Los Angeles, California, March 21, 2002

"Should Class Size Reduction Substitute for Innovation?" Testimony before the Committee on Health, Education, Labor and Pensions, *United States Senate*, June 23, 1999 [Note also comments on

"ESEA Re-authorization and Experimentation," July 8, 1999]

"The Evidence on Class Size," Subcommittee on Early Childhood, Youth, and Families, Committee on Education and the Workforce, *U.S. House of Representatives*, February 24, 1998

"Educational Reform and Current Education Initiatives," Committee on Education and the Workforce, *U.S. House of Representatives*, March 13, 1997

"The Federal Role in Educational Reform," Committee on the Budget, *U.S. Senate*, February 5, 1997

"Approaches to Reforming Vermont Schools," testimony before joint meeting of the Senate and House Education Committees, *Vermont Legislature*, January 11, 1996

"School Finance and Educational Reform," Subcommittee on Education, Arts, and Humanities, Committee on Labor and Human Resources, *U.S. Senate*, Washington, DC, July 26, 1993

"Overview of Federal Education Roles and Spending", *National Economic Commission*, Washington, DC, October 5, 1988

"Evaluation of the School Desegregation Study", *U.S. Commission on Civil Rights*, Washington, DC, February 8, 1986

"Long Run Budget Trends and Space Development Options," *National Commission on Space*, Washington, DC, September 17, 1985

"Future Budgetary Requirements for the 600-Ship Navy," Subcommittee on Seapower and Strategic and Critical Materials, Committee on Armed Services, *U.S. House of Representatives*, Washington, DC, September 6, 1985

"Space Shuttle Pricing Policy," Subcommittee on Science, Technology, and Space, Committee on Commerce, Science, and Transportation, *U.S. Senate*, Washington, DC, March 27, 1985

"Space Shuttle Pricing Policy", Subcommittee on Space Science and Applications, Committee on Science and Technology, *U.S. House of Representatives*, Washington, DC, March 5, 1985

"Financial Outlook for the Hospital Insurance Trust Fund," Subcommittee on Health, Committee on Ways and Means, *U.S. House of Representatives*, Washington, DC, September 13, 1984

"Steel Import Restrictions," Subcommittee on Trade, Committee on Ways and Means, *U.S. House of Representatives*, Washington, DC, June 20, 1984

"The Measurement of Poverty," Subcommittee on Census and Population, Committee on Post Office and Civil Service, and Subcommittee on Oversight, Committee on Ways and Means, *U.S. House of*

Representatives, Washington, DC, May 15, 1984

"Targeted Jobs Tax Credit," Subcommittee on Select Revenue Measures, Committee on Ways and Means,
U.S. House of Representatives, Washington, DC, April 10, 1984

"Financial Condition of the Highway Trust Fund," Committee on Ways and Means, *U.S. House of Representatives*, Washington, DC, February 23, 1984

Legal Testimony

School Finance

Glendale Elementary School District et al. v. State of Arizona et al. (Arizona), 2024

William Penn SD et al. v. Pennsylvania Department of Education et al. (Pennsylvania), 2022

Martinez et al. v. New Mexico; Yazzie et al. v. New Mexico (New Mexico), 2017

Connecticut Coalition for Justice in Education and Funding v. Rell et al. (Connecticut), 2016

Citizens for Strong Schools v. Florida (Florida), 2016

Maisto et al. v. State of New York (New York), 2015

Texas Taxpayers and Student Fairness Coalition et al. v. Scott et al. (Texas), 2013

Gannon et al. v. State of Kansas (Kansas), 2012

Abbott v. Burke (New Jersey), 2011

McCleary v. State of Washington (Washington), 2009 Davis v. South Dakota (South Dakota), 2008

Espinoza v. State of Arizona (Arizona), 2008

Committee for Educational Equality et al. v. State of Missouri et al. (Missouri), 2007

School Districts' Alliance v. State of Washington (Washington), 2006

Montoy et al. v. State of Kansas, et al. (Kansas), 2003

Campaign for Fiscal Equity et al. v. State of New York et al. (New York), 2000

Hoke County Board of Education et al. v. State of North Carolina (North Carolina), 1999

Claremont School District, et al. v. Merrill et al. (New Hampshire), 1996

Committee for Educational Equality v. Missouri; Lee's Summit v. Missouri (Missouri), 1992

Alabama Coalition for Equity v. Hunt; Harper v. Hunt (Alabama), 1992

Tennessee Small Schools et al. v. McWherter et al. (Tennessee), 1990

Abbott v. Burke (New Jersey), 1987

Somerset County Board of Education v. Hornbeck (Maryland), 1980

Levittown v. Nyquist (New York), 1976 S

Serrano v. Priest (California), 1973

Other Court Testimony

Vergara et al. v. State of California et al. , 2014

Jenkins et al. v. State of Missouri et al. (Kansas City, Mo.), 1997

Liddell et al. v. St. Louis et al., 1996

Court Submissions

Friedrichs v. California Teachers Association, 2016

Vergara v. California, 2014

Home v. Flores, 2009

Valenzuela v. O'Connell [CAHSEE], 2006

Williams v. California, 2003