

CURRICULUM VITA

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CURRENT POSITIONS

Thompson Research Professor
Graduate School of Education,
Harvard University

Research Associate, National Bureau of Economic Research

Senior Research Associate, William T. Grant Foundation

FIELDS OF CONCENTRATION Economics of Education; Labor Economics

EDUCATION B.A., Economics, Williams College, 1966

Fulbright Fellowship to University of Kiel, Germany, 1967

M.A., Economics, Yale University, 1968

Ph.D., Economics, Yale University, May 1974

PREVIOUS POSITIONS

High school mathematics teacher (1968-71)

University of Pennsylvania (member of Economics Department,
1974-1978)

Yale University (member of Economics Department, 1978-1983)

Professor, HGSE 1987-1997

Thompson Professor of Education and Society 1997-2014

Academic Dean, HGSE 2005-06

Acting Dean, HGSE, 2013

SAMPLE OF OTHER RECENT PROFESSIONAL ACTIVITIES

Fellow, Society of Labor Economists, 2013-

Member, American Academy of Arts & Sciences, 2013-

Fellow, American Educational Research Association, 2010-

Member, National Academy of Education, 1990-

Member, Board of Directors, the Spencer Foundation, 2011-

Member, Board of Directors, MDRC, 1991-

Member, W.T. Grant Foundation early career award selection committee, 2010-2019

Chair, Committee on Research Evidence related to Future Skill Demands, Division of Behavioral and Social Sciences and Education (DBASSE), National Research Council, 2007-2008.

Member of Advisory Board of Division of Behavioral and Social Sciences and Education (DBASSE), National Research Council, 1999-2005

Chair, Center for Education Advisory Board, National Research Council, 2001- 2006.

Member, Board of Directors, National Academy of Education, 2001-2004.

Member, Policy Council, Association of Public Policy and Management, 2000-2003

Special Senior Assistant to the Superintendent, Boston Public Schools, 2001-2002

Consultant, Inter-American Development Bank, 2013-2018

BOOKS Authored (in reverse chronological order):

Duncan, Greg J. and Murnane, R.J. *Restoring Opportunity: The Crisis of Inequality and the Challenge for American Education* (Harvard Education Press and the Russell Sage Foundation, January 2014)

Murnane, R.J. & Willett, J.B. *Methods Matter* (Oxford University Press, 2011).

Levy, F., & Murnane, R.J. (2004). *The New Division of Labor: How Computers Are Creating the Next Job Market*. Princeton, N.J.; New York: Princeton University Press; Russell Sage Foundation.

Murnane, R.J., & Levy, F. (1996). *Teaching the New Basic Skills: Principles for Educating Children to Thrive in a Changing Economy*. New York: Martin Kessler Books, Free Press.

Murnane, R.J., Singer, J.D., Willett, J.B., Kemple, J.J., & Olsen, R.J. (1991). *Who Will Teach? Policies That Matter*. Cambridge, Mass.: Harvard University Press.

Murnane, R.J. (1975). *The Impact of School Resources on the Learning of Inner City Children*. Cambridge, Mass.: Ballinger Publishing.

BOOKS Edited (in reverse chronological order):

Murnane, R.J., Sawhill, I., & Snow, C. (Eds.) (2012). *Literacy Challenges for the Twenty-First Century. Volume 22 Number 2 of The Future of Children*. Princeton: Princeton University and the Brookings Institution.

Duncan, G.J., & Murnane, R.J. (Eds.) (2011). *Whither Opportunity? Rising Inequality, Schools, and Children's Life Chances*. New York: Russell Sage.

Appelbaum, E., Bernhardt, A.D., & Murnane, R.J. (Eds.) (2006). *Low-Wage America: How Employers Are Reshaping Opportunity in the Workplace*. New York: Russell Sage.

Boudett, K.P., City, E.A., & Murnane, R.J. (Eds.) (2005). *Data Wise: A Step-by-Step Guide to Using Assessment Results to Improve Teaching and Learning*. Cambridge, MA: Harvard Education Press.

Murnane, R.J., & Raizen, S.A. (Eds.) (1988). *Improving Indicators of the Quality of Science and Mathematics Education in Grades K-12*. Washington DC: National Academy Press.

PUBLISHED ARTICLES AND BOOK CHAPTERS (in reverse chronological order):

2020-2010

- Papay, John P., Mantil, Ann, Murnane, Richard J., An, Lily, Donohue, Kate, & McDonough, Aubrey (2020). *Lifting all boats? Accomplishments and challenges from 20 years of education reform in Massachusetts*. Providence, RI: Educational Opportunity in MA, Brown University.
- Duncan, Greg, Magnuson, Katherine, Murnane, Richard, and Votruba-Drzal, Elizabeth. "Income Inequality and the Well-Being of American Families," *Family Relations* 68 (July 2019): 313–325.
- Murnane, Richard J., Reardon, Sean F., Mbekeani, Preeya P., and Lamb, Anne. "Who Goes to Private School?" *Education Next* 18:4 (Fall 2018).
- Murnane, Richard J. and Reardon, Sean F. "Long-Term Trends in Private School Enrollments by Family Income," *AERA Open* 4:1 (Jan-March 2018): 1-24.
- Duncan, Greg J., Magnuson, Katherine, and Murnane, Richard J. "Reforming Preschools and Schools," *Academic Pediatrics* 16: 3S (April 2016): pp. S121-S127.
- Ganimian, Alejandro J. and Murnane, Richard J. "Improving Education in Developing Countries: Lessons from Rigorous Impact Evaluations," *Review of Educational Research* (2016), pp. 1-37.
- Papay, John P., Murnane, Richard J., and Willett, John B. "The Impact of Test-Score Labels on Human-Capital Investment Decisions," *Journal of Human Resources* Vol. 52(2), Spring 2016, pp. 357-388.
- Papay, John P., Murnane, Richard J., and Willett, John B. "Income-based Inequality in Educational Outcomes: Learning from State Longitudinal Data Systems," *Educational Evaluation and Policy Analysis* (May 2015).
- Duncan, Greg J. and Murnane, Richard J. "Rising Inequality and the School Performance of Low- and High-Income Children," in Kathleen McCartney, Hirokazu Yoshikawa, and Laurie B. Forcier (eds.), *Improving the Odds for America's Children* (Harvard Education Press, 2014).
- Duncan, Greg J. and Murnane, Richard J. "Growing Income Inequality Threatens American Education," *Phi Delta Kappan*, March 2014.
- Duncan Greg J. and Murnane, Richard J. "Meeting the educational challenges of income inequality," *Phi Delta Kappan*, April 2014.
- Duncan Greg J. and Murnane, Richard J. "How Public Schools Can Fight Back Against Inequality," (with Greg J. Duncan). *The Atlantic* (online), February 11, 2014.
- Papay, John P., Murnane, Richard J., and Willett, John B. "High-School Exit Examinations and the Schooling Decisions of Teenagers: Evidence from Regression-Discontinuity Approaches," *Journal of Research on Educational Effectiveness* 7: 1-27 (2014).

Murnane, Richard J. and Hoffman, Stephen. "Graduations on the Rise," *Education Next* (Fall 2013).

Murnane, Richard J. "U.S. High School Graduation Rates: Patterns and Explanations." *The Journal of Economic Literature* 51(2): 370-422. (June 2013).

Murnane, Richard J. "Educational Policy Research: Progress, Puzzles and Challenges." *Multidisciplinary Journal of Educational Research*, 3(2), 234-250. (2012) doi: 10.4471/remie.2012.13

Snow, Catherine, Murnane, Richard J., and Sawhill, Isabel. "Literacy Challenges for the Twenty-First Century: Introducing the Issue," *The Future of Children* 22(2), (2012).

Reich, B. Justin, Murnane, Richard J., and John B. Willett. "The State of Wiki Usage in U.S., K-12 Schools: Leveraging Web 2.0 Data Warehouses to Assess Quality and Equity in Online Learning Environments", *Educational Researcher* (2012).

Papay, John P., Murnane, Richard J., and Willett, John B. "Extending the regression-discontinuity approach to multiple assignment variables," *Journal of Econometrics* (April 2011)

Duncan, Greg J., and Murnane, Richard J. "Introduction: The American Dream, Then and Now" (with Greg Duncan), chapter 1 (pp. 3-26) in Duncan, G.J., & Murnane, R.J. (Eds.) (2011). *Whither Opportunity? Rising Inequality, Schools, and Children's Life Chances*. New York: Russell Sage.

Murnane, Richard J., and Papay, John P. "Teachers' Views on NCLB: Support for the Principles, Concerns about the Practices," *Journal of Economic Perspectives* (Summer 2010)

Steele, Jennifer L., Murnane, Richard J., and Willett John B. "Do Financial Incentives Help Low-Performing Schools Attract and Keep Academically Talented Teachers? Evidence from California," *Journal of Policy Analysis and Management* (June 2010)

Papay, John P., Murnane, Richard J., and Willett, John B. "The Consequences of High School Exit Examinations for Low-Performing Urban Students: Evidence from Massachusetts," *Educational Evaluation and Policy Analysis* (March 2010)

2009-1999

Miller, R.T., Murnane, R.J. & Willett, J.B. (2008). Do Teacher Absences Impact Student Achievement? Longitudinal Evidence from One Urban School District. *Educational Evaluation and Policy Analysis*, 30(2), 181-200.

Miller, R.T., Murnane, R.J., & Willett, J.B. (2008). Do Worker Absences Affect Productivity? The Case of Teachers. *International Labour Review*, 147(1), 71.

Murnane, R.J. (2008). Educating Urban Children. In R.P Inman (Ed.), *Making Cities Work: Prospects and Policies for Urban America*. Princeton: Princeton University Press.

Murnane, R.J. (2007). Improving the Education of Children Living in Poverty. *The Future of Children*, 17(2), 161-182.

Murnane, R.J., & Nelson, R.R. (2007). Improving the Performance of the Education Sector: The Valuable, Challenging, and Limited Role of Random Assignment Evaluations. *Economics of Innovation & New Technology*, 16(5), 307-322.

Murnane, R.J., City, E.A., & Singleton, K. (2007). Using Data to Inform Decision-making in Urban School Districts: Progress and New Challenges. In P. Reville (Ed.), *A Decade of Urban School Reform: Persistence and Progress in the Boston Public Schools*. Cambridge, Mass.: Harvard Education Press. Also reprinted as Using Data for Decisions, *Voices in Urban Education*. (2008). Annenberg Institute for School Reform.

Murnane, R.J., & Steele, J. L. (2007). What Is the Problem? The Challenge of Providing Effective Teachers for All Children. *The Future of Children*, 17(1), 15-43.

Murnane, R.J., Willett, J.B., Bub, K.L., & McCartney, K. (2006). Understanding Trends in the Black-White Mathematics Achievement Gap During the First Years of School.” *Brookings-Wharton Papers on Urban Affairs*, 97-135.

Murnane, R.J., Willett, J.B., & Cardenas, S. (2006). Has PEC Contributed to Improvement in Mexican Public Education In F. Reimers (Ed.) *Aprender Más y Mejor* (Secretaría de Educación. Pública, México.

Sharkey, N.S., & Murnane, R.J. (2006). Tough Choices in Designing a Formative Assessment System. *American Journal of Education*, 112(4), 572-588.

Uribe, C., Murnane, R.J., Willett, J.B., & Somers, M. (2006). Expanding School Enrollment by Subsidizing Private Schools: Lessons from Bogotá. *Comparative Education Review*, 50(2), 241-277.

Boudett, K., City, E.A., & Murnane, R.J. (2006). The “Data Wise” Improvement Process. *Principal Leadership*. 7(2), 53-56. Also published in the January/February 2006 issue of the *Harvard Education Letter*.

Levy, F., & Murnane, R.J. (2006). Why the Changing American Economy Calls for Twenty-First Century Learning: Answers to Educators' Questions. *New Directions for Youth Development*, 2006(110), 53-62.

Murnane, R.J., Willett, J.B., Somers, M., & Uribe, C. (2005). Learning Why More Learning Takes Place in Some Classrooms Than Others. *German Economic Review*, 6(3), 309-330.

Appelbaum, E., Bernhardt, A., Murnane, R.J., & Weinberg, J.A. (2005). Low-Wage Employment in America: Results From a Set of Recent Industry Case Studies. *Socio- Economic Review*, 3(2), 293-310.

Murnane, R.J. (2005). The Role of Markets in American K-12 Education. In R. Nelson (Ed.) *The Limits of Market Organization*. New York: Russell Sage Foundation, 161-184.

Boudett, K.P., Murnane, R.J., City, E.A., & Moody, L. (2005). Teaching Educators How to Use Student Assessment Data to Improve Instruction. *Phi Delta Kappan*, 86(9), 700-706.

Murnane, R.J., Sharkey, N.S., & Boudett, K.P. (2005). Using Student Assessment Results to Improve Instruction: Lessons from a Workshop. *Journal of Education for Students Placed at Risk*, 10(3), 269-280.

Murnane, R.J. & Sharkey, N.S. (2004). Learning from Student Assessment Results: Lessons from New York State. *Education Finance and Organizational Structure in New York State Schools, Symposium Proceedings 2004*. Albany, NY: Center for Policy Research, Education Finance Research Consortium.

Levy, F., & Murnane, R.J. (2004). Education and the Changing Job Market. *Educational Leadership*, 62(2), 80-83.

Levy, F. & Murnane, R.J. (2004). A Role for Technology in Professional Development? Lessons from IBM. *Phi Delta Kappan*, 85(10), 728-734.

Autor, D., Levy, F., & Murnane, R.J. (2004). Skill Demand, Inequality, and Computerization: Connecting the Dots. *Federal Reserve Bank of Atlanta Regional Review*.

Tyler, J.H., Murnane, R.J., & Willett, J.B. (2004). The Devil's in the Details: Evidence from the GED on Large Effects of Small Differences in High Stakes Exams. *Economics of Education Review*, 23(4), 339-349.

Murnane, R.J. (2003). Devil in the Details. *Boston Review*, 28(5), 12.

Murnane, R.J. (2003). Standards-Based Educational Reforms: Progress, but Enough to Sustain Momentum? *New York University Review of Law and Social Change*, 28(2), 339-342.

Sharkey, N.S., & Murnane, R.J. (2003). Learning from Student Assessment Results. *Educational Leadership*, 61(3), 77-81.

Autor, D.H., Levy, F., & Murnane, R.J. (2003). The Skill Content of Recent Technological Change: An Empirical Exploration. *Quarterly Journal of Economics*, 118(4), 1279-1333.

Murnane, R.J. (2003). The Future of Low Wage Work: An Overview. In E. Appelbaum, A.D. Bernhardt, & R.J. Murnane (Eds.), *Low-Wage America: How Employers Are Reshaping Opportunity in the Workplace*. New York: Russell Sage.

Murnane, R.J., Autor, D., & Levy, F. (2003). Computer-Based Technological Change and Skill Demands: Reconciling the Perspectives of Economists and Sociologists. In E. Appelbaum, A.D. Bernhardt, & R.J. Murnane (Eds.), *Low-Wage America: How Employers Are Reshaping Opportunity in the Workplace*. New York: Russell Sage.

Tyler, J.H., Murnane, R.J., & Willett, J.B. (2003). Who Benefits from a GED? Evidence for Females from High School and Beyond. *Economics of Education Review*, 22(3), 237-247.

Murnane, R.J. (2003). Improving Urban Public Schools: Suggestions for Teacher Union Leaders. *Education in the 21st Century: Meeting the Challenges of a Changing World, Conference Proceedings*, Federal Reserve Bank of Boston, 297-303.

Vegas, V., Murnane, R.J., & Willett, J.B. (2003). From High School to Teaching: Many Steps. Who Makes It?" *Teachers College Record*, 103(3), 427-449.

Murnane, R.J., Beamish, A., & Levy, F. (2002). Information Technology and Skill Requirements:

Examples from a Car Dealership, In F. Rauner, N. Schreier, G. (Eds) *The Future of Computer-Supported Diagnosis*. Germany: W. Bertelsmann Verlag), 133-159.

Autor, D.H., Levy, F., & Murnane, R.J. (2002). Upstairs, Downstairs: Computers and Skills on Two Floors of a Large Bank. *Industrial & Labor Relations Review*, 55(3), 432-447.

Murnane, R.J., Sharkey, N.S., & Levy, F. (2002). A Role for the Internet in America Education? Lessons from the Cisco Networking Academies. In P. Graham and N. Stacey (Eds.) *The Knowledge Economy and Postsecondary Education*, The Committee on the Impact of the Changing Economy on the Postsecondary Education System, Washington, DC: National Academy Press, 127-157.

Murnane, R.J., & Levy, F. (2001). Key Competencies Critical to Economic Success. In D. Rychen and L. Salganik (Eds.) *Defining and Selecting Key Competencies*. Kirkland, WA: Hogrefe & Huber Publishers.

Murnane, R.J., & Levy, F. (2001). Will Standards-Based Reforms Improve the Education of Students of Color? *National Tax Journal*, 54(2), 401-415.

Murnane, R.J., Willett, J.B., Braatz, M.J., & Duhaldeborde, Y. (2001). Do Different Dimensions of Male High School Students' Skills Predict Labor Market Success A Decade Later? Evidence from the NLSY. *Economics of Education Review*, 20(4), 311-320.

Boudett, K.P., Murnane, R.J., & Willett, J.B. (2000). 'Second-Chance' Strategies for Women Who Drop Out of School. *Monthly Labor Review*, 123(12), 19-31. (Won prize for best paper in the journal for the calendar year.)

Tyler, J.H., Murnane, R.J., & Willett, J.B. (2000). Do the Cognitive Skills of School Dropouts Matter in the Labor Market? *Journal of Human Resources*, 35(4), 748-754

Murnane, R.J., & Willett, J.B. (2000). How Important Are the Cognitive Skills of Teenagers in Predicting Subsequent Earnings? *Journal of Policy Analysis & Management*, 19(4), 547-568.

Tyler, J.H., Murnane, R.J., & Willett, J.B. (2000). Estimating the Labor Market Signaling Value of the GED. *Quarterly Journal of Economics*, 115(2), 431-468.

Murnane, R.J., Willett, J.B., & Tyler, J.H. (2000). Who Benefits from Obtaining A GED? Evidence from High School and Beyond. *Review of Economics & Statistics*, 82(1), 23-37.

Murnane, R.J. (2000). The Case for Standards, *Boston Review*, 24, 6.

Murnane, R.J., Willett, J.B., & Boudett, K.P. (1999). Do Male Dropouts Benefit from Obtaining a GED, Post-Secondary Education, and Training?" *Evaluation Review*, 23(5), 475-503.

1998-1975

"Standards, Information, and the Demand for Student Achievement," (with Frank Levy), in *Economic Policy Review* [Federal Reserve Bank of New York], March 1998, pp. 117-124.

"The Nation's Teaching Force," in *Teachers College Record*, Vol. 99, No. 1, Fall 1997 (with Emiliana Vegas), pp. 36-41.

"Does Acquisition of a GED Lead to More Training, Post-Secondary Education, and Military Service for School Dropouts?," in *Industrial and Labor Relations Review* (Vol. 51, No. 1, October 1997) (with John B. Willett and Kathryn Parker Boudett), pp. 100-116.

"The New Basics: How the right businesses can help our schools," in *The American School Board Journal*, Vol. 184, No. 4, April 1997 (with Frank Levy), pp. 26-29.

"What General Motors Can Teach U.S. Schools About the Proper Role Of Markets in Education Reform," in *Phi Delta Kappan* (Vol. 78, No. 2, October 1996) (with Frank Levy), pp. 109-114.

"Skills for Success in a Civil Society," in *Educational Leadership* (with Frank Levy).

"Economic Reporting And Two-Way Learning," in *Jobs & Capital* (Vol. V, Summer 1996) (with Frank Levy), pp. 12-15.

"With What Skills Are Computers a Complement?" *The American Economic Review* (May 1996)2: pp. 258-262 (with Frank Levy).

"The Contribution of Training and Subject Matter Knowledge to Teaching Effectiveness: A Multi-Level Analysis of Longitudinal Evidence From Belize," *Comparative Education Review* 40(May 1996)2: pp. 139-157 (with John Mullens and John Willett).

"Evidence from Fifteen Schools in Austin, Texas," in Gary Burtless, ed., *Does Money Matter?* (Brookings 1996) (with Frank Levy).

"Are More of College Graduates Really Taking High School Jobs? A Reconsideration of the Evidence," *Monthly Labor Review* (with John Tyler and Frank Levy) 118(December 1995)12, 18-27.

"Pentium Politics," *Jobs & Capital*, 4 (Summer 1995) (with Frank Levy),

"Staffing the Nation's Schools with Skilled Teachers," in Eric A. Hanushek, ed., *Improving American Schools: The Role of Incentives*, National Academy of Sciences, 1996.

"Teaching to New Standards," *Rewards and Reform* edited by Susan Fuhrman and Jennifer O'Day, 8: pp. 257-293 (Jossey-Bass 1996) (with Frank Levy).

"Do High School Dropouts Benefit from Obtaining a GED?" (with John Willett and Kathryn Boudett), *Educational Evaluation and Policy Analysis* (May 1995).

"Will School Finance Reform Improve Education for Disadvantaged Children? Research Issues," *Educational Policy* 8(December 1994)4: pp. 535-542.

"The Growing Importance of Cognitive Skills in Wage Determination" (with Frank Levy and John Willett), *Review of Economics and Statistics* (May 1995).

"Why Are There Fewer and Fewer Black Teachers?" (with James Kemple, Judith Singer, and John Willett), in Gail Thomas (ed.) *Race and Ethnicity in America*, Taylor and Francis, Washington, DC, 1995.

"Did the Job Market Worsen for Male College Graduates Over the 1980s? Different Answers for Different Age Groups," (with John Tyler and Frank Levy) in S. Polacheck (ed.) *Research in Labor Economics* Vol. 14, 1995.

"Skills, Demography, and the Economy: Is There a Mismatch?" in L. C. Solmon and A. R. Levenson (eds.) *Labor Markets, Employment Policy, and Job Creation* (Boulder, CO: Westview Press, 1994). (With Frank Levy)

"Education and the Well-Being of the Next Generation," in S. Danziger, G. Sandefur, and D. Weinberg (eds.) *Confronting Poverty: Prescriptions for Change* (Cambridge, MA: Harvard University Press, 1994).

"Stimulating Employer-Provided General Training," *Journal of Policy Analysis and Management* 13(1994)1: pp.75-81 (with Frank Levy).

"Why Today's High-School-Educated Males Earn Less than Their Fathers Did: The Problem and an Assessment of Responses," *Harvard Educational Review* (Spring 1993) (with Frank Levy).

"Economic Incentives to Improve Teaching," in J. Farrell and J. Oliveira (eds.) *Teachers in Developing Countries: Improving Effectiveness and Managing Costs* (Washington, DC: The World Bank, 1993).

"Education and Training," in Aaron, H. and Schultze, C., (eds.) *Setting Domestic Priorities: What Can Government Do?* (Brookings, 1992) (with Frank Levy).

"Who Will Teach?" in E. E. Boe and D. M. Gilford (eds.) *Teacher Supply, Demand, and Quality: Policy Issues, Models, and Data Bases* (Washington, DC: National Academy Press, 1992).

"Where Will All the Smart Kids Work?" *Journal of the American Planning Association* 58(Summer 1992)3: pp. 283-7.

"Comment: Restructuring Work and Learning," in George E. Peterson and Wayne Vroman (eds.) *Urban Labor Markets and Job Opportunity* (Washington, D.C.: The Urban Institute Press, 1992).

"U.S. Earnings Levels and Earnings Inequality: A Review of Recent Trends and Proposed Explanations," *Journal of Economic Literature* (September 1992) (with Frank Levy).

"The Case for Performance-Based Licensing," *Phi Delta Kappan* (October 1991): pp. 137-142.

"Interpreting the Evidence on: `Does Money Matter?'" *Harvard Journal on Legislation* 28(Summer 1991)2: pp. 457-464.

"The Effects of Salaries and Opportunity Costs on Length of Stay in Teaching: Evidence from North Carolina," *Journal of Human Resources* 25(Winter 1990)1: pp. 106-124 (with Randall Olsen); reprinted in Dr. Geraint Johnes and Dr. Elchanan Cohn (Eds.) *Recent Developments in the Economics of Education* (London: Edward Elgar Publishing Limited, 1993).

"Education and the Productivity of the Work Force: New Challenges," *Florida Policy Review* 5(Winter 1990)2: pp. 1-7.

"Race, Gender, and Opportunity: Supply and Demand for New Teachers in North Carolina, 1975-1985," *Educational Evaluation and Policy Analysis* 11(Summer 1989)2: pp. 93-108 (with Michael Schwinden).

"The Influences of Salaries and "Opportunity Costs" on Teachers' Career Choices: Evidence from North Carolina," *Harvard Educational Review* 59(August 1989)3: pp. 325-346 (with Judith D. Singer and John B. Willett).

"The Effects of Salaries and Opportunity Costs on Duration in Teaching: Evidence from Michigan," *Review of Economics and Statistics* 11(May 1989)2: pp. 347-352 (with Randall Olsen).

"Will There Be Enough Teachers?" *American Economics Review Papers and Proceedings* 79(May 1989)2: pp. 242-246 (with Randall J. Olsen).

"The Career Paths of Teachers: Implications for Teacher Supply and Methodological Lessons for Research," *Educational Researcher* (August-September 1988) (with Judith D. Singer and John B. Willett).

"Education and the Productivity of the Workforce: Looking Ahead," in Robert E. Litan, Robert Z. Lawrence, and Charles L. Schultze (eds.) *American Living Standards: Threats and Challenges* (Washington, DC: Brookings, 1988).

"Comments on Ehrenberg and Chaykowsky," in Richard B. Freeman and Casey Ichniowski (eds.) *When Public Sector Workers Unionize* (Chicago: University of Chicago Press, 1988): pp. 263-269.

"Lessons from Comparing Education Indicators and Economic Indicators," *Phi Delta Kappan* (March 1988) (with Edward Pauly).

"How Enrollment Declines Affect Per Pupil Expenditure Levels in Public School Districts," in J. Quigley (ed.) *Perspectives in Local Public Finance*, Vol. 3 (JAI Press, 1987): pp. 159-196 (with E. Cavin and R. Brown).

"Improving Education Indicators and Economic Indicators: The Same Problems?" *Educational Evaluation and Policy Analysis* (Summer 1987).

"Changes in Teacher Salaries During the 1970s: The Role of School District Demographics," *Economics of Education Review* 6(1987)4: pp. 379-388 (with Judith D. Singer and John B. Willett).

"Understanding Teacher Attrition," *Harvard Educational Review* (May 1987).

"Family Choice in Public Education: The Roles of Students, Teachers, and System Designers," *Teachers College Record* (Winter 1986).

"Merit Pay and the Evaluation Problem: Why Most Merit Pay Plans Fail and a Few Survive," *Harvard Educational Review* 56(February 1986)1: pp. 1-17 (with David K. Cohen).

"The Merits of Merit Pay," *The Public Interest* (Summer 1985) (with David K. Cohen).

"School District Responses to Enrollment Changes: The Direction of Change Matters!" *Journal of Education Finance* 10(Spring 1985)4: pp. 426-440 (with E. Cavin and R. Brown).

"An Economist's Look at Federal and State Education Policies," in J. Quigley and D. Rubinfeld (eds.) *American Domestic Priorities* (University of California Press, 1985).

"The Rhetoric and Reality of Merit Pay: Why Are They Different?" in H. Johnson (ed.) *Merit, Money and Teachers' Careers* (University Press of America, 1985).

"A Critique of the Methodology of 'The Catholic High School: A National Portrait'," *Momentum* 16(May 1985)2: pp. 21-23.

"Comparing Public and Private Schools: The Puzzling Role of Selectivity Bias," *Journal of Business and Economic Statistics* (January 1985) (with Stuart Newstead and Randall Olsen). Reprinted in *Evaluation Studies Review Annual*, 1985.

"Comparisons of Public and Private Schools: Lessons from the Uproar," *Journal of Human Resources* (Spring 1984). Reprinted in *Evaluation Studies Review Annual*, 1985. Revised version entitled

"Comparisons of Private and Public Schools: What Can We Learn?" published in D. Levy (ed.) *Private Education: Studies in Choice and Public Policy* (Oxford University Press, 1986).

"Alternative Views of the Quality of American Education" in E. Dean (ed.) *Education and Economic Productivity* (Ballinger, 1984).

"Production and Innovation When Techniques are Tacit: The Case of Education," *Journal of Economic Behavior and Organization* (December 1984) (with Richard R. Nelson).

"Comments on Arthur E. Wise's and Linda Darling-Hammond's paper entitled: 'Education by Vouchers: Private Choice and the Public Interest,'" *Educational Theory* (Winter 1984).

"Selection and Survival in the Teacher Labor Market," *Review of Economics and Statistics* (August 1984).

Essay Review of W. W. McMahon and T. G. Geske (eds.) *Financing Education: Overcoming Inefficiency and Inequity*, in *American Journal of Education* (November 1983).

"How Clients' Characteristics Affect Organization Performance: Lessons from Education," *Journal of Policy Analysis and Management* 2(Spring 1983).

"Understanding the Sources of Teaching Competence: Skills, Choices, and the Limits of Training," *Teachers College Record* (Spring 1983).

Essay Review of W. K. Cummings, *Education and Equality in Japan*, in *American Journal of Sociology* (May 1983).

"Quantitative Studies of Effective Schools: What Have We Learned?" in A. Odden and L.D. Webb (eds.)

"Understanding Public and Private Schools: Implications for Tuition Tax Credits," in T. James and H. Levin (eds.) *Public Support for Private Schools* (Temple University Press, 1983). Revised version entitled "Comparisons of Private and Public Schools: The Critical Role of Regulations," published in D. Levy (ed.) *Private Education: Studies in Choice and Public Policy* (Oxford University Press, 1986).

"Input-Output Research in Education: Accomplishments, Limitations, and Lessons," in A. Summers (ed.) *New Directions for Testing and Measurement: Productivity Assessment in Education*, No. 15 (Jossey-Bass, September 1982).

"Initial Comments on Coleman's Public and Private Schools," *School Research Forum* (April 1981).

"Making Sense of Research on School Effectiveness: The Primacy of Human Resources in Schooling," *Impact on Instructional Improvement* 16 (Summer 1981).

"Interpreting the Evidence on School Effectiveness," *Teachers College Record* (Fall 1981).

"Evidence, Analysis, and Unanswered Questions," *Harvard Educational Review* 51(November 1981).

Essay Review of L. Sproull, et al., "Organizing an Anarchy," in *Economics of Education Review* (Winter 1981).

"Teacher Mobility Revisited," *Journal of Human Resources* (Winter 1981).

"Learning by Doing, Vintage, and Selection: Three Pieces of the Puzzle Relating Teaching Experience and Teaching Performance," *Economics of Education Review* 1(Fall 1981) (with Barbara Phillips).

"Seniority Rules and Educational Productivity: Understanding the Consequence of a Mandate for Equality," *American Journal of Education* 90 (November 1981).

"Home Resources and Children's Achievement," *Review of Economics and Statistics* (August 1981) (with Rebecca Maynard and James Ohls).

"What Do Effective Teachers of Inner City Children Have in Common?" *Social Science Research* 10 (1981) (with Barbara Phillips).

"New Evidence on the Relationship Between Mother's Education and Children's Cognitive Skills," *Economics of Education Review* (Spring 1981).

"The Effects of a Negative Income Tax on School Performance: Results of an Experiment," *Journal of Human Resources* (Fall 1979) (with Rebecca Maynard). Reprinted in E. Stromsdorfer and G. Farkas (eds.) *Evaluation Studies Volume 5* (1980).

Essay Review of J. T. Fromkin, et al. (eds.) *Education as an Industry*, in *Journal of Human Resources* (Spring 1979).

Review of J. E. Coons and S. D. Sugarman, *Education by Choice: The Case for Family Control*, in *Harvard Educational Review* (May 1979).

"Using Panel Data to Improve Estimates of the Determinants of Educational Achievement," *Sociology of Education* (April 1979) (with Anthony Boardman).

"Evolution at Alum Rock," *Review of Education* 1(August 1975)3: 309-318 (with David Stern and Richard DeLone).

SELECTED OP ED PIECES:

“How We can Strengthen Schools Serving Low-Income Children” (with Greg J. Duncan), *Education Week* (August 5, 2014)

“Are Public-Service Subsidies Good for the Public?” (with Jennifer L. Steele and John B. Willett) *Education Week* (July 14, 2010)

“When 19 Heads are Better than One,” (with Kathryn P. Boudett and Elizabeth A. City), *Education Week* (Dec. 7, 2005)

"The Increasing Role of the GED in American Education," *Education Week* (May 3, 2000) (with John H. Tyler)

"Test scores are a poor way to evaluate classroom performance. How to judge teachers," *Boston Globe*, Thursday, January 28, 1999.

"Money's only one lure to would-be teachers," *Boston Sunday Globe*, July 12, 1998, p. D3.

“Why Money Matters Sometimes: A Two-Part Management Lesson from East Austin, Texas,” *Education Week* (September 11, 1996) (with Frank Levy).

“Recent Job Gains Conceal a Harsh Truth,” *New York Times* (Dec. 12, 1993 (with Frank Levy)

“Orphans of the Ballot Box,” *New York Times* (February 6, 2009) (with Frank Levy)