

David W. Grissmer

Research Professor

Director- Foundations of Cognition and Learning Lab (FOCAL)

Center for Advanced Study of Teaching and Learning (CASTL)

Curry School of Education, University of Virginia

EDUCATION

1968 Ph.D., Purdue University, Physics

1964 M.S., Purdue University, Physics

1962 B.S., Xavier University, Physics,(Summa Cum Laude)

PROFESSIONAL EXPERIENCE

2007- Research Professor, University of Virginia

1977 - 2006 Rand Corporation, Senior Management Scientist

1976 - 1977 Mathematica, Washington Office, Assistant Director

1974 – 1976 Director, Department of Policy Analysis, General Research Corporation

1969 - 1974 Advanced Research Department, Research Analysis Corporation

PREVIOUS RESEARCH SUPPORT

Dr. Grissmer's education research have been funded by foundations (Rockefeller, Ford, Lilly, Danforth, Arnold), the National Science Foundation, the National Institute for Child Health and Development, Social Innovation Fund, the White House Office of Science and Technology and the Institute for Education Research

RECENT AND ONGOING RESEARCH SUPPORT

NSF Grant- \$1M- to study developmental origins of achievement score gaps

IES grant-\$5M- to evaluate the impact of Core Knowledge Charter Schools in improving reading, math and writing achievement using a kindergarten lottery

NICHD grant-\$1M- to conduct an RCT to evaluate the impact of improving fine motor and executive function skills on math scores

NSF EAGER grant- 300K- to further evaluate, disseminate and develop policy implications for research on the origins of score gaps.

IES- \$2.8M- to evaluate the WINGS after-school socio-emotional learning program.

Social Innovation Fund (SIF)- \$1.5M- to enhance the evaluation of the WINGS after-school socio-emotional program

NSF Grant- \$2.5M to develop multi-component interventions from pre-k to 3rd grade focused on closing achievement gaps and to improve the current R&D system for funding educational and children's research

CAREER FOCUS

Dr. Grissmer's career has focused on using quantitative techniques from statistics, econometrics and operations research to analyze *important public policy problems* in defense personnel, education and child/youth policy. He currently is the Director of the Foundations of Cognition and Learning Lab (FOCAL) at the University of Virginia that has won \$15M in federal grants to study the role of early developmental, domain general skills in shaping later math, reading, and science achievement through experimental interventions and analysis of longitudinal data.

PUBLICATIONS

Grissmer, David W., (2017), A guide to incorporating multiple methods in randomized controlled trials to assess intervention effects."Washington, DC: American Psychological Association

Kim, H., Duran, C. A., Cameron, C. E., & Grissmer, D. (2017). Developmental relations among motor and cognitive processes and mathematics skills. *Child Development*.

Cameron, C. E., Cottone, E. A., Murrah, W. M., & Grissmer, D. W. (2016). How are motor skills linked to children's school performance and academic achievement?, *Child Development Perspectives*, 10(2), 93-98.

Byers, A. I., Cameron, C. E., Ko, M., LoCasale-Crouch, J., & Grissmer, D. W. (2016). What Preschool Classroom Experiences Are Associated With Whether Children Improve in Visuomotor Integration? *Early Education and Development*, 27(7), 976-1003.

Kim, H., Byers, A. I., Cameron, C. E., Brock, L. L., Cottone, E. A., & Grissmer, D. W. (2016). Unique contributions of attentional control and visuomotor integration on concurrent teacher-reported classroom functioning in early elementary students. *Early Childhood Research Quarterly*, 36, 379-390.

Cameron, C. E., Brock, L. L., Hatfield, B. E., Cottone, E. A., Rubinstein, E., LoCasale-Crouch, J., & Grissmer, D. W. (2015). Visuomotor integration and inhibitory control compensate for each other in school readiness. *Developmental psychology*, 51(11), 1529.

Kim, H., Byers, A., Cameron, C. E., Brock, L. L., Cottone, E. A., & Grissmer, D. W. (2016). Unique contributions of attentional control and visuomotor integration on concurrent teacher-reported classroom functioning in early elementary students. *Early Childhood Research Quarterly*, 36, 379-390.

Cameron, C. E., Brock, L. B., Hatfield, B., Cottone, E. A. Rubinstein, E., Grissmer, D. W. (2015). Visuomotor Integration and Inhibitory Control Compensate For Each Other in School Readiness, *Developmental Psychology*,

Cameron, C. E., Grimm, K. J., *Steele, J. S., Castro-Schilo, L., & Grissmer, D. W. (2015). Nonlinear Gompertz curve models of achievement gaps in mathematics and reading. *Journal of Educational Psychology*

Kim, H., Schmidt, K. M., Murrah, W. M., Cameron, C. E., & Grissmer, D. W.(2015). A Rasch analysis of the KeyMath-3 Diagnostic Assessment. *Journal of Applied Measurement*, 16(4), 365-378.

Kim, H., Murrah, W. H., Cameron, C. E., Brock, L. L., Cottone, E. A., & Grissmer, D. (2014). Psychometric properties of the teacher-reported Motor Skills Rating Scale. *Journal of Psychoeducational Assessment*.

Grissmer, D. W., Ober, D. & Beekman, J. (2014). Focusing on short-term achievement gains fails to produce long-term gains. *Education Policy Analysis Archives*, 22, 5.

Ottmar, E. R., Konold, T. R., Berry, R. Q., Grissmer, D. W., & Cameron, C. (2014). Evaluating the Structure of the mathematics teacher questionnaire: A measure of exposure to mathematics instructional practices and content. *Learning Environments Research*, 17(1), 127-138.

Ottmar, E. R., Berry, R. Q., Cameron, C., Konold, T. R., & Grissmer, D. W. (2013). Increasing equity and achievement in fifth grade mathematics: The contribution of content exposure. *School Science and Mathematics, 113*(7), 345-355.

Potter, D., Mashburn, A., Grissmer, D., (2013) The Family, Neuroscience, and Academic Skills: An Interdisciplinary Account of Social Class Gaps in Children's Test Scores, *Social Science Research, 42*(2), 446-464.

Baker, C. E., Cameron, C. E., Rimm-Kaufman, S. E., & Grissmer, D. W. (2012). Family and sociodemographic predictors of school readiness in African American boys. *Early Education & Development, 23*(6), 833-854.

Cameron, C. E., Brock, L. L., Murrah, W. M., Bell, L., Worzalla, S., Grissmer, D. W., & Morrison, F. J. (2012). Fine motor skills and executive function both contribute to kindergarten achievement. *Child Development, 83*, 1229-1244.

Cameron, C. E., Chen, W-B., Cottone, E., Blodgett, J., Mashburn, A. J., Brock, L. L., & Grissmer, D. W. (2012). Preliminary validation of the Motor Skills Rating Scale. *Journal of Psychoeducational Assessment, 30*, 555-556.

Fitzpatrick, M. D., Grissmer, D. W., & Hastedt, S. (2011). What a difference a day makes: Estimating daily learning gains during kindergarten and first grade using a natural experiment. *Economics of Education Review, 30*(2), 269-279.

Grissmer, D. W., Grimm, K. J., Aiyer, S. M., Murrah, W. M., & Steele, J. S. (2010). Fine motor skills and early comprehension of the world: Two new school readiness indicators. *Developmental Psychology, 46*(5), 1008-1017.

Demmert, William G., D. Grissmer and J. Towner, (2006). A Review and Analysis of the Research on Native American Students. *Journal of American Indian Education - Special Edition, 45*(3).

Grissmer, D. W. (2000). The Continuing Use and Misuse of SAT Scores. *Journal of Psychology, Public Policy and Law, 6*(1), 223-232.

Grissmer, D. W. (1999). Issue on Class Size, Guest Editor, *Educational Evaluation and Policy Analysis, 20*(2).

Grissmer, D. W. (1999). Effects of Class Size: Assessing the Evidence, its Policy Implications and Future Research Agenda. *Educational Evaluation and Policy Analysis, 20*(2).

Grissmer, D. W. & Kirby, S. N. (1997). Teacher Turnover and Teacher Quality. *Teacher's College Record, 99*(1).

Kirby, S., Grissmer, D. W., & Hudson, L. (1991). Sources of Teacher Supply: Some New Evidence from Indiana. *Educational Evaluation and Policy, 13*(3).

BOOK CHAPTERS

Grissmer, D. W., Subotnik, R., & Orland, M. (2009). *A Guide to Incorporating Multiple Methods in Randomized Controlled Trials to Assess Interventions*, Washington, D.C.: American Psychological Association.

Grissmer, D. & Eiseman, E. (2008). Can Gaps in the Quality of Early Environments and Non-cognitive Skills Help Explain Persisting Black-White Achievement Gaps? In J. Waldfogel & K. Magnuson (Eds.), *Steady Gains and Stalled Progress: Inequality and the Black-White Test Score Gap*. New York, NY: Russell Sage Foundation.

Flanagan, A. & Grissmer, D. W. (2007). What do National and State NAEP Scores Tell Us About the Achievement of American K-12 Students? In B. Brown (Ed.), *Key Indicators of Child and Youth Well-Being: Completing the Picture*. Psychology Press.

Grissmer, D. W. & Flanagan, A. (2004). The Role of Federal Resources in Closing the Achievement Gaps of Minority and Disadvantaged Students. In T. Loveless, (Ed.), *Closing the Gap: Promising Approaches to Reducing the Achievement Gap*. Washington D.C.: Brookings.

Grissmer, D. W. (2001). Cost-Effectiveness and Cost Benefit Analysis: The Effect of Targeting Interventions. In H. Levin & P. McEwan, (Eds.), *American Educational Finance Yearbook*. Washington, D.C.: American Education Finance Association.

Flanagan, A. & **Grissmer, D.** (2001). Searching for Indirect Evidence for the Effects of State Reform. In D. Ravich (Ed.), *Education*, Washington, D.C.: Brookings.

Grissmer, D. (2001). Research Directions for Understanding the Relationship of Educational Resources to Educational Outcomes. In S. Chaikind & W. Fowler (Eds.), *Education Finance in the New Millennium*. Larchmont, NY: Eye on Education.

Grissmer, D. W. & Ross, J. M. (Eds.), (2000). *Analytic Issues in Student Achievement*. Washington, D.C.: U.S. Department of Education, NCES.

Grissmer, D. & Flanagan, A. (2000). Improving Methodology and Data in Educational Research. In D. Grissmer & M. Ross (Eds.), *Analytic Issues in Student Achievement*. Washington, D.C.: U.S. Department of Education, NCES.

Grissmer, D., & Flanagan, A. (1999). Making Title I more effective: Lessons from recent research. *Hard work for good schools: Facts not fads in Title I reform*, (48-56). Cambridge, MA.

Grissmer, D., Flanagan, A., Kawata, J., & Williamson, S. (1998). Why Did Black Test Scores Rise Rapidly in the 1970s and 1980s. In C. Jencks & M. Phillips (Eds.), *The Black-White Test Score Gap*. Washington, D.C.: Brookings.

Grissmer, D. W., Kirby, S. N., Berends, M., & Williamson, S. (1998). Exploring the Rapid Rise in Black Achievement Scores in the United States (1970-1990). In U. Neisser (Ed.), *The Rising Curve: Long-Term Changes in IQ and Related Measures*. Washington, D.C.: American Psychological Association.

Grissmer, D., Flanagan, A., & Williamson, S. (1997). Does Money Matter for Minority and Disadvantaged Students: Assessing the New Empirical Evidence. In W. Fowler (Ed.), *Developments in School Finance: 1997* (98-212). Washington, D.C.: U.S. Department of Education, NCES.

Grissmer, D., (1997). Appendix A, Estimating Federal R&D for Children: Methodology. In *Investing in Our Future: A National Research Initiative for America's Children for the 21st Century*. Washington, D.C.: Office of Science and Technology.

RAND REPORTS

Grissmer, D. & Flanagan, A. (2006). Improving the Achievement of Tennessee Students: An Analysis of the National Assessment of Educational Progress, TR-381-EDU, RAND Corporation.

Demmert, W., Grissmer, D., Chun, J., Tower, J., Cresswell, R. (2005). Native American Children, The Gap in Achievement and Research, RAND, DRR-2915-1-EDU.

Grissmer, D. & Eiseman, E. (2005). An Analysis of Gaps in Reading and Math Skills and General Knowledge at Kindergarten Entrance for Native American Children, RAND, DRR-3539-EDU.

Grissmer, D. (2003). From Developmental Research to Developmental Science: A Strategy for Federal R&D Directed Toward Children and Youth Issues, RAND, DRR 3102-OSTP.

Grissmer, D., Flanagan, A., Kawata, J., & Williamson, S. (2000). Improving Student Achievement: What State NAEP Scores Tell Us, MR-924-EDU, RAND, July.

Grissmer, D., Kirby, S. N., Berends, M., & Williamson S. (1994). Student Achievement and the Changing American Family. Santa Monica, CA: RAND.

Grissmer, D. & Kirby, S., (1992). Patterns of Attrition Among Indiana Teachers. R-4076-LE, RAND.

Hudson, L., Grissmer, D., & Kirby S. (1991). Entering and Reentering Teachers in Indiana: The Role of the Beginning Teacher Internship Program. R-4048-LE ,RAND.

SELECTED INVITED PRESENTATIONS AND RESEARCH DISSEMINATION

Two op-ed pieces co-authored by Dr Grissmer appeared in the New York Times and New York Daily News.

How to Get More Early Bloomers, New York Times, Jan 29, 2014

The teacher quality conundrum: If they are the problem, why are kids gaining in math? New York Daily News, Feb 5, 2011.

Dr. Grissmer, gave an invited presentation at the National Science Foundation in December, 2015 at their Early Childhood and Learning Symposium, entitled “The Role of Early Cognitive Skills in Explaining the Puzzling Results of 25 Years of School Reform”.

Dr Grissmer has provided presentations on his research to caucuses of U.S. Senators and Representatives, Cabinet members, congressional staffs, members of the White House staff, many state governors and CEO's of major corporations. He has provided presentations for the Council of Chief of State School Officers, and the Council of Great City Schools. His work has been covered in the New York Times, Washington Post, Wall Street Journal, Newsweek, U.S. News and World Report, Business Week and appearances on ABC and NBC nightly news.