

David W. Grissmer Ph.D
Research Professor
Director- Foundations of Cognition and Learning Lab (FOCAL)
Center for Advanced Study of Teaching and Learning (CASTL)
School of Education and Human Development
University of Virginia

EDUCATION

1968 Ph.D., Purdue University, Physics
1964 M.S., Purdue University, Physics
1962 B.S., Xavier University, Physics, Math and Philosophy ((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, Smith Richardson), 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

Smith-Richardson Foundation- \$330K- Charter School Evaluation

Arnold Foundation-\$500K- Evaluation of Core Knowledge Charter Schools

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 IN PROGRESS

Grissmer, D., Buddin R., Berends, M., Willingham, D., DeCoster, J, Duran, Hulleman, C., Murrah W., Evans, T., A Kindergarten Lottery Evaluation of Core Knowledge Charter Schools: Should Building General Knowledge Have a Central Role in Educational and Social Science Research and Policy?

PUBLICATIONS and PEER REVIEWED REPORTS

Duran, C. A., & Grissmer, D. W. (2020). Choosing immediate over delayed gratification correlates with better school-related outcomes in a sample of children of color from low-income families. *Developmental Psychology*, 56(6), 1107.

Duran, C. A., Cottone, E., Ruzek, E. A., Mashburn, A. J., & Grissmer, D. W. (2020). Family stress processes and children's self-regulation. *Child Development*, 91(2), 577-595.

Grissmer, D., Brock, L., Duran, C., Mashburn, A., Cottone, E., Kim, Helen., Murrah, W., Cameron, C., Deutsch, N., Blodgett, J., Cordier, A., Dormal, J., Walker, K. (2019). Final Report: The Evaluation of the WINGS After-School Social-Emotional Program for At-Risk Urban Children, Corporation for National Community Service (CNCS)

Kim, H., Cameron, C. E., Kelly, C. A., West, H., Mashburn, A. J., & Grissmer, D. W. (2019). Using an individualized observational measure to understand children's interactions in underserved kindergarten classrooms. *Journal of Psychoeducational Assessment*, 37(8), 935-956.

Brock, L. L., Kim, H., Kelly, C. L., Mashburn, A. J., & Grissmer, D. W. (2019). Theory of mind, directly and indirectly, facilitates kindergarten adjustment via verbal ability, executive function, and emotion knowledge. *Psychology in the Schools*, 56(2), 176-193.

Brock, L., Kim, H., Grissmer, D. (2018), Longitudinal Associations Among Executive Function, Visuomotor Integration, and Achievement in a High-Risk Sample, *Mind, Brain and Education*, 12(1)

Kim, H., Duran, C. A., Cameron, C. E., & Grissmer, D. (2018). Developmental relations among motor and cognitive processes and mathematics skills. *Child development*, 89(2), 476-494.

Kim, H., Cameron, C. E., Kelly, C. A., West, H., Mashburn, A. J., & Grissmer, D. W. (2018). Using an Individualized Observational Measure to Understand Children's Interactions in Underserved Kindergarten Classrooms. *Journal of Psychoeducational Assessment*,

Brock, L. L., Kim, H., Gutshall, C. C., & Grissmer, D. W. (2018). The development of theory of mind: predictors and moderators of improvement in kindergarten. *Early Child Development and Care*, 1-11.

Duran, C. A. K. Byers, A. Cameron, C. E. Grissmer, D. W. (2018). Unique and Compensatory Associations of Executive Functioning and Visuomotor Integration with Mathematics Performance in Early Elementary School. *Early Childhood Research Quarterly*. 42, 21-30.

Duran, C. A. K., Cottone, E., Ruzek, E., Mashburn, A., Grissmer, D. W. (2018). Family Stress Processes and Children's Self-Regulation. *Child Development*.

- Brock, L. L., Murrah, W. M., Cottone, E. A., Mashburn, A. J., & Grissmer, D. W. (2018). An after-school intervention targeting executive function and visuospatial skills also improves classroom behavior. *International Journal of Behavioral Development, 42*(5), 474–484.
- Cameron, C., 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.

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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.

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

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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).

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.

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

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.

BOOK CHAPTERS

Grissmer, D. W., Subotnik, R., & Orland, M. (2018). *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.