

Derek C. Briggs

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National Academy of Education (2025)

AERA Fellow (2023)

NCME President (2021–22)

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RESEARCH EXPERTISE

My research examines how measurement works—and how it can mislead—in educational contexts. I work at the intersection of psychometrics, causal inference, and assessment policy, with sustained attention to vertical scaling and growth modeling in K–12 assessment, the theoretical and historical foundations of measurement in the human sciences, and the design of large-scale assessment systems that can genuinely inform teaching and learning. Recent work develops learning progressions as an alternative framework for scale construction, content-referenced approaches to growth reporting, and the philosophical commitments that distinguish measurement in the social sciences from its counterparts in the physical sciences.

Keywords: assessment policy; causal inference in education; educational measurement; growth modeling; history and philosophy of measurement; item response theory; learning progressions; psychometrics; Rasch model; vertical scaling.

PROFESSIONAL EXPERIENCE

2026	Associate Dean of Faculty, School of Education, University of Colorado Boulder
2025	Visiting Scholar, Curriculum Associates
2016–present	Director, Center for Assessment, Design, Research and Evaluation (CADRE), University of Colorado Boulder
2013–present	Professor, Research and Evaluation Methodology, School of Education, University of Colorado Boulder
2009–2013	Associate Professor, Research and Evaluation Methodology, School of Education, University of Colorado Boulder
2003–2009	Assistant Professor, Research and Evaluation Methodology, School of Education, University of Colorado Boulder
2002–2003	Postdoctoral Scholar, Berkeley Evaluation and Assessment Research Center, University of California, Berkeley
1993–1996	Assistant Analyst, Macroeconomic Analysis Division, Congressional Budget Office, Washington, D.C.

EDUCATION

- 2002** **Ph.D.**, University of California, Berkeley. Education: Quantitative Methods and Evaluation. Dissertation: *SAT Coaching, Bias and Causal Inference* (winner, AERA Division D Outstanding Dissertation Award, 2004). Advisor: Mark Wilson.
- 1993** **B.A.**, Carleton College. Economics (Departmental Distinction).

HONORS & AWARDS

- 2025** Elected to the National Academy of Education
- 2024** Award for Significant Contribution to Educational Measurement and Research Methodology, American Educational Research Association Division D, for the book *Historical and Conceptual Foundations of Measurement in the Human Sciences* (Briggs, 2021)
- 2023** American Educational Research Association Fellow
- 2021–2022** Elected President, National Council for Measurement in Education (presidential term)
- 2020–2022** Honorary Research Fellow, University of Oxford, Department of Education
- 2016–2019** Elected at-large member of Board of Directors, National Council for Measurement in Education
- 2013–2016** Editor, *Educational Measurement: Issues and Practice*
- 2013** Outstanding Reviewer Award, *Journal of Educational and Behavioral Statistics*
- 2012** University of Colorado Provost’s Award for Faculty Achievement
- 2012** Annual Award for Contributions to Theory and Practice, National Council on Measurement in Education
- 2012** Outstanding Reviewer Award, *Educational Researcher*
- 2007–2009** National Academy of Education / Spencer Postdoctoral Fellowship
- 2004** AERA Division D Outstanding Dissertation Award
- 2003** UC Berkeley Graduate School of Education Commencement Address
- 2002** Educational Testing Service Summer Associate
- 2000** RAND Summer Associate
- 1993** Departmental Distinction in Economics, Carleton College

GRANTS AND CONTRACTS

FUNDER	TITLE	ROLE	AMOUNT	DATES
Curriculum Associates	Methods for Normative and Criterion-Referenced Interpretations of i-Ready Growth	PI	\$907,230	2020–2024
National Science Foundation	Transforming the Education and Training of Interdisciplinary Data Scientists (TETRIDS)	Co-PI	\$500,000	2020–2023
Spencer Foundation	Aspire Research-Practice Partnership: Research Infrastructure for Longitudinal Tracking of Student Science Learning	Co-PI	\$84,466	2017–2020
National Science Foundation	From Teacher Task Design to Generalizable Study of Student Learning: A Comprehensive Study of Learning Progression Use	Co-PI	\$461,159	2016–2019
Keck Foundation	Evaluating the Validity and Instructional Sensitivity of Concept Inventories	PI	\$300,000	2015–2017
Denver Public Schools	Evaluation of Teacher Professional Compensation Program (ProComp)	PI	\$123,160	2014–2015
Institute for Education Sciences	National Center for Research on Policy and Practice	Co-PI	\$714,404	2014–2015
Denver Public Schools	Using Learning Trajectories to Measure Growth for Student Learning Outcomes	PI	\$128,562	2014–2015
Institute of Education Sciences	An Exploration of Novice Teachers' Core Competencies: Impacts on Student Achievement, and Effectiveness of Preparation	Co-PI	\$987,152	2012–2015
Denver Public Schools	Using Learning Trajectories to Measure Growth for Student Learning Outcomes	PI	\$147,980	2013–2014
Denver Public Schools	Evaluation of Teacher Professional Compensation Program (ProComp)	PI	\$128,241	2013–2014

FUNDER	TITLE	ROLE	AMOUNT	DATES
Pearson	Application of a Diagnostic Classification Model to Learning Progressions in Science	PI	\$43,513	2013–2014
Denver Public Schools	Student Outcomes Analysis in Support of Educator Effectiveness Evaluation	PI	\$65,028	2012–2013
University of Colorado Continuing Education	An Evaluation of CU's Online Summer Session Courses	PI	\$23,000	2012–2013
Colorado Department of Higher Education	Analysis of Educator Preparation and K-12 Placement in Colorado	PI	\$15,000	2012
The Carnegie Corporation	Multidimensional Growth Modeling: Estimating Value-Added School Effects with a Multidimensional Vertical Scale	PI	\$300,000	2009–2011
National Science Foundation	Learning Assistant Model for Teacher Education in Science and Technology	Co-PI	\$2,500,000	2006–2011
American Educational Research Association	The Effectiveness of Admissions Test Preparation: New Evidence From ELS:2002	PI	\$20,000	2008
National Science Foundation	Undergraduate Science Course Innovations and Their Impact on Student Learning	PI	\$121,000	2007–2008
The Carnegie Corporation	Vertical Scaling in Value-Added Models for Student Learning	PI	\$50,000	2005–2006
University of Colorado	Junior Faculty Development Grant: Vertical Scaling in Value-Added Models for Student Learning	PI	\$4,000	2006

Totals: \$7,623,895 across 21 projects (PI: \$2,376,714 · Co-PI: \$5,247,181)

TEACHING

Courses

- EDUC 8230: Quantitative Methods in Educational Research I
- EDUC 8710: Measurement in Survey Research
- EDUC 8720: Psychometric Modeling: Item Response Theory
- EDUC 8804: Using AI in Academic Research
- EDUC 7396: Latent Variable and Structural Equation Modeling

PhD Students Graduated

NAME	YEAR	CURRENT POSITION
Kyla McClure	2025	Postdoctoral Fellow, Center for Assessment (NCIEA)
Sanford Student	2023	Assistant Professor, School of Education, University of Delaware
Rajendra Chattergoon	2020	Director of Efficacy Research, Lexia Learning
Amy Burkhardt	2020	Managing Lead Scientist, Cambium Assessment
Michael Turner	2019	Global VP of Services and Support, Upland Software
Jessica Alzen	2016	Executive Director of Accountability and Evaluation, Boulder Valley School District
Ruhan Circi	2015	Principal Data Scientist, American Institutes for Research
Nathan Dadey	2015	Associate, Center for Assessment (NCIEA)
Benjamin Domingue	2012	Associate Professor, Stanford Graduate School of Education
Jonathan Weeks	2011	Principal Psychometrician, Stanford University
Kimberly Geil	2011	Independent Research Consultant
Matthew Gaertner	2011	Director of Research, WestEd (in memoriam, d. 2021)
Elena Diaz-Bilello	2011	Associate Director, CADRE, University of Colorado Boulder
Robert Talbot	2010	Associate Professor, School of Education and Human Development, University of Colorado Denver
Eric Snow	2008	Independent Research Consultant

PUBLICATIONS

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Selected Publications

- Briggs, D. C., McClure, K., Student, S., Wellberg, S., Minchen, N., Cox, O., Whitfield, E., Buchbinder, N., & Davis, L. (2025). Visualizing and reporting content-referenced growth on a learning progression. *Educational Assessment*, 1-23. <https://doi.org/10.1080/10627197.2025.2503288>
- Briggs, D. C., Maul, A., & McGrane, J. (2025). On the nature of measurement. In Cook, L., & Pitoniak, M. (Eds.), *Educational Measurement (5th ed.)*. <https://ncme.org/wp-content/uploads/2026/01/Educational-Measurement-Fifth-Edition-Chapter-21.pdf>
- Briggs, D. C. (2022). NCME presidential address 2022: Turning the page to the next chapter of educational measurement. *Journal of Educational Measurement*, 59(4), 398-417. <https://doi.org/10.1111/jedm.12350>

- Briggs, D. C. (2021). *Historical and conceptual foundations of measurement in the human sciences: Credos and controversies*. New York, NY: Routledge.
- Briggs, D. C., & Peck, F. A. (2015). Using learning progressions to design vertical scales that support coherent inferences about student growth. *Measurement: Interdisciplinary Research & Perspectives*, 13, 75-99. <https://doi.org/10.1080/15366367.2015.1042814>
- Briggs, D. C. (2013). Measuring growth with vertical scales. *Journal of Educational Measurement*, 50(2), 204-226. <https://doi.org/10.1111/jedm.12011>
- Briggs, D. C. (2008). Using explanatory item response models to analyze group differences in science achievement. *Applied Measurement in Education*, 21(2), 89-118. <https://doi.org/10.1080/08957340801926086>

Refereed Journal Articles (38)

- Briggs, D. C., McClure, K., Student, S., Wellberg, S., Minchen, N., Cox, O., Whitfield, E., Buchbinder, N., & Davis, L. (2025). Visualizing and reporting content-referenced growth on a learning progression. *Educational Assessment*, 1-23. <https://doi.org/10.1080/10627197.2025.2503288>
- Student, S. R., Briggs, D. C., & Davis, L. (2025). Growth across grades and common item grade alignment in vertical scaling using the Rasch model. *Educational Measurement: Issues and Practice*. <https://doi.org/10.1111/emip.12639>
- Briggs, D. C. (2024). The past, present, and future of large-scale assessment consortia. *Educational Measurement: Issues and Practice*, 43, 62-72. <https://doi.org/10.1111/emip.12634>
- Shear, B., & Briggs, D. C. (2024). Measurement issues in causal inference. *Asia Pacific Education Review*. <https://doi.org/10.1007/s12564-024-09942-9>
- Ackerman, T. A., Bandalos, D. L., Briggs, D. C., Everson, H. T., Ho, A. D., Lottridge, S. M., Madison, M. J., Sinharay, S., Rodriguez, M. C., Russell, M., von Davier, A. A., & Wind, S. A. (2023). Foundational competencies in educational measurement. *Educational Measurement: Issues and Practice*. <https://doi.org/10.1111/emip.12581>
- Briggs, D. C. (2022). NCME presidential address 2022: Turning the page to the next chapter of educational measurement. *Journal of Educational Measurement*, 59(4), 398-417. <https://doi.org/10.1111/jedm.12350>
- Peck, F., Johnson, R., Briggs, D. C., & Alzen, J. (2021). Toward learning trajectory-based instruction: A framework of conceptions of learning and assessment. *School Science and Mathematics*, 121, 357-368. <https://doi.org/10.1111/ssm.12489>
- Briggs, D. C., Chattergoon, R., & Burkhardt, A. (2019). Examining the dual purpose use of student learning objectives for classroom assessment and teacher evaluation. *Journal of Educational Measurement*. <https://doi.org/10.1111/jedm.12233>
- Briggs, D. C. (2019). Interpreting and visualizing the unit of measurement in the Rasch model. *Measurement*, 46, 961-971. <https://doi.org/10.1016/j.measurement.2019.07.035>
- Briggs, D. C., & Alzen, J. L. (2019). Making inferences about teacher observation scores over time. *Educational and Psychological Measurement*. <https://doi.org/10.1177/0013164419826237>

- Briggs, D. C., & Kizil, R. C. (2017). Challenges to the use of artificial neural networks for diagnostic classifications with student test data. *International Journal of Testing*.
<https://doi.org/10.1080/15305058.2017.1297816>
- Penuel, W. R., Briggs, D. C., Davidson, K. L., Herlihy, C., Sherer, D., Hill, H. C., Farrell, C., & Allen, A. (2017). How school and district leaders access, perceive, and use research. *AERA Open*, 3(2), 1-17.
<https://doi.org/10.1177/2332858417705370>
- Briggs, D. C., & Dadey, N. (2016). Principal holistic judgments and high-stakes evaluations of teachers. *Educational Assessment, Evaluation and Accountability*, 29, 155-178. <https://doi.org/10.1007/s11092-016-9256-7>
- Briggs, D. C., & Peck, F. A. (2015). Rejoinder to commentaries on using learning progressions to design vertical scales. *Measurement: Interdisciplinary Research and Perspectives*, 13(3-4), 206-218.
<https://doi.org/10.1080/15366367.2015.1104113>
- Briggs, D. C., & Peck, F. A. (2015). Using learning progressions to design vertical scales that support coherent inferences about student growth. *Measurement: Interdisciplinary Research & Perspectives*, 13, 75-99.
<https://doi.org/10.1080/15366367.2015.1042814>
- Briggs, D. C., & Dadey, N. (2015). Making sense of common test items that do not get easier over time: Implications for vertical scale designs. *Educational Assessment*, 20(1), 1-22.
- Briggs, D. C., & Domingue, B. (2013). The gains from vertical scaling. *Journal of Educational and Behavioral Statistics*, 38(6), 551-576. <https://doi.org/10.3102/1076998613508317>
- Briggs, D. C. (2013). Measuring growth with vertical scales. *Journal of Educational Measurement*, 50(2), 204-226. <https://doi.org/10.1111/jedm.12011>
- Safran, R. J., Flaxman, S. M., Kopp, M., Irwin, D. E., Briggs, D., Evans, M., Funk, W., Gray, Hebbets, E., Seddon, N., Scordato, E., Symes, L., Tobias, J., Toews, D., & Uy, J. (2013). A robust new metric of phenotypic distance to estimate and compare multiple trait differences among populations. *Current Zoology*, 58(3), 426-439.
- Briggs, D. C., Ruiz-Primo, M. A., Furtak, E., Shepard, L., & Yin, Y. (2012). Meta-analytic methodology and conclusions about the efficacy of formative assessment. *Educational Measurement: Issues and Practice*, 13-17. <https://doi.org/10.1111/j.1745-3992.2012.00251.x>
- Dadey, N., & Briggs, D. C. (2012). A meta-analysis of growth trends from vertically scaled assessments. *Practical Assessment, Research & Evaluation*, 17(14). <http://pareonline.net/getvn.asp?v=17&n=14>
- Furtak, E. M., Seidel, T., Iverson, H., & Briggs, D. C. (2012). Experimental and quasi-experimental studies of inquiry-based science teaching: A meta-analysis. *Review of Educational Research*, 300-329.
<https://doi.org/10.3102/0034654312457206>
- Briggs, D. C., & Weeks, J. P. (2011). The persistence of value-added school effects. *Journal of Educational and Behavioral Statistics*, 36(5), 616-637.
- Ruiz-Primo, M., Briggs, D. C., Iverson, H., Talbot, R., & Shepard, L. (2011). Impact of undergraduate science course innovations on learning. *Science*, 331, 1269-1270. <https://doi.org/10.1126/science.1198976>

- Briggs, D. C., & Weeks, J. P. (2009). The sensitivity of value-added modeling to the creation of a vertical scale. *Education Finance & Policy*, 4(4), 384-414. <https://doi.org/10.1162/edfp.2009.4.4.384>
- Briggs, D. C., & Weeks, J. P. (2009). The impact of vertical scaling decisions on growth interpretations. *Educational Measurement: Issues & Practice*, 28(4), 3-14. <https://doi.org/10.1111/j.1745-3992.2009.00158.x>
- Domingue, B. W., & Briggs, D. C. (2009). Using linear regression and propensity score matching to estimate the effect of coaching on the SAT. *Multiple Linear Regression Viewpoints*, 35(1), 12-29.
- Briggs, D. C. (2008). Using explanatory item response models to analyze group differences in science achievement. *Applied Measurement in Education*, 21(2), 89-118. <https://doi.org/10.1080/08957340801926086>
- Briggs, D. C. (2008). Synthesizing causal inferences. *Educational Researcher*, 37(1), 15-22.
- Briggs, D. C., & Wilson, M. (2007). Generalizability in item response modeling. *Journal of Educational Measurement*, 44(2), 131-155. <https://doi.org/10.1111/j.1745-3984.2007.00031.x>
- Briggs, D., Alonzo, A., Schwab, C., & Wilson, M. (2006). Diagnostic assessment with ordered multiple-choice items. *Educational Assessment*, 11(1), 33-64. https://doi.org/10.1207/s15326977ea1101_2
- Briggs, D. C. (2005). Meta-analysis: A case study. *Evaluation Review*, 29(2), 87-127. <https://doi.org/10.1177/0193841X04272555>
- Briggs, D. C. (2004). Causal inference and the Heckman model. *Journal of Educational and Behavioral Statistics*, 29(4), 397-420.
- Briggs, D. C., & Wilson, M. (2003). An introduction to multidimensional measurement using Rasch models. *Journal of Applied Measurement*, 4(1), 87-100.
- Briggs, D. C. (2002). SAT coaching, bias and causal inference. *Dissertation Abstracts International*. DAI-A 64/12, p. 4433 (UMI No. 3115515).
- Briggs, D. C. (2001). The effect of admissions test preparation: Evidence from NELS-88. *Chance*, 14(1), 10-18.
- Stern, D., & Briggs, D. (2001). Does paid employment help or hinder performance in secondary school? Insights from US high school students. *Journal of Education and Work*, 14(3), 355-372.
- Stern, D., & Briggs, D. (2001). Changing admissions policies: Mounting pressures, new developments, more questions. *Change*, 33(1), 34-41.

Books and Book Chapters (19)

- Briggs, D. C. (2026). Psychometrics. In Teo, T. (Ed.), *The Palgrave Encyclopedia of Theoretical and Philosophical Psychology*. Cham: Palgrave Macmillan. https://doi.org/10.1007/978-3-031-70581-6_115-1
- Briggs, D. C., Maul, A., & McGrane, J. (2025). On the nature of measurement. In Cook, L., & Pitoniak, M. (Eds.), *Educational Measurement (5th ed.)*. <https://ncme.org/wp-content/uploads/2026/01/Educational-Measurement-Fifth-Edition-Chapter-21.pdf>
- Briggs, D. C. (2021). *Historical and conceptual foundations of measurement in the human sciences: Credos and controversies*. New York, NY: Routledge.

- Briggs, D. C. (2021). A history of scaling and its relationship to measurement. In Clauser, B. (Ed.), *A History of Educational Measurement*. New York, NY: Routledge.
- Briggs, D. C., & Furtak, E. F. (2019). Learning progressions and embedded assessment. In Brookhart, S., & McMillan, J. (Eds.), *Classroom Assessment and Educational Measurement*. Routledge. NCME Book Series. <https://doi.org/10.4324/9780429507533-9>
- Briggs, D., & Domingue, B. (2014). Value-added to what? The paradox of multidimensionality. In Lissitz, R. (Ed.), *Value-added Modeling and Growth Modeling with Particular Application to Teacher and School Effectiveness*. Charlotte, NC: Information Age Publishing.
- Camilli, G., Briggs, D. C., Sloane, F., & Chiu, T.-W. (2013). Psychometric perspectives on test fairness: Shrinkage estimation. In *APA Handbook of Testing and Assessment in Psychology, Volume 3: Testing and Assessment in School Psychology and Education*.
- Briggs, D. C. (2012). Making value-added inferences from large-scale assessments. In Simon, M., Ercikan, K., & Rousseau, M. (Eds.), *Improving Large-Scale Assessment in Education: Theory, Issues and Practice*. London: Routledge. <https://doi.org/10.4324/9780203154519>
- Briggs, D. C. (2012). Making progress in the modeling of learning progressions. In Alonzo, A., & Gotwals, A. (Eds.), *Learning Progressions in Science* (pp. 293-316). Sense Publishers. https://doi.org/10.1007/978-94-6091-824-7_15
- Briggs, D. C., & Alonzo, A. C. (2012). The psychometric modeling of ordered multiple-choice item responses for diagnostic assessment with a learning progression. In Alonzo, A., & Gotwals, A. (Eds.), *Learning Progressions in Science* (pp. 345-355). Sense Publishers.
- Briggs, D. C. (2011). Cause or effect? Validating the use of tests for high-stakes inferences in education. In Dorans, N. J., & Sinharay, S. (Eds.), *Looking Back: Proceedings of a Conference in Honor of Paul W. Holland*. New York, NY: Springer. https://doi.org/10.1007/978-1-4419-9389-2_8
- Briggs, D. C. (2010). Two Philadelphia reports. In Welner, K., Hinchey, P., Molnar, A., & Weizman, D. (Eds.), *Think Tank Research Quality: Lessons for Policymakers, the Media, and the Public*. Information Age Publishing.
- Briggs, D. C. (2010). Schools in eight states: Effects on achievement, attainment, integration, and competition. In Welner, K., Hinchey, P., Molnar, A., & Weizman, D. (Eds.), *Think Tank Research Quality: Lessons for Policymakers, the Media, and the Public*. Information Age Publishing.
- Briggs, D. C., & Wiley, E. (2008). Causes and effects. In Ryan, K., & Shepard, L. (Eds.), *The Future of Test-Based Educational Accountability*. Routledge. <https://doi.org/10.4324/9780203895092>
- Ruiz-Primo, M. A., Briggs, D., Shepard, L., Iverson, H., & Huchton, M. (2008). Evaluating the impact of instructional innovations in engineering education. In Duque, M. (Ed.), *Engineering Education for the XXI Century: Foundations, Strategies and Cases* (pp. 241-274). Bogotá, Colombia: ACOFI Publications.
- Rijmen, F., & Briggs, D. C. (2004). Multiple person dimensions and latent item predictors. In De Boeck, P., & Wilson, M. (Eds.), *Explanatory Item Response Models: A Generalized Linear and Nonlinear Approach*. Springer. https://doi.org/10.1007/978-1-4757-3990-9_8

Tuerlinckx, F., Rijmen, F., Molenberghs, G., Verbeke, G., Briggs, D., Van den Noortgate, W., Meulders, M., & De Boeck, P. (2004). Estimation and software. In De Boeck, P., & Wilson, M. (Eds.), *Explanatory Item Response Models: A Generalized Linear and Nonlinear Approach*. Springer.

Briggs, D. C. (2004). Evaluating SAT coaching: Gains, effects and self-selection. In Zwick, R. (Ed.), *Rethinking the SAT: The Future of Standardized Testing in University Admissions*. RoutledgeFalmer.
<https://doi.org/10.4324/9780203463932>

Briggs, D. C. (2002). Test preparation programs: Impact. In *Encyclopedia of Education (2nd ed.)*.

Reports & Working Papers (25)

Briggs, D. C., Carrasco, D., Martinez, S., Hopfenbeck, T., & Sandoval-Hernandez, A. (2025). *Psychometric issues related to the PAES reporting scales*. International Scientific Committee. 2nd Report.

Briggs, D. C., Cox, O., Student, S., & Whitfield, E. (2023). *Teacher perspectives on the content-reference growth reporting prototype: Findings from interviews*. Boulder, CO: Center for Assessment, Design, Research and Evaluation (CADRE), University of Colorado Boulder.

Cox, O., & Briggs, D. C. (2023). *Development of a reading foundational skills learning progression*. Boulder, CO: Center for Assessment, Design, Research and Evaluation (CADRE), University of Colorado Boulder.

Wellberg, S., Briggs, D. C., & Student, S. (2023). *Big ideas in the understanding of fractions: A learning progression*. Boulder, CO: Center for Assessment, Design, Research and Evaluation (CADRE), University of Colorado Boulder.

Briggs, D. C., & Wellberg, S. (2022). *Evidence of 'summer learning loss' on the i-Ready diagnostic assessment*. Boulder, CO: Center for Assessment, Design, Research and Evaluation (CADRE), University of Colorado Boulder. <https://www.colorado.edu/cadre/2022/09/27/evidence-summer-learning-loss-i-ready-diagnostic-assessment>

Hill, H. C., & Briggs, D. C. (2020). *Education leaders' knowledge of causal research design: A measurement challenge*. Annenberg Institute at Brown University. EdWorkingPaper 20-298. <https://doi.org/10.26300/vxt5-ws91>

Buell, J. Y., Briggs, D. C., Burkhardt, A., Chattergoon, R., Fine, C., Furtak, E. M., Henson, K., Mahr, B., & Tayne, K. (2019). *A learning progression for modeling energy flows in systems*. Boulder, CO: Center for Assessment, Design, Research and Evaluation (CADRE). <https://www.colorado.edu/cadre/2019/07/19/learning-progression-modeling-energy-flows-systems>

Atteberry, A., Briggs, D. C., LaCour, S., & Bibilos, C. (2015). *Year 2 Denver ProComp evaluation report: Teacher retention and variability in bonus pay, 2001-02 through 2013-14*. Center for Assessment, Design, Research and Evaluation (CADRE). Report for Denver Public Schools.

Briggs, D. C., Diaz-Bilello, E., Peck, F., Alzen, J., Chattergoon, R., & Johnson, R. (2015). *Using a learning progression framework to assess and evaluate growth*. Center for Assessment, Design, Research and Evaluation (CADRE). Working Paper.

Briggs, D. C., Dadey, N., & Kizil, R. C. (2015). *Comparing student growth and teacher observation to principal judgments in the evaluation of teacher effectiveness*. Center for Assessment, Design, Research and Evaluation (CADRE). Report for the Georgia Department of Education.

- Briggs, D. C., Kizil, R. C., & Dadey, N. (2015). *Adjusting mean growth percentiles for classroom composition*. Center for Assessment, Design, Research and Evaluation (CADRE). Report for the Georgia Department of Education.
- Briggs, D. C., Diaz-Bilello, E., Peck, F., Alzen, J., Chattergoon, R., & McClelland, A. (2014). *Tier 3 student learning objective pilot: Documentation of pilot work and lessons learned in the 2013-2014 school year*. Center for Assessment, Design, Research and Evaluation (CADRE). Report for Denver Public Schools.
- Briggs, D. C., Diaz-Bilello, E., Maul, A., Turner, M., & Bibilos, C. (2014). *Denver ProComp evaluation report: 2010-2012*. Center for Assessment, Design, Research and Evaluation (CADRE) and the National Center for the Improvement of Educational Assessment.
- Diaz-Bilello, E. K., & Briggs, D. C. (2014). *Using student growth percentiles for educator evaluations at the teacher level: Key issues and technical considerations for school districts in Colorado*. Center for Assessment and the Center for Assessment, Design, Research and Evaluation (CADRE).
- Briggs, D., & Alzen, J. (2013). *Does taking an online version of a course have a negative effect on student learning? An evaluation study*. Commissioned by the University of Colorado's Department of Continuing Education.
- Alzen, J., Briggs, D., Whitcomb, J., Haug, C., Paterson, W., & Klopfenstein, K. (2012). *An initial exploration of Colorado-trained teachers: Providing context for outcome-based teacher preparation program evaluation*. Report Commissioned by the Colorado Department of Higher Education.
- Alzen, J., Briggs, D., Whitcomb, J., Haug, C., Paterson, W., & Klopfenstein, K. (2012). *Enhancing Colorado data systems: Linking teachers to preparation programs*. Report Commissioned by the Colorado Department of Higher Education.
- Briggs, D. C. (2011). *Making inferences about growth and value-added: Design issues for the PARCC consortium*. White Paper Commissioned by the PARCC Large-Scale Assessment Consortium.
- Briggs, D. C., & Domingue, B. D. (2011). *Due diligence and the evaluation of teachers: A review of the value-added analysis underlying the effectiveness rankings of Los Angeles Unified School District teachers by the Los Angeles Times*. National Education Policy Center. <http://nepc.colorado.edu/publication/due-diligence>
- Briggs, D. C., & Domingue, B. D. (2011). *Hawaii school improvement growth model analysis: 2010 results*. Report Commissioned by the Hawaii Department of Education.
- Briggs, D. C., & Domingue, B. D. (2010). *Hawaii school improvement growth model analysis: 2009 results and sensitivity analysis*. Report Commissioned by the Hawaii Department of Education.
- Gaertner, M., & Briggs, D. C. (2009). *Detecting and addressing item parameter drift in IRT test equating contexts*. Report Commissioned by the National Center for the Improvement of Educational Assessment.
- Briggs, D. C. (2009). *Preparation for college admissions exams*. Report Commissioned by the National Association of College Admissions Counselors.
- Briggs, D. C., & Weeks, J. P. (2009). *Hawaii school improvement: Growth model analysis*. Report Commissioned by the Hawaii Department of Education.

Briggs, D. C. (2008). *The goals and uses of value-added models*. Paper prepared for a workshop held by the Committee on Value-Added Methodology for Instructional Improvement, Program Evaluation and Educational Accountability, sponsored by the National Research Council and the National Academy of Education, Washington DC, November 13-14, 2008. .

Commentaries & Reviews (16)

Briggs, D. C. (2024). Strive for measurement, set new standards, and try not to be evil. Commentary on Duolingo English Test responsible AI standards. *Journal of Educational and Behavioral Statistics*.
<https://doi.org/10.3102/10769986241238479>

Briggs, D. C. (2021). Book review: A pragmatic perspective of measurement by David Torres Iribarra. *Integrative Psychological and Behavioral Science*. Online First. <https://doi.org/10.1007/s12124-021-09635-7>

Briggs, D. C. (2021). Commentary: Comment on college admissions tests and social responsibility. *Educational Measurement: Issues and Practice*. <https://doi.org/10.1111/emip.12455>

Briggs, D. C. (2017). Learning theory and psychometrics: Room for growth. *Assessment in Education: Principles, Policy & Practice*, 24(3), 351-358. <https://doi.org/10.1080/0969594X.2017.1336987>

Briggs, D. C. (2016). Can Campbell's law be mitigated? In Braun, H. (Ed.), *Meeting the Challenges to Measurement in an Era of Accountability*. Routledge. NCME Book Series.

Briggs, D. C. (2013). Teacher evaluation as Trojan horse: The case for teacher-developed assessments. *Measurement: Interdisciplinary Research and Perspectives*, 11(1-2), 24-29.
<https://doi.org/10.1080/15366367.2013.784153>

Briggs, D. C. (2010). Validate high stakes inferences by designing good experiments, not audit items. *Measurement: Interdisciplinary Research and Perspectives*, 8(4), 185-190.

Briggs, D. C. (2009). Review of "Charter schools in eight states: Effects on achievement, attainment, integration and competition" by Ron Zimmer, Brian Gill, Kevin Booker, Stephanie Lavertu, Tim Sass and John Witte. *Education Policy Studies Laboratory*. <http://www.epicpolicy.org/thinktank/review-charter-schools-eight-states>

Talbot, R., & Briggs, D. C. (2007). Does theory drive the items or do items drive the theory? *Measurement: Interdisciplinary Research and Perspectives*, 5(2-3), 205-208. <https://doi.org/10.1080/15366360701492906>

Briggs, D. C. (2007). Review of "State takeover, school restructuring, private management, and student achievement in Philadelphia" by Gill, Zimmer, Christman, and Blanc, and "School reform in Philadelphia" by Peterson. *Education Policy Studies Laboratory*. http://epsl.asu.edu/epru/epru_2007_thinktankreview.htm

Wiley, E., & Briggs, D. C. (2007). Can value-added assessment improve accountability? *Education Views*. University of Colorado at Boulder, School of Education, Winter 2007.

Briggs, D. C. (2007). Assessing what students know or how they know it? *Measurement: Interdisciplinary Research and Perspectives*, 5(1), 62-65. <https://doi.org/10.1080/15366360701293618>

Briggs, D. C. (2006). Review of "Getting farther ahead by staying behind: A second-year evaluation of Florida's policy to end social promotion" by Jay Greene and Marcus Winters. *Education Policy Studies Laboratory*. http://epsl.asu.edu/epru/epru_2006_thinktankreview.htm

Briggs, D. C. (2006). Book review: The SAGE handbook of quantitative methods in the social sciences. *Applied Psychological Methods*, 30(5), 447-451.

Briggs, D. C. (2004). Comment: Making an argument for design validity before interpretive validity. *Measurement: Interdisciplinary Research and Perspectives*, 2(3), 171-174.

Briggs, D. C. (2002). Comment: Jack Kaplan's new study of SAT coaching. *Chance*, 15(1), 7-8.

Blogs, Interviews, Podcasts (5)

Briggs, D. C. (2025). How do we know if our students are learning? And if not, what can we do about it? *Extraordinary Educators Blog, Curriculum Associates*. <https://www.curriculumassociates.com/blog/progress-over-mastery>

Briggs, D. C. (2022). Gain scores and the regression fallacy. *CADRE Newsletter*. March 2022. <https://www.colorado.edu/cadre/gain-scores-and-regression-fallacy>

Marion, S., & Briggs, D. C. (2022). Just give us a little: Please make one small change in federal testing law to yield big improvements. *National Center for the Improvement of Educational Assessment*. July 13, 2022. <https://www.nciea.org/blog/just-give-us-a-little>

Briggs, D. C., & Marion, S. (2022). NEPC talks education: An interview with Derek Briggs and Scott Marion. *National Education Policy Center (podcast)*. Interview, January 2022. <https://open.spotify.com/episode/4OKNIwrl2fDizsAul62XEo>

Briggs, D. C. (2021). The history of measurement: A conversation with Derek Briggs. *Quantitude, Season 3 Episode 12*. Podcast interview, November 30, 2021. <https://quantitodepod.org/s3e12-the-history-of-measurement-a-conversation-with-derek-briggs/>

PRESENTATIONS

Invited Talks & Keynotes (26)

Briggs, D. C. (2025). On the Nature of Measurement. Presentation at the annual meeting of the National Council on Measurement in Education, April 25, 2025.

Briggs, D. C. (2025). Is Unaccounted-for Multidimensionality Really That Problematic? Organized Discussion at the annual meeting of the National Council on Measurement in Education, April 24, 2025.

Briggs, D. C. (2024). Scaling and its Relationship with Measurement: Past, Present and Future. Invited Keynote Presentation, Society for the Study of Measurement, Berkeley, CA, August 7, 2024.

Briggs, D. C. (2024). Content-Referenced Growth. Keynote Address for Michigan State Testing Conference, February 15, 2024.

Briggs, D. C. (2024). Reflections on educational accountability and assessment. Invited Womer Lecture, University of Michigan, February 14, 2024.

Briggs, D. C. (2023). Some lessons about measurement and measurers. Keynote Address for the International Objective Measurement Workshop, Chicago, IL, April 12, 2023.

- Briggs, D. C. (2022). Content-referenced growth. Keynote address for the annual meeting of the Association for Educational Assessment-Europe, Dublin, November 12, 2022.
- Briggs, D. C. (2022). Historical Foundations and New Frontiers: Units of Measurement. Keynote address for Division 5 of the American Psychological Association, Minneapolis, MN, August 4, 2022.
- Briggs, D. C. (2022). Turning the page to the next chapter of educational measurement. Presidential Address at the annual meeting of the National Council on Measurement in Education, April 23, 2022.
<https://www.youtube.com/watch?v=1jgUiZ2LUv8>
- Briggs, D. C. (2021). The use of content-referencing to evaluate the magnitude of student growth. Keynote address at the 17th conference of the Israeli Psychometric Association, January 27, 2021 (virtual).
- Briggs, D. C. (2020). A general factor, neural bonds, and the next generation of science standards. Meeting of Testing Issues in Large-Scale Assessment (TILSA) group during meeting of the Council of Chief State School Officers, New Orleans, LA, February 18, 2020.
- Briggs, D. C. (2019). The role of measurement in evaluating the practical significance of learning outcomes. Invited presentation, Stanford University Graduate School of Education, May 23, 2019.
- Briggs, D. C. (2018). Tolerating approximate answers about student learning. Invited presentation, Oxford University Centre for Assessment, Ashmolean Museum, May 24, 2018.
<http://media.podcasts.ox.ac.uk/education/general/2018-05-24briggsv1720.mp4>
- Briggs, D. C. (2018). Visualizing location and growth: Design principles for person-item maps. Invited keynote presentation, Rasch Measurement Conference, University of Western Australia, Perth, Australia, January 18, 2018.
- Briggs, D. C. (2017). Longitudinal growth models and classroom assessment. Invited presentation at North Carolina State University, School of Education, November 9, 2017.
- Briggs, D. C. (2016). Psychometrics, measurement and obtainable goals. Invited presentation at the International Meeting of the Psychometric Society, Asheville, NC, July 13, 2016.
- Briggs, D. C. (2015). Measuring Student Learning: Assessment 101. Invited presentation at The Aspen Institute, Aspen, CO, September 26, 2015.
- Briggs, D. C. (2015). Psychometrics, Testing and Obtainable Goals. Invited debate at the National Council for Measurement in Education, April 19, 2015.
- Briggs, D. C. (2015). Standardized Testing and Special Needs. Presentation at Chautauqua Education Series, Boulder, CO, March 18, 2015.
- Briggs, D. C. (2013). An Economist, a Psychometrician and a Father of a Special Needs Child Walk into a School. Invited Womer Lecture, University of Michigan, February 19, 2013.
- Briggs, D. C. (2013). Comparability Challenges Facing PARCC and SBAC. Invited presentation, annual meeting of the National Council for Measurement in Education, San Francisco, CA, April 30, 2013.
- Briggs, D. C. (2013). NCME Hot Topics: Growth and Value-Added Modeling. Invited workshop presentation, annual meeting of the National Council for Measurement in Education, San Francisco, CA, April 27, 2013.

Briggs, D. C. (2013). The Impact of Coaching on College Admissions (sometimes even a small effect can matter!). Invited presentation at Seminario Internacional de Investigación sobre Calidad de la Educación, Bogotá, Colombia, November 8, 2013.

Briggs, D. C. (2010). Can We Use Large-Scale Assessments for both Summative and Formative Purposes? Invited presentation at the Reidy Interactive Lectures Series, Cambridge, MA, October 22, 2010.

Briggs, D. C. (2010). Rationales for measuring growth in student achievement: choosing between orthodoxy and pragmatism. Invited presentation at the BEAR Seminar, University of California, Berkeley, September 14, 2010.

Briggs, D. C. (2008). The Measurement of Learning Progressions. Invited talk at the University of Arizona, February 21, 2008.

Conference Presentations since 2015 (22)

Briggs, D. C. (2025). From Interval Scales to Scales with Intervals. Presentation at the International Meeting of the Psychometric Society, Minneapolis, MN, July 15, 2025.

Student, S., & Briggs, D. C. (2025). A self-contained empirical Bayes approach to weekly scoring. Paper presented at the annual meeting of the National Council on Measurement in Education, Denver, CO, April 26, 2025.

Briggs, D. C. (2023). Technicians, Curators or Guides on the Assessment Reform Journey? Preparing the Next Generation of Educational Measurement Professionals. Symposium presentation at the AEA-Europe Conference, Malta, November 3, 2023.

Briggs, D. C., Marion, S., & Sireci, S. (2023). Improving large-scale standardized testing. Coordinated symposium at the annual meeting of the American Educational Research Association, Chicago, IL, April 13, 2023.

Cox, O., & Briggs, D. C. (2023). Development of a reading foundational skills learning progression. Paper presented at the annual meeting of the National Council on Measurement in Education, Chicago, IL, April 13, 2023.

Briggs, D. C. (2021). Historical and conceptual foundation of measurement in the human sciences: credos and controversies. Presentation for the Institute of Behavioral Sciences, University of Colorado Boulder, November 1, 2021 (virtual).

Briggs, D. C. (2021). Some lessons learned from research on vertical scaling. Invited presentation for Associação Brasileira de Avaliação Educacional (ABAVE), September 27, 2021 (virtual).

Briggs, D. C. (2021). Historical lessons from the modeling and measuring of human abilities. Invited presentation for the 2021 annual conference of the National Council on Measurement in Education, May 18, 2021 (virtual).

Briggs, D. C. (2021). State plans for administering large-scale K-12 assessments in 2021. Education Congressional Staff Network Call coordinated by The Aspen Institute, March 19, 2021 (virtual).

Briggs, D. C. (2021). Discussion: Psychometrics and looming causal inferences. TILSA Panel coordinated by the Center for Assessment, February 23, 2021 (virtual).

- Briggs, D. C., Maul, A., & McGrane, J. (2021). On the nature of measurement. Spotlight presentation at the International Objective Measurement Workshop, February 5, 2021 (virtual).
- Briggs, D. C. (2020). Teaching and learning 'educational measurement': defining the discipline? Presentation for the annual meeting of the National Council on Measurement in Education, 2020 (virtual).
- Briggs, D. C., & Furtak, E. M. (2019). Learning Progressions and NGSS. Presentation at the Special Conference for Classroom Assessment, Boulder, CO, September 18, 2019.
- Briggs, D. C. (2019). Some thoughts on the origins of classical test theory. Presentation at the annual meeting of the National Council on Measurement in Education, Toronto, April 8, 2019.
- Briggs, D. C., & Furtak, E. (2019). Learning progressions and embedded assessment. Presentation at the annual meeting of the National Council on Measurement in Education, Toronto, April 6, 2019.
- Briggs, D. C. (2018). You can't know where you're going unless you find out where you've been. Invited presentation as part of a panel on 'measurement problems' inspired by Howard Wainer, annual meeting of the National Council on Measurement in Education, New York, NY, April 16, 2018.
- Furtak, E. M., Briggs, D. C., & Chattergoon, R. (2018). Toward a system of classroom assessments for three-dimensional secondary science learning: the case of the Aspire study. Paper presented as part of the symposium 'The Challenge of Assessing Knowledge in Use' at the annual meeting of the International Conference of the Learning Sciences, London, UK, 2018.
- Chattergoon, R., Briggs, D. C., Mahr, B., & Furtak, E. M. (2018). Developing a learning progression for the crosscutting concept of energy. Paper presented at the annual meeting of the National Council on Measurement in Education, New York, NY, April 17, 2018.
- Briggs, D. C., & Alzen, J. L. (2018). The hidden facets of teacher growth. Paper presented at the annual meeting of the National Council on Measurement in Education, New York, NY, April 15, 2018.
- Burkhardt, A., & Briggs, D. C. (2018). The state of district level interim assessments. Paper presented at the annual meeting of the National Council on Measurement in Education, New York, NY, April 15, 2018.
- Briggs, D. C., Chattergoon, R., & Burkhardt, A. (2017). Examining the use of Student Learning Objectives to evaluate teachers. Paper presented at the annual meeting of the National Council on Measurement in Education, San Antonio, TX, April 29, 2017.
- Briggs, D. C., Diaz-Bilello, E., Peck, F., Alzen, J., Chattergoon, R., & Johnson, R. (2015). Using a Learning Progression Framework to Assess and Evaluate Student Growth. Paper presented at the annual meeting of the American Educational Research Association, Chicago, IL, March 23, 2015.

PROFESSIONAL SERVICE

National & International Leadership

- Executive Committee (elected), National Council for Measurement in Education, 2020–2023
- At-Large Board Member (elected), National Council for Measurement in Education, 2016–2019
- Research Methods Section Chair, Society for Research on Educational Effectiveness (SREE), Spring 2014 Conference

- NCME Dissertation Award Committee Chair, 2010–2011
- Conference Chair, International Objective Measurement Workshop, 2010
- AERA Division L, Section 5 Program Chair, 2009–2010

Editorial Roles

Editor

- Editor, *Educational Measurement: Issues and Practice*, 2013–2015

Editorial Boards (Current)

- *Educational Assessment* (since 2010)
- *Journal of Educational Measurement* (since 2016)

Editorial Boards (Past)

- *AERA Open* (2014–2021)
- *International Journal of Testing* (2016–2019)
- *Educational Measurement: Issues and Practice* (2007–2009)
- *Educational Researcher* (2006–2009)

Advisory Panels & Technical Committees

Current

- ETS-Carnegie Job for the Future Panel (since 2024)
- NAEP Validity Studies Panel (since 2023)
- Curriculum Associates, Technical Advisory Committee (since 2018)
- Multistate Alternate Assessment Consortium, Chair of Technical Advisory Committee (since 2016)
- State of Kansas Assessment Technical Advisory Committee (since 2019)
- State of Arizona Assessment Technical Advisory Committee (since 2016)
- National Assessment of Educational Progress, ETS Design Advisory Committee (since 2013)
- Partnership for the Assessment of College and Career Readiness Consortium (now New Meridian), Technical Advisory Panel (since 2011)
- Smarter Balanced Assessment Consortium (SBAC), Technical Advisory Panel (since 2011)
- State of New York Assessment Technical Advisory Committee (since 2012)
- State of Utah Assessment Technical Advisory Committee (since 2007)

Past

- Educational Testing Service Visiting Panel on Research (2019–2025)
- NAEP Reading Framework Revision, Technical Advisory Panel (2019–2021)
- NAEP Mathematics Framework Revision, Technical Advisory Panel (2018–2019)
- Institute of Education Sciences Review Panel, Education Systems and Broad Reform (2016–2019)
- State of Nevada Assessment Technical Advisory Committee (2016–2019)
- State of Indiana Assessment Technical Advisory Committee (2016)
- State of Tennessee Assessment Technical Advisory Committee (2015–2018)

- State of Michigan Assessment Technical Advisory Committee (2013–2015)
- English Language Proficiency Assessment Consortium (ELPA21), Technical Advisory Committee (2013–2016)
- National Centers and State Collaborative (NCSC), Technical Advisory Committee (2011–2015)
- Georgia Educator Effectiveness Technical Advisory Committee (2011–2019)
- State of Montana Assessment Technical Advisory Committee (2006–2017)
- Gates Foundation, Measures of Effective Teaching Technical Advisory Panel (2010)
- National Council on Measurement in Education, Brenda Loyd Dissertation Award Committee (2008–2011)
- Expert Panel, Evaluating the Validity of English Language Proficiency Assessments (2009–2011)
- Expert Panel, GSEG Consortia: Validity Evaluation, National Alternate Assessment Center (2008–2009)
- Expert Panel, Growth Model Task Force, National Center for Learning Disabilities (2008)

Institutional Service – University of Colorado Boulder

- Associate Dean of Faculty, School of Education, 2026–
- Faculty Salary Equity Fellow, Office of the Provost, 2025–2026
- Vice-Chancellor’s Advisory Committee (Promotion and Tenure Review), 2024
- School of Education, Faculty Merit Review Committee, 2023–2025
- School of Education, Research and Evaluation Methodology Program Chair, 2008–2019
- Chair, Research and Evaluation Methodology Search Committees, 2008–2016 (multiple cycles)
- Member, Dean Search Committee, 2014–2016
- Coordinator of Bi-Weekly Research & Evaluation Methodology Seminar, 2003–2014
- Graduate Student Recruitment Taskforce, 2006–2008
- Science Education Search Committee, 2005–2006
- Doctoral Curriculum Taskforce, 2003–2005

Manuscript Reviewing

- *AERA Open*
- *American Educational Research Journal*
- *Applied Psychological Measurement*
- *Assessment in Education*
- *Behavioral Research Methods*
- *British Journal of Mathematical and Statistical Psychology*
- *Cognition and Instruction*
- *Educational Evaluation and Policy Analysis*
- *Educational Measurement: Issues and Practice*
- *Educational Policy*
- *Educational Researcher*
- *Evaluation Review*
- *International Journal of Testing*
- *Journal of Educational and Behavioral Statistics*
- *Journal of Educational Measurement*
- *Journal of Experimental Child Psychology*
- *Journal of Teacher Education*
- *Multivariate Behavioral Research*
- *Physical Review*
- *Psychological Methods*
- *Psychometrika*
- *Review of Educational Research*
- *Theory & Psychology*
- Routledge Publications
- SAGE Publications

Professional Affiliations

National Academy of Education; American Educational Research Association; National Council on Measurement in Education; The Psychometric Society; Society for the Study of Measurement; National Education Policy Center.