# CURRICULUM VITAE Derek C. Briggs

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## **RESEARCH EXPERTISE**

Educational Measurement, Psychometrics, History of Measurement, Item Response Theory, Rasch Model, Learning Progressions, Growth Modeling, Large-Scale Assessment, Diagnostic Assessment, Causal Inference

# **PROFESSIONAL EXPERIENCE**

2016-present	Director, Center for Assessment, Design, Research and Evaluation (CADRE) <u>https://www.colorado.edu/cadre/</u>	
2013-present	Professor, Research and Evaluation Methodology, School of Education, University of Colorado at Boulder	
2009-2013	Associate Professor, Research and Evaluation Methodology, School of Education, University of Colorado at Boulder	
2003-2009	Assistant Professor, Research and Evaluation Methodology, School of Education, University of Colorado at Boulder	
2002-2003	Visiting Postdoctoral Scholar, Berkeley Evaluation and Assessment Research Center, Graduate School of Education, University of California at Berkeley	
1998-2002	Graduate Student Researcher, , National Center for Research on Vocational Education (98-00); Berkeley Evaluation and Assessment Research Center (00-02), Graduate School of Education, University of California at Berkeley	
1996-1997	Research Assistant, National Association for State Community Services Programs, Washington, D.C.	
1993-1996	Assistant Analyst, Macroeconomic Analysis Division, Congressional Budget Office, Washington, D.C.	
EDUCATION		

Ph.D.	University of California, Berkeley	2002
	Education, Quantitative Methods and Evaluation	
	Dissertation: SAT Coaching, Bias and Causal Inference	
	Advisor: Mark Wilson	

B.A. Carleton College Economics

#### **HONORS/AWARDS**

- Award for Significant Contribution to Educational Measurement and Research Methodology, American Educational Research Association Division D, 2024
- American Educational Research Association Fellow, 2023
- Honorary Research Fellow, University of Oxford, Department of Education, 2020-2022
- Elected President, National Council for Measurement in Education; Presidential term from 2021-22
- Elected at-large member of Board of Directors, National Council for Measurement in Education, 2016-2019.
- Outstanding Reviewer Award, Journal of Educational and Behavioral Statistics, 2013
- Editor, Educational Measurement: Issues and Practice, 2013-2016.
- 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, 2012
- National Academy of Education/Spencer Postdoctoral Fellowship, 2007-2009
- AERA Division D Mary Catherine Ellwein Outstanding Dissertation Award, 2004
- UC Berkeley Graduate School of Education Commencement Address, 2003
- Educational Testing Service Summer Associate, 2002
- RAND Summer Associate, 2000
- Graduate School of Education Research Centers Coordinator, 1999-2001
- National Center for Educational Statistics, NELS-88 Training Fellowship, Summer 1999
- Graduate School of Education Regents Fellowship, 1999-2002
- Berkeley Evaluation and Assessment Research Center Coordinator, 1998-99
- Departmental Distinction in Economics, Carleton College, 1993

#### **GRANTS and CONTRACTS**

Curriculum Associates. Methods for Normative and Criterion-Referenced Interpretations of i-Ready Growth. \$907,230 (PI) (1/1/20-8/1/24)

National Science Foundation. Transforming the Education and Training of Interdisciplinary Data Scientists (TETRIDS). \$500,000 (co-PI) (7/1/20-6/30/23).

Spencer Foundation. Aspire Research-Practice Partnership: Research Infrastructure for Longitudinal Tracking of Student Science Learning. \$84,466 (co-PI) (12/1/17-11/30/20)

National Science Foundation. From Teacher Task Design to Generalizable Study of Student Learning: A Comprehensive Study of Learning Progression Use. \$461,159 (co-PI) (5/1/16-4/30/19)

1993

Keck Foundation. Evaluating the Validity and Instructional Sensitivity of Concept Inventories. \$300,000 (PI) (8/1/15-7/31/17)

Denver Public School District. Evaluation of Teacher Professional Compensation Program (ProComp). \$123,160 (PI) (9/1/14-7/31/15)

Denver Public School District. Using Learning Trajectories to Measure Growth for Student Learning Outcomes. \$128,562 (PI) (9/1/14-6/30/15)

Institute for Education Sciences. National Center for Research on Policy and Practice. \$714,404 (co-PI) (7/1/14-6/30/15)

Denver Public School District. Using Learning Trajectories to Measure Growth for Student Learning Outcomes. \$147,980 (PI) (9/1/13-6/30/14)

Denver Public School District. Evaluation of Teacher Professional Compensation Program (ProComp). \$128,241 (PI) (1/15/13-2/28/14)

Pearson. Application of a Diagnostic Classification Model to Learning Progressions in Science. 43,513 (PI) (2/1/13 – 1/31/14)

Denver Public School District. Student Outcomes Analysis in Support of Educator Effectiveness Evaluation. \$65,028 (PI) (6/1/12-5/31/13)

University of Colorado Department of Continuing Education. An Evaluation of CU's Online Summer Session Courses. \$23,000 (PI) (6/1/12-1/31/13)

Institute of Education Sciences. An Exploration of Novice Teachers' Core Competencies: Impacts on Student Achievement, and Effectiveness of Preparation. \$987,152 (co-PI) (03/01/2012- 02/28/2015)

Colorado Department of Higher Education. Analysis of Educator Preparation and K-12 Placement in Colorado. \$15,000 (PI) (January 2012 to June 2012)

The Carnegie Corporation. Multidimensional Growth Modeling: Estimating Value-Added School Effects with a Multidimensional Vertical Scale. \$300,000 (PI) (January 2009 to December 2011)

American Educational Research Association. The Effectiveness of Admissions Test Preparation: New Evidence From ELS:2002. \$20,000 (PI) (January 2008 to December 2008).

National Science Foundation. Undergraduate Science Course Innovations and their Impact on Student Learning. \$121,000 (PI) (January 2007 to January 2008).

University of Colorado. Junior Faculty Development Grant. Vertical Scaling in Value-Added Models for Student Learning. \$4,000 (July 2006 to August 2006).

National Science Foundation. Learning Assistant model for Teacher Education in Science and Technology. \$2,500,000. (Co-PI) (September 2006 to September 2011).

The Carnegie Corporation. Vertical Scaling in Value-Added Models for Student Learning. \$50,000 (PI) (August 2005 to August 2006).

## **TEACHING EXPERIENCE**

- EDUC 8230: Quantitative Methods in Educational Research I
- EDUC 8710: Measurement in Survey Research
- EDUC 8720: Advanced Topics in Measurement: Item Response Theory
- EDUC 7396: Latent Variable and Structural Equation Modeling
- EDUC 7316: Intermediate Statistical Methods
- EDUC 7326: Experimental Design
- EDUC 7386: Educational Evaluation
- EDUC 7416: Historical and Conceptual Foundations of Measurement

#### **PhD Students Graduated**

Eric Snow, 2008; Robert Talbot, 2010; Elena Diaz-Bilello, 2011; Matthew Gaertner, 2011; Jonathan Weeks, 2011; Benjamin Domingue, 2012; Nathan Dadey, 2015; Ruhan Circi, 2015; Jessica Alzen, 2016; Michael Turner, 2019; Amy Burkhardt, 2020; Rajendra Chattergoon, 2020; Sanford Student, 2023

# PUBLICATIONS

#### Books

Briggs, D. C. (2021) Historical and Conceptual Foundations of Measurement in the Human Sciences: Credos and Controversies. New York, NY: Routledge.

#### **Refereed Journal Articles**

- 1. Shear, B., & Briggs, D. C. (2024). Measurement issues in causal inference. *Asia Pacific Education Review*. <u>https://link.springer.com/article/10.1007/s12564-024-09942-9</u>
- 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. and Wind, S.A. (2023), Foundational Competencies in Educational Measurement. *Educational Measurement: Issues and Practice*. <u>https://doi.org/10.1111/emip.12581</u>
- 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. <u>https://doi.org/10.1111/jedm.12350</u>

- Peck, F., Johnson, R., Briggs, D., & Alzen, J. (2021). Toward learning trajectory-based instruction: A framework of conceptions of learning and assessment. *School Science and Mathematics*, 121, 357–368. <u>https://doi.org/10.1111/ssm.12489</u>
- 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*. <u>https://doi.org/10.1111/jedm.12233</u>
- 6. Briggs, D. C. (2019). Interpreting and visualizing the unit of measurement in the Rasch Model. *Measurement*, 46 (2019) 961–971. <u>https://doi.org/10.1016/j.measurement.2019.07.035</u>
- Briggs, D. C. & Alzen, J. L. (2019). Making inferences about teacher observation scores over time. Educational and Psychological Measurement. <u>https://doi.org/10.1177/0013164419826237</u>
- 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*. DOI: 0.1080/15305058.2017.1297816
- 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. DOI: 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. DOI: 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, DOI: 10.1080/15366367.2015.1104113.
- 12. 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.
- 13. 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.
- 14. Briggs, D. C., & Domingue, B. (2013). The gains from vertical scaling. *Journal of Educational and Behavioral Statistics*, 38(6), 551-576.
- 15. Briggs, D. C. (2013). Measuring growth with vertical scales. *Journal of Educational Measurement*, 50(2), 204-226.
- Briggs, D. C., Ruiz-Primo, M. A., Furtak, E., Shephard, L. & Yin, Y. (2012). Meta-analytic methodology and conclusions about the efficacy of formative assessment. *Educational Measurement: Issues and Practice*, 13-17.
- 17. Dadey, N. & Briggs, D. C. (2012). A meta-analysis of growth trends from vertically scaled assessments. *Practical Assessment, Research & Evaluation*, 17(14). Available online: 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.
- 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.
- 20. Briggs, D. C. & Weeks, J. P. (2011) The persistence of value-added school effects. *Journal of Educational and Behavioral Statistics*, 36(5), 616-637.
- 21. 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.

- 22. 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.
- 23. Briggs, D. C. & Weeks, J. P. (2009) The impact of vertical scaling decisions on growth interpretations. *Educational Measurement: Issues & Practice*, 28(4), 3-14.
- 24. 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.
- 25. Briggs, D. C. (2008) Using explanatory item response models to analyze group differences in science achievement. *Applied Measurement in Education*, 21(2), 89-118.
- 26. Briggs, D. C. (2008) Synthesizing causal inferences. Educational Researcher, 37(1), 15-22.
- 27. Briggs, D. C., & Wilson, M. (2007) Generalizability in item response modeling. *Journal of Educational Measurement*, Vol 44(2), 131-155.
- 28. Briggs, D., Alonzo, A., Schwab, C. & Wilson, M. (2006) Diagnostic assessment with ordered multiple-choice items. *Educational Assessment*, 11(1), 33-64.
- 29. Briggs, D. C. (2005) Meta-analysis: a case study. Evaluation Review, Vol 29(2), 87-127.
- 30. Briggs, D. C. (2004) Causal inference and the Heckman model. *Journal of Educational and Behavioral Statistics*. Vol 29(4), 397-420.
- 31. Briggs, D. C. & Wilson, M. (2003) An introduction to multidimensional measurement using Rasch models. *Journal of Applied Measurement*, 4(1), 87-100.
- 32. Briggs, D. C. (2002) SAT coaching, bias and causal inference. *Dissertation Abstracts International*. DAI-A 64/12, p. 4433. (UMI No. 3115515)
- 33. Briggs, D. C. (2001) The effect of admissions test preparation: evidence from NELS-88. *Chance*, Vol. 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*, Vol. 14(3), 355-372.
- 35. Stern, D. & Briggs, D. (2001) Changing admissions policies: mounting pressures, new developments, more questions. *Change* Vol. 33(1), 34-41.

#### **Refereed Book Chapters**

- 1. Briggs, D. C., Maul, A., & McGrane, J. (forthcoming 2024). On the nature of measurement. In L. Cook & M. Pitoniak (Eds.) *Educational Measurement*, 5<sup>th</sup> Edition.
- 2. Briggs, D. C. (2021). A history of scaling and its relationship to measurement. In B. Clauser (Ed.) *A History of Educational Measurement*. New York, NY: Routledge
- Briggs, D. C. & Furtak, E. F. (2019). Learning progressions and embedded assessment. In S. Brookhart & J. McMillan (Eds) *Classroom Assessment and Educational Measurement*, NCME Book Series.
- 4. Briggs, D. & Domingue, B. (2014) Value-added to what? The paradox of multidimensionality. R. Lissitz (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. *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 M. Simon, K. Ercikan, & M. Rousseau (Eds.), *Improving Large-Scale Assessment in Education: Theory, Issues and Practice*. London: Routledge.

- 7. Briggs, D. C. (2012). Making progress in the modeling of learning progressions. In A. Alonzo & A. Gotwals (Eds.) *Learning Progressions In Science* (pp. 293-316). Sense Publishers.
- 8. Briggs, D. C. & Alonzo, A. C. (2012) The psychometric modeling of ordered multiple-choice item responses for diagnostic assessment with a learning progression. In A. Alonzo & A. Gotwals (Eds.), *Learning Progressions In Science* (pp. 345-355). Sense Publishers.
- 9. Briggs, D. C. (2011) Cause or Effect? Validating the use of tests for high-stakes inferences in education. In N. J. Dorans & S. Sinharay (Eds.), *Looking Back: Proceedings of a Conference in Honor of Paul W. Holland*. New York: Springer.
- Briggs, D. C. (2010). Two Philadelphia reports. In *Think Tank Research Quality: Lessons for Policymakers, the Media, and the Public*, K. Welner, P. Hinchey, A. Molnar, & D. Weizman (Eds). Information Age Publishing.
- Briggs, D. C. (2010). Schools in eight states: Effects on achievement, attainment, integration, and competition. In *Think Tank Research Quality: Lessons for Policymakers, the Media, and the Public*, K. Welner, P. Hinchey, A. Molnar, & D. Weizman (Eds). Information Age Publishing.
- 12. Briggs, D. C., & Wiley, E. (2008) Causes and effects. In *The Future of Test-Based Educational Accountability*, K. Ryan & L. Shepard (Eds). Routledge.
- Ruiz-Primo, M. A., Briggs, D., Shepard, L., Iverson, H., & Huchton, M. (2008). Evaluating the impact of instructional innovations in engineering education. (Evaluando el impacto de las innovaciones instruccionales en la enseñaza de la ingeniería.) In M. Duque (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: *Explanatory Item Response Models: A Generalized Linear and Nonlinear Approach*, P. De Boeck and M. Wilson, eds., Springer.
- 15. Tuerlinckx, F., Rijmen, F., Molenberghs, G., Verbeke, G., Briggs, D., Van den Noorgate, W., Meulders, M, & De Boeck, P. (2004) Estimation and software. In: *Explanatory Item Response Models: A Generalized Linear and Nonlinear Approach*, P. De Boeck and M. Wilson, eds., Springer.
- 16. Briggs, D. C. (2004) Evaluating SAT coaching: gains, effects and self-selection. In: *Rethinking the SAT. The Future of Standardized Testing in University Admissions*, R. Zwick, ed., RoutledgeFalmer.
- 17. Briggs, D. C. (2002) Test preparation programs: impact. *Encyclopedia of Education*. 2nd Edition.

#### **Reports and Working Papers**

- 1. Briggs, D. C., Cox, O., Student, S., & Whitfield, E. (2023). Teacher perspectives on the contentreference growth reporting prototype: findings from interviews. Boulder, CO: The 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: The Center for Assessment, Design, Research and Evaluation (CADRE), University of Colorado Boulder.
- 3. Wellberg, S., Briggs, D. C. & Student, S. (2023). Big ideas in the understanding of fractions: a learning progression. Boulder, CO: The 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: The Center for Assessment, Design, Research and Evaluation (CADRE), University of Colorado Boulder. https://www.colorado.edu/cadre/2022/09/27/evidencesummer-learning-loss-i-ready-diagnostic-assessment

- Hill, Heather C., & Briggs, D. C. (2020). Education Leaders' Knowledge of Causal Research Design: A Measurement Challenge. (EdWorkingPaper: 20-298). Retrieved from Annenberg Institute at Brown University: <u>https://doi.org/10.26300/vxt5-ws91</u>
- 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.
- 8. 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). <u>Comparing Student Growth and Teacher Observation</u> <u>to Principal Judgments in the Evaluation of Teacher Effectiveness</u>. Center for Assessment, Design, Research and Evaluation (CADRE). Report for the <u>Georgia Department of Education</u>.
- Briggs, D.C., Kizil, R.C., & Dadey, N. (2015). <u>Adjusting Mean Growth Percentiles for Classroom</u> <u>Composition</u>. Center for Assessment, Design, Research and Evaluation (CADRE). Report for the <u>Georgia Department of Education</u>.
- 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) <u>Denver</u> <u>ProComp Evaluation Report: 2010-2012</u>. 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) <u>Using Student Growth Percentiles for Educator</u> <u>Evaluations at the Teacher Level: Key Issues and Technical Considerations for School Districts in</u> <u>Colorado</u>. Center for Assessment and the Center for Assessment, Design, Research and Evaluation (CADRE).
- 14. Briggs, D. & Alzen, J. (2013). Does Taking an Online Version of a Course have a Negative Effect of Student Learning? An Evaluation Study Commissioned by the University of Colorado's Department of Continuing Education.
- 15. Alzen, J., Briggs, D., Whitcomb, J., Haug, C., Paterson, W. & Klopfestein, 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.
- 16. Alzen, J., Briggs, D., Whitcomb, J., Haug, C., Paterson, W. & Klopfestein, K. (2012). Enhancing Colorado data systems: Linking teachers to preparation programs. Report Commissioned by the Colorado Department of Higher Education.
- 17. Briggs, D. C. (2011). Making inferences about growth and value-added: Design issues for the PARCC consortium. A White Paper Commissioned by the PARCC Large-Scale Assessment Consortium.
- 18. 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. <u>http://nepc.colorado.edu/publication/due-diligence</u>
- 19. Briggs, D. C. & Domingue, B. D. (2011) Hawaii school improvement growth model analysis: 2010 results. A Report Commissioned by the Hawaii Department of Education.

- 20. Briggs, D. C. & Domingue, B. D. (2010) Hawaii school improvement growth model analysis: 2009 results and sensitivity analysis. A 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. A Report Commissioned by the National Center for the Improvement of Educational Assessment.
- 22. Briggs, D. C. (2009) Preparation for college admissions exams. A Report Commissioned by the National Association of College Admissions Counselors. Available online at <a href="http://www.nacacnet.org/PublicationsResources/Research/Documents/TestPrepDiscussionPaper.pdf">http://www.nacacnet.org/PublicationsResources/Research/Documents/TestPrepDiscussionPaper.pdf</a>
- 23. Briggs, D. C. & Weeks, J. P. (2009) Hawaii school improvement: growth model analysis. A Report Commissioned by the Hawaii Department of Education.
- 24. 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.

## **Blogs, Interviews and Podcasts**

- 1. Briggs, D. C. (2022) Gain Scores and the Regression Fallacy. Briggs, D. C. (March 2022). CADRE Newsletter: 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. July 13, 2022 https://www.nciea.org/blog/just-give-us-alittle
- 3. NEPC Talks Education: An Interview with Derek Briggs and Scott Marion. Jan 2022. https://open.spotify.com/episode/40KNlwrl2fDizsAuI62XE0
- 4. Quantitude S3E12: The History of Measurement: A Conversation with Derek Briggs. Nov 30, 2021. https://quantitudepod.org/s3e12-the-history-of-measurement-a-conversation-with-derek-briggs/

# **Published Commentaries and Reviews**

- 1. 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*. <u>https://journals.sagepub.com/doi/10.3102/10769986241238479</u>
- Briggs, D. C. (2021). Book review: A pragmatic perspective of measurement by David Torres Irribarra. *Integrative Psychological and Behavioral Science*. Online First. DOI: 10.1007/s12124-021-09635-7
- 3. Briggs, D.C. (2021). Commentary: Comment on college admissions tests and social responsibility. *Educational Measurement: Issues and Practice*. <u>https://doi.org/10.1111/emip.12455</u>
- 4. Briggs, D. C. (2017). Learning theory and psychometrics: room for growth. Assessment in Education: Principles, Policy & Practice. 24(3), 351-358.
- 5. Briggs, D. C. (2016). Can Campbell's Law be mitigated? In H. Braun (Ed.), *Meeting the Challenges to Measurement in an Era of Accountability*. NCME Books Series, Routledge.
- 6. Briggs, D. C. (2013). Teacher evaluation as Trojan horse: the case for teacher-developed assessments. *Measurement: Interdisciplinary Research and Perspectives*, Vol 11(1-2), 24-29.

- 7. Briggs, D. C. (2010) Validate high stakes inferences by designing good experiments, not audit items. *Measurement: Interdisciplinary Research and Perspectives*, Vol 8(4), 185-190.
- 8. 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*. Available online at http://www.epicpolicy.org/thinktank/review-charter-schools-eight-states.
- 9. Talbot, R. & Briggs, D. C. (2007) Does theory drive the items or do items drive the theory? *Measurement: Interdisciplinary Research and Perspectives*. Vol 5(2-3), 205-208.
- 10. Briggs, D. C. (2007) Review of "State Takeover, School Restructuring, Private Management, and Student Achievement in Philadelphia" by Brian Gill, Ron Zimmer, Jolley Christman and Suzanne Blanc and "School Reform in Philadelphia: A Comparison of Student Achievement at Privately-Managed Schools with Student Achievement in Other District Schools' by Paul Peterson. *Education Policy Studies Laboratory*. Available online at http://arsl.acm.edu/aprm/cmm. 2007. thinktenkreaview.htm

http://epsl.asu.edu/epru/epru\_2007\_thinktankreview.htm.

- 11. Wiley, E. & Briggs, D.C. (2007) Can value-added assessment improve accountability? *Education Views*. University of Colorado at Boulder, School of Education, Winter 2007.
- 12. Briggs, D. C. (2007) Assessing what students know or how they know it? *Measurement: Interdisciplinary Research and Perspectives.* Vol 5(1), 62-65.
- 13. 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*. Available online at http://epsl.asu.edu/epru/epru\_2006\_thinktankreview.htm.
- 14. Briggs, D. C. (2006) Book Review: The SAGE Handbook of Quantitative Methods in the Social Sciences. *Applied Psychological Methods*. Vol 30(5), 447-451.
- 15. Briggs, D. C. (2004) Comment: making an argument for design validity before interpretive validity. *Measurement: Interdisciplinary Research and Perspectives*. Vol. 2(3), 171-174.
- 16. Briggs, D. C. (2002) Comment: Jack Kaplan's new study of SAT coaching. Chance. Vol. 15(1), 7-8.

#### **Invited Talks and Keynote Addresses**

- 1. Briggs, D. C. (2023) Some lessons about measurement and measurers. Keynote Address for the International Objective Measurement Workshop. Chicago, IL., April 12, 2023.
- 2. Briggs, D. C. (2022). Content-referenced growth. Keynote address for the annual meeting of the Association for Educational Assessment-Europe. Dublin, November 12, 2022.
- 3. 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.
- 4. 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
- 5. Briggs, D. C. (2021). The use of content-referencing to evaluate the magnitude of student growth. Keynote address at the 17<sup>th</sup> conference of the Israeli Psychometric Association, January 27, 2021.(Virtual Presentation).
- 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. (2018). Tolerating approximate answers about student learning. Invited presentation, Oxford University Centre for Assessment, Ashmolean Museum, May 24, 2018. <u>http://media.podcasts.ox.ac.uk/education/general/2018-05-24briggsv1720.mp4</u>
- 8. 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.

## **Professional Conference Papers**

- 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.
- 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": Examples from Three-Dimensional Science Learning and Instruction" at the annual meeting of the International Conference of the Learning Sciences, London, UK.
- 3. 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.
- 4. 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.
- 5. Burkhardt, A. & Briggs, D. C. (2018). The state of district level interim assessments. Paper presented at the annual meeting of the National Council for Measurement in Education, New York, NY, April 15, 2018.
- 6. 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 for Measurement in Education, San Antonio, TX, April 29, 2017.
- 7. 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.
- 8. Briggs, D. C., Kizil, R. C., & McClarty, K. (2014). Challenges when Using an Artificial Neural Network to Make Diagnostic Classifications from Ordered Multiple Choice Items. Paper presented at the annual meeting of the American Educational Research Association, Philadelphia, PA, April 7, 2014.
- 9. Turner, M., Bibilos, C., Briggs, D. C., Maul, A., & Diaz-Bilello, E. (2014). New Evidence on the Effect of the Denver Public Schools Professional Compensation System on Teacher Attitudes. Paper presented at the annual meeting of the American Educational Research Association, Philadelphia, PA, April 6, 2014.
- 10. Briggs, D. C. & Alzen, J. (2013). Does Taking an Online Version of a Course have a Negative Effect of Student Learning? Paper presented at the annual meeting of the American Educational Research Association, San Francisco, CA, May 1, 2013.

- Briggs, D. C., Circi, R., Seidel, K, & Green, K. (2013). Challenges in Measuring Core Competencies in Teacher Preparation Programs. Paper presented at the annual meeting of the American Educational Research Association, San Francisco, CA, May 1, 2013.
- 12. Dadey, N. & Briggs, D. C. (2013). The curious case of linking items with p-value reversals. Paper presented at the annual meeting of the National Council for Measurement in Education, San Francisco, CA. April 30, 2013.
- 13. Briggs, D. C. (2012). Prospects for modeling growth with tests designed by the state assessment consortia. Paper presented at the annual meeting of the National Council for Measurement in Education, Vancouver, BC, April 15, 2012.
- 14. Briggs, D. C. & Maul, A. (2011). The comparability of assessments that include performance tasks. Paper presented at the annual meeting of the National Council for Measurement in Education, New Orleans, LA, April 11, 2011.
- 15. Dadey, N., Briggs, D. C., & Weeks, J. P. (2011). Making sense of growth trends from vertically scaled assessments. Paper presented at the annual meeting of the National Council for Measurement in Education, New Orleans, LA, April 9, 2011.
- 16. Briggs, D. C. (2010). Why aren't states with developmental score scales measuring growth? Paper presented at the 2010 International Meeting of the Psychometric Society, Athens, GA, July 10, 2010.
- 17. Briggs, D. C. (2010). The problem with vertical scales. Paper presented at the 2010 Annual Meeting of the American Educational Research Association, Denver, CO, May 3, 2010.
- Weeks, J. P., Domingue, B. & Briggs, D. C. (2010) Is a multidimensional vertical scale really necessary? Modeling student achievement growth in multiple dimensions. Paper presented at annual meeting of the National Council for Measurement in Education, Denver, CO, May 1, 2010.
- Iverson, H.I., Briggs, D.C., Ruiz-Primo, M.A., Talbot, R.M., & Shepard, L.A. (2010, May) A closer look at undergraduate physics course Innovations: a meta-analysis of their impact on student learning. Paper presented at the American Educational Research Association Annual Meeting, Denver, CO, April 30, 2010.
- Iverson, H., Briggs, D. C., Ruiz-Primo, M., Talbot, R., & Shepard, L. (2009). Undergraduate Physics Course Innovations and Their Impact on Student Learning. 2009 Physics Education Research Conference. Ann Arbor (MI), 29–30 July 2009. AIP Conference Proceedings Volume 1179, pp. 169-172.
- Briggs, D. C. & Alonzo, A. C. (2009) The psychometric modeling of ordered multiple-choice item responses for diagnostic assessment with a learning progression. Paper presented at the Learning Progressions in Science (LeaPS) Conference, Iowa City, IA, June 25, 2009.
- 22. Briggs, D. C. & Alonzo, A. C. (2009) Building a Learning Progression as a Cognitive Model. Paper presented at the symposium "How to Build a Cognitive Model for Educational Assessments," at the annual meeting of the National Council for Measurement in Education, San Diego, CA, April 16, 2009.
- 23. Choi, J., Briggs, D. C. & Wilson, M. (2009) Multidimensional Extension of Generalizability in Item Response Modeling. Paper presented at the annual meeting of the National Council for Measurement in Education, San Diego, CA, April 16, 2009.
- 24. Briggs, D. C. & Betebenner, D. (2009) Is Growth in Student Achievement Scale Dependent? Paper presented at the invited symposium "Measuring and Evaluating Changes in Student Achievement: A Conversation about Technical and Conceptual Issues" at the annual meeting of the National Council for Measurement in Education, San Diego, CA, April 14, 2009.
- 25. Talbot, R., Briggs, D. C. & Otero, V. (2009) Can Science Teachers' Strategic Knowledge be Conceptualized as a Learning Progression? Paper presented at the annual meeting of the American Educational Research Association, San Diego, CA, April 14, 2009.

- 26. Domingue, B. & Briggs, D. C. (2009) Using Propensity Score Matching to Estimate the Effect of Coaching on the SAT. Paper presented at the annual meeting of the American Educational Research Association, San Diego, CA, April 14, 2009.
- Briggs, D. C., Weeks, J. P., & Wiley, E. W. (2008). The Sensitivity of Value-Added Modeling to Vertical Scaling. Paper presented at the National Conference on Value-Added Modeling, April 22-24, 2008, Madison, WI.
- 28. Briggs, D. C. & Weeks, J. P. (2008) The Persistence of Value-Added School Effects. Paper presented at the 2008 Annual Meeting of the American Educational Research Association, Division D, New York, NY. March 27, 2008.
- 29. Briggs, D. C., Weeks, J. P. & Wiley. E. (2008) The Impact of Vertical Scaling Decisions on Growth Projections. Paper presented at the annual meeting of the National Council for Measurement in Education Annual Conference, March 26, 2008, New York, NY.
- 30. Talbot, R., & Briggs, D.C. (2008) Measuring the Pedagogical Sophistication of Science Teachers using the Flexible Application of Student-Centered Instruction (FASCI) Instrument. Annual Meeting of the American Educational Research Association, Division D, New York, NY. March 27, 2008.
- 31. Briggs, D. C., Geil, K., Harlow, D & Talbot, R. (2007). Measuring the Pedagogical Sophistication of Math and Science Teachers using Scenario-based Items. Paper presented at the 2007 Annual Meeting of the American Educational Research Association, Division D, Chicago, IL. April 10, 2007.
- 32. Briggs, D. C., Wiley, E., & Weeks, J. (2006) Vertical scaling in value-added models for student learning: a simulation study. Paper presented at the 2006 Annual Meeting of the American Educational Research Association, Division D, San Francisco, CA. April 10, 2006.
- 33. Briggs, D. C. (2005) Measuring racial/ethnic achievement gaps by dimension and level. Presentation at the 2005 AERA Conference, Montreal, Canada. April 12, 2005.
- 34. Briggs, D. C. (2004) Generalizability theory in item response modeling. Presentation at the International Meeting of the Psychometric Society, Pacific Grove, CA. June 15, 2004.
- 35. Briggs, D., Alonzo, A., Schwab, C. & Wilson, M. (2004) Developmental assessment with ordered multiple-choice items. Presentation at the 2004 AERA Conference, San Diego, CA. April 15, 2004.
- 36. Briggs, D. C. (2003) Causal inference and the Heckman model. Paper presented at the National Council on Measurement in Education, Chicago, IL. April 22, 2003.
- 37. Briggs, D. C. & Wilson, M. (2001) An introduction to multidimensional measurement using Rasch models. Paper presented at the 2001 AERA Conference, Seattle, WA. April 10, 2001.
- 38. Stern, David S., & Briggs, D. (1999) Competition or complementarity between work and school: some insights from high school students. Paper presented at 1999 AERA Conference, Montreal.

# **Selected Works in Progress**

- 1. Briggs, D. C., Shepard, L. A. (in progress) What Can NAEP Mathematics Subscales and Subscale Weights Tell Us About Common Core Effects? A White Paper for the NAEP Validity Studies Panel.
- 2. Briggs, D. C. (in progress) Dynamic Score Reporting with Content-Referenced Growth.
- 3. Briggs, D. C. (in preparation) On Interval Scales.

#### **CONFERENCE PRESENTATIONS**

- 1. Briggs, D. C. (2023). Technicians, Curators or Guides on the Assessment Reform Journey? Preparing the Next Generation of Educational Measurement Professionals. Symposium presentation at 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 Eductional Research Association, Chicago, IL., April 13, 2024.
- 3. 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 Presentation).
- 4. Briggs, D. C. (2021). Some lessons learned from research on vertical scaling. Presentation for Associação Brasileira de Avaliação Educational (ABAVE), September, 27, 2021. (Virtual Presentation).
- 5. 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 Presentation).
- 6. 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 Presentation).
- 7. Briggs, D. C. (2021). Discussion: Psychometrics and looming causal inferences. TILSA Panel Coordinated by the Center for Assessment, February, 23, 2021. (Virtual Presentation).
- 8. Briggs, D. C., Maul, A. & McGrane J. (2021). On the nature of measurement. Spotlight presentation for the International Objective Measurement Workshop, February 5, 2021. (Virtual Presentation).
- 9. Briggs, D. C. (2020). Teaching and learning "educational measurement": defining the discipline? Presentation for 2020 Annual Meeting of the National Council on Measurement in Education. (Virtual Presentation).
- 10. Briggs, D. C., & Furtak, E. M. (2019). Learning Progressions and NGSS, Presentation at the Special Conference for Classroom Assessment, Boulder, CO, September 18, 2019.
- 11. 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.
- 12. 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
- 13. 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.
- 14. 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 panel on "measurement problems" theme inspired by Howard Wainer, presented at the annual meeting of the National Council on Measurement in Education, New York, NY, April 16, 2018.
- 15. 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.
- 16. Briggs, D. C. (2017). Longitudinal growth models and classroom assessment. Invited presentation at North Carolina State University, School of Education, November 9, 2017.
- 17. Briggs, D. C. (2016). Psychometrics, measurement and obtainable Goals. Invited presentation at the International Meeting of the Psychometric Society, Asheville, NC. July 13, 2016.

- 18. Briggs, D. C. (2015). Measuring Student Learning: Assessment 101. Invited presentation at The Aspen Institute, Aspen, CO. September 26, 2015.
- 19. Briggs, D. C. (2015). Psychometrics, Testing and Obtainable Goals. Invited debate at the National Council for Measurement in Education, April 19, 2015.
- 20. Briggs, D. C. (2015). Standardized Testing and Special Needs. Presentation at Chautauqua Education Series, Boulder, CO. March 18, 2015.
- 21. Briggs, D. C. (2014). Improving the Science Behind Vertical Scaling. Presentation at the annual meeting of the National Council for Measurement in Education, Philadelphia, PA. April 5, 2014.
- 22. Briggs, D. C., Kizil, R. C. (2014). The Riddle of Dimensional Structure in Surveys of Teacher Preparation. Presentation at the annual meeting of the National Council for Measurement in Education, Philadelphia, PA. April 4, 2014.
- 23. Briggs, D. C. (2013). The Impact of Coaching on College Admissions (sometimes even a small effect can matter!) Invited presentation at Seminario International de Investigación sobre Calidad de la Educación, Bogotá, Colombia, November 8, 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.
- 25. 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.
- 26. Briggs, D. C. (2013). An Economist, a Psychometrician and a Father of a Special Needs Child Walk into a School. University of Michigan, Invited Womer Lecture. February, 19, 2013.
- 27. Briggs, D. C., & Domingue, B. (2012) Exploring Value-Added Across Multiple Dimensions: A Bifactor Approach. Maryland Assessment Conference. October 18, 2012.
- 28. Briggs, D, C. (2012) Due Diligence and the Evaluation of Teachers. Joint Statistics Meeting, San Diego, CA, July 29, 2012.
- 29. Briggs, D. C. (2011). Generalizing Causal Inferences: Test Scales and Meta-Analysis. Presentation at the European Association of Research on Learning and Instruction, Exeter, UK, August 31, 2011.
- 30. Briggs, D. C. (2011). Why Measuring Growth in Student Learning is a Lot Harder than Most People Realize. Presentation at the University of Oslo, March 17, 2011.
- 31. Briggs, D. C. & Maul, A. (2011). The comparability of assessments that include performance tasks. Paper presented at the annual meeting of the National Council for Measurement in Education, New Orleans, LA, April 11, 2011.
- 32. Dadey, N., Briggs, D. C., & Weeks, J. P. (2011). Making sense of growth trends from vertically scaled assessments. Paper presented at the annual meeting of the National Council for Measurement in Education, New Orleans, LA, April 9, 2011.
- 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.
- 35. Briggs, D. C. (2010) Making inferences about teachers and schools in the United States: Do we need value-added? Invited presentation at the 2010 Symposium on Causality, Jena University, Germany, July 14, 2010.
- 36. Weeks, J. P., Domingue, B. & Briggs, D. C. (2010) Design issues in developing a multidimensional vertical scale. Presentation at the 2010 International Meeting of the Psychometric Society, Athens, GA, July 10, 2010.

- Briggs, D. C. (2010) Pathology or pragmatism? Why psychometricians don't measure growth in student achievement. School of Education Colloquium Series, University of Colorado, April 7, 2010.
- 38. Briggs, D. C. (2009) Using Learning Progressions on a Large-Scale Basis. Invited presentation to the Massachusetts Department of Education, November 13, 2009.
- 39. Briggs, D. C. & Alonzo, A. C. (2009) Building a Learning Progression as a Cognitive Model. Presentation at the symposium "How to Build a Cognitive Model for Educational Assessments," at the annual meeting of the National Council for Measurement in Education, San Diego, CA, April 16, 2009.
- 40. Choi, J., Briggs, D. C. & Wilson, M. (2009) Multidimensional Extension of Generalizability in Item Response Modeling. Presentation at the annual meeting of the National Council for Measurement in Education, San Diego, CA, April 16, 2009.
- 41. Briggs, D. C. & Betebenner, D. (2009) Is Growth in Student Achievement Scale Dependent? Presentation at the invited symposium "Measuring and Evaluating Changes in Student Achievement: A Conversation about Technical and Conceptual Issues" at the annual meeting of the National Council for Measurement in Education, San Diego, CA, April 14, 2009.
- 42. Talbot, R., Briggs, D. C. & Otero, V. (2009) Can Science Teachers' Strategic Knowledge be Conceptualized as a Learning Progression? Presentation at the annual meeting of the American Educational Research Association, San Diego, CA, April 14, 2009.
- 43. Domingue, B. & Briggs, D. C. (2009) Using Propensity Score Matching to Estimate the Effect of Coaching on the SAT. Presentation at the annual meeting of the American Educational Research Association, San Diego, CA, April 14, 2009.
- 44. Briggs, D. C. (2008) The goals and uses of value-added models. Presentation 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.
- 45. Briggs, D. C. (2008) Validating the use of tests for high-stake inferences in education. Presentation at the National Academy of Education's Annual Meeting and Fellow's Retreat. Seattle, WA. October 17, 2008.
- 46. Briggs, D. C. (2008) Cause or effect? Validating the use of tests for high-stake inferences in education. Invited presentation at the Festschrift in honor of the career of Paul Holland, ETS, Princeton, NJ. Sep 20, 2008.
- 47. Briggs, D. C. (2008) Cause or effect? Validating the use of tests for high-stake inferences in education. Invited presentation at the Symposium on Causality, Jena, Germany. July 18, 2008.
- 48. Ruiz-Primo, M. A., Briggs, D., Shepard, L., Iverson, H., & Huchton, M. (2008, June). Innovations in undergraduate science education: Lessons Learned. Invited talk as a Conference Plenary Session. International Conference of Active Learning in Engineering Education. Bogotá, Colombia.
- 49. Briggs, D.C., Weeks, J. P. & Wiley. E. (2008) The Impact of Vertical Scaling Decisions on Growth Projections. Presentation at the National Conference on Student Assessment, June 16, 2008, Orlando, FL.
- 50. Briggs, D. C., Weeks, J. P. & Wiley. E. (2008) Vertical Scaling in Value-Added Models for Student Learning. Presentation at the National Conference for Value-Added Modeling, April 23, 2008, Madison, WI.
- Briggs, D. C. & Weeks, J. P. (2008) The Persistence of Value-Added School Effects. Presented at the 2008 Annual Meeting of the American Educational Research Association, Division D, New York, NY. March 27, 2008.

- 52. Talbot, R., & Briggs, D.C. (2008) Measuring the Pedagogical Sophistication of Science Teachers using the Flexible Application of Student-Centered Instruction (FASCI) Instrument. Annual Meeting of the American Educational Research Association, Division D, New York, NY. March 27, 2008.
- 53. Briggs, D.C., Weeks, J. P. & Wiley. E. (2008) The Impact of Vertical Scaling Decisions on Growth Projections. Presentation at the annual meeting of the National Council for Measurement in Education Annual Conference, March 26, 2008, New York, NY.
- 54. Briggs, D. C. (2008) The Process of Developing and Validating Learning Progressions: Issues From Two Case Studies. Poster Presented at the Annual Meeting of the American Educational Research Association, Division D, New York, NY. March 25, 2008.
- 55. Talbot, R. M., Briggs, D., & Otero, V. (2008). A new instrument for measuring the pedagogical knowledge of physics teachers. Workshop given at the Physics Teacher Education Coalition Conference. Austin, TX. March 1, 2008.
- 56. Briggs, D. C. (2008) The Measurement of Learning Progressions. Invited talk at the University of Arizona, February 21, 2008.
- 57. Briggs, D. C. (2007). Value-Added Modeling as a Tool for Accountability. Education in the Public Interest Center Conference. Boulder, CO. October 12, 2007.
- 58. Briggs, D. C., Geil, K., Harlow, D & Talbot, R. (2007). Measuring the pedagogical sophistication of math and science teachers using scenario-based items Paper presented at the 2007 Annual Meeting of the American Educational Research Association, Division D, Chicago, IL. April 10, 2007.
- 59. Briggs, D. C. (2007) Causes and Effects. Invited presentation for CRESST Conference: The Future of Test-based Accountability. Los Angeles, CA. January 22, 2007.
- 60. Briggs, D. C., Wiley, E., & Weeks, J. (2006) Vertical scaling in value-added models for student learning: a simulation study. Paper presented at the 2006 Annual Meeting of the American Educational Research Association, Division D, San Francisco, CA. April 10, 2006.
- 61. Wilson, M. & Briggs, D. C. (2005). Generalizability in item response modeling. Invited lecture presented at the 21st University of Twente IRT Workshop, Enschede, The Netherlands.
- 62. Briggs, D. C. (2004) Adequate yearly progress and causal inference. Presentation at the CRESST Conference, Los Angeles, CA. September 9, 2004.
- 63. Briggs, D. C. (2004) Multidimensionality and latent item predictors as extensions to item response modeling under a GLMM framework. Presentation at the Society for Multivariate Analysis in the Behavioral Sciences Conference, Jenna, Germany. July 21, 2004.
- 64. Briggs, D., Alonzo, A., Schwab, C. & Wilson, M. (2004) Developmental assessment with ordered multiple-choice items. Presentation at the International Meeting of the Psychometric Society, Pacific Grove, CA. June 16, 2004.
- 65. Briggs, D. C. (2003) SAT coaching and causal inference. Presentation at the National Council on Measurement in Education, Chicago, IL. April 22, 2003.
- 66. Briggs, D. C. (2003) SAT coaching and causal inference. Presentation at the UCLA Department of Statistics, Los Angeles, CA. February 11, 2003.
- 67. Briggs, D. C. (2002) Evaluating SAT test preparation: gains, effects and self-selection. Presentation at the Western Regional Meeting of The College Board, Anaheim, CA. February 24, 2002.
- 68. Briggs, D. C. & Hansen, B. (2001) Evaluating SAT test preparation: gains, effects and self-selection. Presentation at the University of California, Santa Barbara "Rethinking the SAT in University Admissions" Conference, Santa Barbara, CA. November 12, 2001.

- 69. Briggs, D. C. (2001) The effect of admissions test preparation: evidence from NELS:88. Presentation at the Board of Testing and Assessment, National Research Council, Washington, D.C. June 6, 2001.
- 70. Briggs, D. C. & Wilson, M. (2001) An introduction to multidimensional measurement using Rasch models. Presentation at the 2001 AERA Conference, Seattle, WA. April 10, 2001.
- 71. Briggs, D. C.. (2000) Measuring the racial/ethnic gap in science achievement. Presentation at the Berkeley Evaluation and Assessment Research (BEAR) Seminar, UC Berkeley Department of Education.
- 72. Briggs, D. C. & Wilson, M. (2000) An introduction to multidimensional measurement. Presentation at the International Objective Measurement Workshop, New Orleans, LA. April 22, 2000.
- 73. Wilson, M & Briggs, D. (1999) An introduction to individual growth modeling: A multilevel modeling perspective. Presentation at the Institute for Human Development, UC Berkeley Department of Psychology. December 3, 1999.
- 74. Briggs, D. (1999) Longitudinal data in educational research: NELS-88. Presentation at the Berkeley Evaluation and Assessment Research (BEAR) Seminar, UC Berkeley Department of Education.

# **PROFESSIONAL AFFILIATIONS**

- American Educational Research Association
- National Council on Measurement in Education
- National Education Policy Center
- The Psychometric Society

#### **PROFESSIONAL SERVICE**

#### **Advisory Boards & Committees**

#### Current

- NAEP Validity Studiesd Panel, (2023-)
- Educational Testing Service Visiting Panel on Research, (2019-)
- Curriculum Associates, Technical Advisory Committee, (2018-)
- Multistate Alternate Assessment Consortium, Chair of Technical Advisory Committee (2016-)
- State of Kansas Assessment Technical Advisory Committee (2019-)
- State of Arizona Assessment Technical Advisory Committee (2016-)
- National Assessment of Educational Progress, ETS Design Advisory Committee (2013-)
- Partnership for the Assessment of College and Career Readiness Consortium now New Meridian, Technical Advisory Panel (2011-)
- Smarter Balanced Assessment Consortium (SBAC), Technical Advisory Panel (2011-)
- State of New York Assessment Technical Advisory Committee (2012-)
- State of Utah Assessment Technical Advisory Committee (2007-)
- Editorial Board, Educational Assessment (2010-)
- Editorial Board, Journal of Educational Measurement, (2016-)

## Past

- NAEP Reading Framework Revision, Technical Advisory Panel, (2019-2021)
- NAEP Mathematics Framework Revision, Technical Advisory Panel, (2018-2019)
- National Centers and State Collaborative (NCSC), Technical Advisory Committee (2011-2015)
- Institute of Education Sciences Review Panel, Education Systems and Broad Reform (2016-2019).
- Georgia Educator Effectiveness Technical Advisory Committee (2011-2019)
- State of Nevada Assessment Technical Advisory Committee (2016-2019)
- State of Montana Assessment Technical Advisory Committee (2006-2017)
- State of Michigan Assessment Technical Advisory Committee (2013-2015)
- State of Tennessee Assessment Technical Advisory Committee (2015-2018)
- State of Indiana Assessment Technical Advisory Committee (2016)
- English Language Proficiency Assessment Consortium (ELPA21) Technical Advisory Committee (2013-2016)
- 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)
- Editorial Board, Educational Researcher (2006-2009)
- Editorial Board, Educational Measurement: Issues and Practice (2007-2009)
- Editorial Board, International Journal of Testing, (2016-2019)
- Editorial Board, AERA Open (2014-2021)

# Leadership Positions

- 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.
- Editor, Educational Measurement: Issues and Practice, 2013-2015
- NCME Dissertation Award Committee Chair, 2010-2011
- Conference Chair, International Objective Measurement Workshop, 2010
- AERA Division L, Section 5 Program Chair, 2009-2010
- University of Colorado, School of Education, Research and Evaluation Methodology Program Chair, 2008-2019

#### **Manuscript Reviews**

- American Educational Research Journal
- AERA Open
- 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 Measurement
- Journal of Educational and Behavioral Statistics
- Journal of Experimental Child Psychology
- Journal of Teacher Education
- Multivariate Behavioral Research
- Physical Review
- Psychometrika
- Psychological Methods
- Review of Educational Research
- Routledge Publications
- SAGE Publications
- Theory & Psychology

#### University of Colorado

- University of Colorado, Vice-Chancellors Advisory Committee (Promotion and Tenure Review), 2024-2027
- University of Colorado, School of Education, Faculty Merit Review Committee, 2023-2025
- University of Colorado, School of Education, Research and Evaluation Methodology Program Chair, 2008-2019
- Chair of Research and Evaluation Methodology Search Committee 2016
- Member of Dean Search Committee, 2014-16
- Chair of Research and Evaluation Methodology Search Committee 2014-15
- Chair of Research and Evaluation Methodology Search Committee 2013-14
- Chair of Research and Evaluation Methodology Search Committee 2011-12
- Chair of Research and Evaluation Methodology Search Committee 2008-09
- Graduate Student Recruitment Taskforce, 2006-2008
- Coordinator of Bi-Weekly Research & Evaluation Methodology Seminar, 2003-2014

- Research and Evaluation Methodology Search Committee, 2004-05.
- Science Education Search Committee, 2005-2006.
- Doctoral Curriculum Taskforce, 2003-2005.