

Benjamin R. Shear

Curriculum Vitae

January 2026

ADDRESS

School of Education
University of Colorado Boulder
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Boulder, CO 80309

CONTACT

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<https://www.colorado.edu/education/benjamin-shear>

EDUCATION

- 2017 *Ph.D., Stanford Graduate School of Education*
Developmental and Psychological Sciences
Advisors: Edward Haertel & Sean F. Reardon
- 2012 *M.A., University of British Columbia*
Measurement, Evaluation, and Research Methodology
Advisor: Bruno D. Zumbo
- 2006 *B.A., Dartmouth College*
Philosophy (mathematics minor), *magna cum laude*

EMPLOYMENT

- 2025 – Present *Associate Professor*
Research and Evaluation Methodology, School of Education, University of Colorado, Boulder, CO
- 2017 – Present *Faculty Partner*
Center for Assessment, Design, Research and Evaluation (CADRE), School of Education, University of Colorado, Boulder, CO
- 2017 – 2025 *Assistant Professor*
Research and Evaluation Methodology, School of Education, University of Colorado, Boulder, CO
- 2009 – 2016 *Graduate Research Assistant*
Stanford Center for Education Policy Analysis (Stanford), Stanford Center for Assessment, Learning and Equity (Stanford), Edgeworth Laboratory (UBC), Visual Cognition Lab (UBC)
- 2006 – 2008 *High School Mathematics Teacher*
Eagle Rock School & Professional Development Center, Estes Park, CO

PUBLICATIONS

PEER-REVIEWED JOURNAL ARTICLES

- Shear, B. R.**, Taylor, J., & Fahle, E. M. (in press). Determinants of between-school variation in student achievement: Results from US population data. *Journal of Research on Educational Effectiveness*.
- Shear, B. R.**, & Briggs, D. C. (2024). Measurement issues in causal inference. *Asia Pacific Education Review*. <https://doi.org/10.1007/s12564-024-09942-9>

- Shear, B. R.** (2023). Gender bias in test item formats: Evidence from PISA 2009, 2012, and 2015 math and reading tests. *Journal of Educational Measurement*, 60(4), 676–696. <https://doi.org/10.1111/jedm.12372>
- Shear, B. R.** (2023). Causal inference and COVID: Contrasting methods for evaluating pandemic impacts using state assessments. *Educational Measurement: Issues and Practice*, 42(1), 99–109. <https://doi.org/10.1111/emip.12540>
- Shear, B. R.**, & Reardon, S. F. (2021). Using pooled heteroskedastic ordered probit models to improve small-sample estimates of latent test score distributions. *Journal of Educational and Behavioral Statistics*, 46(1), 3–33. <https://doi.org/10.3102/1076998620922919>
- Shear, B. R.** (2018). Using hierarchical logistic regression to study DIF and DIF variance in multilevel data. *Journal of Educational Measurement*, 55(4), 513–542. <https://doi.org/10.1111/jedm.12190>
- Shear, B. R.**, Nordstokke, D. W., & Zumbo, B. D. (2018). A note on using the nonparametric Levene test when population means are unequal. *Practical Assessment, Research & Evaluation*, 23(13), 1–11.
- Lockwood, J. R., Castellano, K. E., & **Shear, B. R.** (2018). Flexible Bayesian models for inferences from coarsened, group-level achievement data. *Journal of Educational and Behavioral Statistics*, 43(6), 663–692. <https://doi.org/10.3102/1076998618795124>
- Reardon, S. F., **Shear, B. R.**, Castellano, K. E., & Ho, A. D. (2017). Using heteroskedastic ordered probit models to recover moments of continuous test score distributions from coarsened data. *Journal of Educational and Behavioral Statistics*, 42(1), 3–45. <https://doi.org/10.3102/1076998616666279>
- Zumbo, B. D., Liu, Y., Wu, A. D., **Shear, B. R.**, Olvera Astivia, O. L., & Ark, T. K. (2015). A methodology for Zumbo's third generation DIF analyses and the ecology of item responding. *Language Assessment Quarterly*, 12(1), 136–151. <https://doi.org/10.1080/15434303.2014.972559>
- Shear, B. R.**, & Zumbo, B. D. (2013). False positives in multiple regression: Unanticipated consequences of measurement error in the predictor variables. *Educational and Psychological Measurement*, 73(5), 733–756. <http://doi.org/10.1177/0013164413487738>
- ### BOOK CHAPTERS AND INVITED SUBMISSIONS
- Stout, W., Henson, R., DiBello, L., & **Shear, B. R.** (2019). The Reparameterized Unified Model system: A diagnostic assessment modeling approach. In M. von Davier & YS Lee (Eds.), *Handbook of Diagnostic Classification Models* (pp. 47–79). Springer. https://doi.org/10.1007/978-3-030-05584-4_3
- Fahle, E. M., **Shear, B. R.**, & Shores, K. A. (2019)*. Assessment for monitoring of education systems: The U.S. example. *The ANNALS of the American Academy of Political and Social Science*, 683(1), 58–74. <https://doi.org/10.1177/0002716219841014>
- Shear, B. R.**, & Roussos, L. A. (2017). Validating a distractor-driven geometry test using a generalized diagnostic classification model. In B. D. Zumbo & A. M. Hubley (Eds.), *Understanding and investigating response processes in validation research* (Vol. 69, pp. 277–304). Springer International Publishing. https://doi.org/10.1007/978-3-319-56129-5_15
- Zumbo, B. D., Liu, Y., Wu, A. D., Forer, B., & **Shear, B. R.** (2017). National and international educational achievement testing: A case of multi-level validation framed by the ecological model of item responding. In B. D. Zumbo & A. M. Hubley (Eds.), *Understanding and*

investigating response processes in validation research (Vol. 69, pp. 341–361). Springer International Publishing. https://doi.org/10.1007/978-3-319-56129-5_18

Shear, B. R., & Zumbo, B. D. (2014). What counts as evidence: A review of Validity Studies in Educational and Psychological Measurement. In B. D. Zumbo & E. K. H. Chan (Eds.), *Validity and validation in social, behavioral, and health sciences* (pp. 91–111). Springer. https://doi.org/10.1007/978-3-319-07794-9_6

REPORTS AND OTHER PUBLICATIONS

Shear, B. R., & Thomas, K. (2025). *Descriptive summary of Colorado's ESSER Expanded Learning Opportunities (ELO) grant programs*. Boulder, CO: The Center for Assessment, Design, Research and Evaluation (CADRE), University of Colorado Boulder. <https://www.colorado.edu/cadre/2025/11/20/descriptive-summary-colorados-esser-expanded-learning-opportunities-elo-grant-programs>

Shear, B. R. (2025). *NEPC review: Apples to apples: The definitive look at school test scores in Milwaukee and Wisconsin for 2024*. Boulder, CO: National Education Policy Center. <https://nepc.colorado.edu/review/apples>

Shear, B. R., Whitfield, E. [†], & Nath, K. [†] (2025). *Investigating the relationship between sample size and reliability of aggregate test score measures in Colorado schools*. The Center for Assessment, Design, Research and Evaluation (CADRE), University of Colorado Boulder. <https://www.colorado.edu/cadre/2025/08/25/investigating-relationship-between-sample-size-and-reliability-aggregate-test-score>

Whitfield, E. [†], **Shear, B. R.**, & Diaz-Bilello, E. (2024). *Analysis of Colorado multilingual learner redesignation among the 2018 3rd grade cohort*. The Center for Assessment, Design, Research and Evaluation (CADRE), University of Colorado Boulder. <https://www.colorado.edu/cadre/2024/10/29/analysis-colorado-multilingual-learner-redesignation-among-2018-3rd-grade-cohort>

Shear, B. R., & Nath, K. [†] (2024). *Nominal and effective weights of composite accountability ratings: A demonstration using Colorado's School Performance Framework*. The Center for Assessment, Design, Research and Evaluation (CADRE), University of Colorado Boulder. <https://www.colorado.edu/cadre/2024/09/06/nominal-and-effective-weights-composite-accountability-ratings-demonstration-using>

Fahle, E. M., Saliba, J., Kalogrides, D., **Shear, B. R.**, Reardon, S. F., & Ho, A. D. (2024). *Stanford Education Data Archive: Technical documentation (Version 5.0)*. <https://purl.stanford.edu/cs829jn7849> [Also co-author for documentation to Version [2.0](#), [2.1](#), [3.0](#), [4.0](#), and [4.1](#)]

Fahle, E. M., Reardon, S. F., **Shear, B. R.**, Ho, A. D., Min, J., & Kalogrides, D. (2024). *Stanford Education Data Archive technical documentation: SEDA2023*. <https://purl.stanford.edu/xt779fj2637> [Also co-author for documentation to [SEDA2022](#) and [SEDA2022 2.0](#)]

Mork, K. [†], **Shear, B. R.**, & Diaz-Bilello, E. (2022). *Descriptive Analyses of Connect for Success, Multi-Tiered Systems of Support, and Accountability Pathways*. The Center for Assessment, Design, Research and Evaluation (CADRE). <https://www.colorado.edu/cadre/2022/04/08/descriptive-analyses-connect-success-multi-tiered-systems-support-and-accountability>

Shear, B. R., Diaz-Bilello, E., Student, S. [†] & Pierre-Louis, M. [†] (2021). *Evaluation of Colorado School Turnaround Network and School Turnaround Leadership Development Grants: Descriptive Analysis of 2015- 2020 Cohorts*. The Center for Assessment, Design, Research and Evaluation (CADRE). <https://www.colorado.edu/cadre/2021/04/02/evaluation-colorado-school-turnaround-network-and-school-turnaround-leadership>

Shear, B. R. (2020). *Comparison of 2019 cohort and baseline student growth percentiles*. The Center for Assessment, Design, Research and Evaluation (CADRE).
<https://www.colorado.edu/cadre/node/373/attachment>

Shear, B. R. (2019). *Summary of median growth percentile analyses: Descriptive statistics, demographics correlations, and stability analyses*. The Center for Assessment, Design, Research and Evaluation, University of Colorado Boulder.
<https://www.colorado.edu/cadre/2020/01/16/summary-median-growth-percentile-analyses-descriptive-statistics-demographics> [Basis for two public research briefs disseminated by the Colorado Department of Education [here](#) and [here](#)]

Shear, B. R., Diaz-Bilello, E., Chattergoon, R.[†] (2017, August). *Considerations for adopting and implementing innovative assessment systems*. Report prepared for the Colorado Department of Education. Center for Assessment, Design, Research and Evaluation, University of Colorado Boulder.

Shear, B. R. (2017). *Review of "Apples to Apples: The Definitive Look at School Test Scores in Milwaukee and Wisconsin."* National Education Policy Center, University of Colorado Boulder.
<http://nepc.colorado.edu/thinktank/review-milwaukee-vouchers>

Nayfield, I., Pecheone, R., Whittaker, A., **Shear, B. R.**, & Klesch, H. (2015). *Educative assessment & meaningful support: 2014 edTPA administrative report*. Stanford Center for Assessment, Learning and Equity.

Shear, B. R. (2014). "Mathematics achievement" and "Mean differences." In *Encyclopedia of Quality of Life and Well-Being Research*. Springer Reference.

STATISTICAL SOFTWARE AND DATASETS

Reardon, S. F., Fahle, E. M., Ho, A. D., **Shear, B. R.**, Saliba, J., Min, J., Shim, J., & Kalogrides, D. (2025). Stanford Education Data Archive (Version SEDA 2024.2) [dataset].
<https://purl.stanford.edu/ns863bk0785>. [Also contributed to development of Versions 2022, 2022 2.0, 2023, and 2024] <https://edopportunity.org>

Reardon, S. F., Ho, A. D., **Shear, B. R.**, Fahle, E. M., Kalogrides, D., & Saliba, J. (2024). Stanford Education Data Archive (Version 5.0) [dataset]. <https://purl.stanford.edu/cs829jn7849>. [Also contributed to development of Versions 1.0, 1.1, 2.0, 2.1, 3.0, 4.0, and 4.1]
<https://edopportunity.org>

Shear, B. R. & Reardon, S. F., (2017; 2019), HETOP: Stata module for estimating heteroskedastic ordered probit models with ordered frequency data,
<http://EconPapers.repec.org/RePEc:boc:bocode:s458287>.

* = authorship listed alphabetically.

† = graduate student co-author.

SELECTED CONFERENCE PAPERS AND PRESENTATIONS

INVITED SESSIONS

Shear, B. R. (2022, April). *Item format gender bias in large-scale assessment: New evidence and considerations for state accountability testing*. Invited poster for Excellence in Education Research: Early Career Scholars and Their Work at the 2022 American Educational Research Association Annual Meeting, San Diego, CA.

Shear, B. R. (May, 2021). *Scales of Educational Opportunity: Using administrative test score data to study educational opportunity in the US*. Keynote Address at Inaugural Interdisciplinary Social Research Seminar [on-line], Trent University, Ontario, Canada.

Shear, B. R. (2019, March). *Using administrative test-score data to study educational opportunity in the U.S.* Invited Keynote Address at the 7th Annual Leadership Symposium, St. John's University, Queens, NY.

PEER-REVIEWED CONFERENCE PRESENTATIONS, PAPERS, AND POSTERS

Muldoon, L., Huff, K., Shear, B. R., Warner, Z., & Carr, P. (2025, June). Bridging the Gap: Helping the Public Make Sense of All the Tests Kids Take. Coordinated panel presentation at the National Conference on Student Assessment, Denver, Colorado.

Reardon, S. F., & Shear, B. R. (2025, June). *Combining NAEP and state data to contextualize and study state test score trends from 2009-2024.* Presentation at the National Conference on Student Assessment, Denver, Colorado.

Shear, B. R., Taylor, J., & Fahle, E. M. (2025, April). *Determinants of between-school variation in student achievement: Results from U.S. population data.* Paper presented at the 2025 American Educational Research Association Annual Meeting, Denver, CO.

Shear, B. R. (2025, April). *Affordances and tradeoffs of using matrix sampling for state accountability testing.* Paper presented at the National Council on Measurement in Education Annual Meeting, Denver, CO.

Marion, S., Shear, B. R., Lorié, W., Timberlake, A., Farley, D., & Zurkowski, J. (2024, June). *Reducing state accountability testing: Possibilities and challenges.* Coordinated session at the CCSSO National Conference on Student Assessment, Seattle, WA.

Shear, B. R., Taylor, J., Fahle, E. M. (2023, September). *Determinants of between-school variation in student achievement: Results from US population data.* Paper presented at the Society for Research on Educational Effectiveness 2023 Conference, Arlington, VA.

Shear, B. R., Reardon, S. F., Warner, Z., Ho, A. D., & Fahle, E. M. (2023, June). *Using state and national test score data to understand district-level educational opportunities from 2009-2022.* Coordinated Session at the CCSSO National Conference on Student Assessment 2023, New Orleans, LA.

Shear, B. R., Mork, K., Student, S., Huchton, M., Hartman, A., & Lovinguth, M. (2022, June). *Using OTL Indicators to Describe Educational Experiences and Contextualize Spring 2021 Test Score Data in Three Districts.* Coordinated Session at the CCSSO National Conference on Student Assessment 2022, Atlanta, GA.

Shear, B. R. (2022, April). *Item format gender bias in large-scale assessment: New evidence and considerations for state accountability testing.* Paper presented at the 2022 National Council on Measurement in Education Annual Meeting, San Diego, CA.

Mork, K., & Shear, B. R. (2022, April). *Operationalizations of the effective weights of indicators in state accountability systems.* Paper presented at the American Educational Research Association 2022 Annual Meeting, San Diego, CA.

Shear, B. R., Ho, A. D., & Reardon, S. F. (2021, May). *Models for aggregate growth and progress using multiyear, multicohort datasets.* Paper presented at the 2021 National Council on Measurement in Education Annual Meeting [held on-line].

Shear, B. R., Ho, A. D., Reardon, S. F., & Fahle, E. M. (2020, March). *Improving the precision and interpretation of aggregate school growth metrics.* Accepted at the Society for Effectiveness in Education 2020 Annual Meeting. [Not presented due to COVID-19 cancellation of conference.]

Shear, B. R. (2019, June). *Validating the use of growth for high-stakes accountability.* Presented at the CCSSO National Conference on Student Assessment, Orlando, FL.

- Shear, B. R. (2018, April). *Using hierarchical logistic regression to study DIF variance*. Paper presented at the National Council on Measurement in Education Annual Meeting, New York, NY.
- Shear, B. R., Reardon, S. F., Fahle, E. M., & Ho, A. D. (2018, April). *Mapping proficiency standards using heteroskedastic ordered probit models and NAEP-based linear linking*. Paper presented at the National Council on Measurement in Education Annual Meeting, New York, NY.
- Ho, A. D., Shear, B. R., Reardon, S. F., & Fahle, E. M. (2018, April). *Rise and convergence of state proficiency standards in the Common Core era*. Paper presented at the National Council on Measurement in Education Annual Meeting, New York, NY.
- Shear, B. R., Ho, A. D., Reardon, S. F., & Fahle, E. M. (2018, March). *Trends in state proficiency standards in the Common Core era*. Paper presented at the Society for Research on Educational Effectiveness Spring 2018 Conference, Washington, DC.
- Shear, B. R., & Reardon, S. F. (2017, April). *Using pooled heteroskedastic ordered probit models to improve small-sample estimates*. Paper presented at the National Council on Measurement in Education 2017 Annual Meeting, San Antonio, TX.
- Lockwood, J. R., Castellano, K. E., & Shear, B. R. (2017, April). *Flexible Bayesian models for inferences from coarsened, group-level achievement data*. Paper presented at the National Council on Measurement in Education 2017 Annual Meeting, San Antonio, TX.
- Shear, B. R., & Thum, Y. M. (2017, March). *Sensitivity of achievement gap trend estimates to alternative treatments of nested data*. Paper presented at the Society for Research on Educational Effectiveness Spring 2017 Conference, Washington, DC.
- Shear, B. R., & Thum, Y. M. (2016, April). *Alternative approaches for comparing test score achievement gap trends*. Poster presented at the National Council on Measurement in Education 2016 Annual Meeting, Washington, DC.
- Shear, B. R., Castellano, K. E., Reardon, S. F., & Ho, A. D. (2015, April). *Recovering NAEP and state test score distributions using coarsened data*. Paper presented at the National Council on Measurement in Education 2015 Annual Meeting, Chicago, IL.
- Shear, B. R., Roussos, L. A., DiBello, L. V., Henson, R. A., & Stout, W. F. (2015, April). *Fitting diagnostic classification models to distractor-driven tests for validation purposes*. Paper presented at the National Council on Measurement in Education 2015 Annual Meeting, Chicago, IL.
- Shear, B. R., Castellano, K. E., Reardon, S. F., & Ho, A. D. (2014, March). *Simultaneous estimation of multiple achievement gaps from ordinal proficiency data*. Paper presented at the Society for Research on Educational Effectiveness Spring 2014 Conference, Washington, DC.
- Shear, B. R., Nordstokke, D. W., & Zumbo, B. D. (2013, April). *On centering scores before applying the nonparametric Levene test*. Paper presented at American Educational Research Association 2013 Annual Meeting, San Francisco, CA.
- Ark, T. K., Shear, B. R., & Zumbo, B. D. (2013, April). *Demonstration of the impact of data entry errors on generalizability and decision studies: Crossed and nested two-facet designs*. Paper presented at the American Educational Research Association 2013 Annual Meeting, San Francisco, CA.
- Liu, Y., Shear, B. R., & Zumbo, B. D. (2013, April). *Impact of outliers arising from a subpopulation on ordinary least squares and robust regression estimates*. Paper presented at the American Educational Research Association 2013 Annual Meeting, San Francisco, CA.

- Shear, B. R., Olvera, O. L., & Zumbo, B. D. (2012, April). *Relative variable importance measures for multiple linear regression in suppression situations: A Monte Carlo study*. Paper presented at the American Educational Research Association 2012 Annual Meeting, Vancouver, BC.
- Shear, B. R., & Zumbo, B. D. (2012, April,). *What counts as evidence? An empirical review of Validity Studies in Educational and Psychological Measurement*. Poster presented at the American Educational Research Association 2012 Annual Meeting, Vancouver, BC.
- Zumbo, B. D., Liu, Y., Shear, B. R., Olvera, O.L., Ark, T.K., & Wu, A.D. (2012, April). *Latent class logistic regression family of models and its applications to Explanatory DIF*. Paper presented at the National Council on Measurement in Education 2012 Annual Meeting, Vancouver, BC.
- Zumbo, B. D., Liu, Y., Wu, A. D., Forer, B., & Shear, B. R. (2010, May). *National and international educational achievement testing: a case of multi-level validation*. Paper presented at the American Educational Research Association 2010 Annual Meeting, Denver, CO.

MEDIA AND PUBLIC SCHOLARSHIP

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| 2023 | Interviewed about state test scores during COVID for EducationWeek |
| 2019 | Interviewed about student data reporting in Colorado in the Denver Post |
| 2019 | Interviewed for CU Boulder Today about new Stanford Education Data Archive |
| 2017 | Stanford Education Data Archive featured in NYTimes TheUpshot analysis |
| 2016 | Stanford Education Data Archive used for NYTimes TheUpshot analysis |
| 2016 | Stanford Education Data Archive featured in EducationWeek |

HONORS AND AWARDS

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| 2025 | University of Colorado Best Should Teach Gold Award |
| 2023 | University of Colorado Provost's Faculty Achievement Award |
| 2020 | AERA Division D Award for Significant Contribution to Educational Measurement and Research Methodology (jointly with Sean Reardon, Andrew Ho, Erin Fahle, and Demetra Kalogrides) |
| 2018 | NCME Annual Award for Exceptional Achievement in Educational Measurement (jointly with Sean Reardon, Andrew Ho, Erin Fahle, Ken Shores, Katherine Castellano, and Demetra Kalogrides) |
| 2017 - Present | National Education Policy Center Fellow |
| 2012 – 2016 | Institute of Education Sciences Predoctoral Training Fellowship |
| 2012 – 2013 | Thomas G. and Terry B. Eastman Fellowship |
| 2011 – 2012 | ECPS Department Student Funding Award |
| 2011 | UBC Faculty of Education Student Research Grant |
| 2009 | Americorps Education Award |
| 2006 | Phi Beta Kappa inductee |

RESEARCH FUNDING

- 2025 – 2027 *Investigating Potential Explanations for Gender by Item Format Biases on PISA Large Scale Assessments Using Response Process Data.* Spencer Foundation. PI Benjamin Shear (\$49,840).
- 2025 – 2026 *Technical Assistance to Colorado Department of Education.* Colorado Department of Education. PI Benjamin Shear; Co-PI Elena Diaz-Bilello (Total award \$79,980).
- 2024 – 2025 *Technical Assistance to Colorado Department of Education.* Colorado Department of Education. PI Benjamin Shear; Co-PI Elena Diaz-Bilello (Total award \$78,389).
- 2023 – 2024 *Technical Assistance to Colorado Department of Education.* Colorado Department of Education. PI Benjamin Shear; Co-PI Elena Diaz-Bilello (Total award \$75,069).
- 2022 – 2023 *Technical Assistance to Colorado Department of Education.* Colorado Department of Education. PI Benjamin Shear; Co-PI Elena Diaz-Bilello (Total award \$72,259).
- 2021 – 2022 *Gender Bias in Item Formats for Large-Scale Assessments.* AERA Grants Program, NSF Award NSF-DRL #1749275. PI Benjamin Shear (Total award \$25,000).
- 2021 – 2022 *Technical Assistance to Colorado Department of Education.* Colorado Department of Education. PI Benjamin Shear; Co-PI Elena Diaz-Bilello (Total award \$73,640).
- 2020 – 2021 *Technical Assistance to Colorado Department of Education.* Colorado Department of Education. PI Benjamin Shear; Co-PI Elena Diaz-Bilello (Total award \$73,189).
- 2019 – 2020 *Technical Assistance to Colorado Department of Education.* Colorado Department of Education. PI Benjamin Shear; Co-PI Elena Diaz-Bilello (Total award \$67,221).
- 2019 – 2020 *Accountability and Assessments in Small Rural School Districts.* School of Education Place-Based Partnership Award. PI Terri Wilson; Co-PI Benjamin Shear (Total award \$13,999).
- 2018 – 2019 *Technical Assistance to Colorado Department of Education.* Colorado Department of Education. PI Benjamin Shear; Co-PI Elena Diaz-Bilello (Total award \$55,000).
- 2017 – 2019 *Expanding the Stanford Education Data Archive.* Bill and Melinda Gates Foundation. Subaward from Stanford University. PI Benjamin Shear (CU Boulder subaward \$146,812).
- 2017 – 2018 *Technical Assistance to Colorado Department of Education.* Colorado Department of Education. PI Elena Diaz-Bilello; Co-PI Benjamin Shear (Total award \$76,705).
- 2011 – 2012 *Measurement validation practices: A systematic review of the literature and implications for validity theory.* Faculty of Education UBC HSS Seed Grant. Co-PI with Dr. Bruno Zumbo. (\$6,739 CAD).

TEACHING

GRADUATE COURSES

EDUC 7396: Latent Variable & Structural Equation Modeling, University of Colorado Boulder School of Education, Spring 2025

EDUC 7396: Categorical Data Analysis, University of Colorado Boulder School of Education, Spring 2017, 2019, 2020

EDUC 7456: Multilevel Modeling, University of Colorado Boulder School of Education, Fall 2022, Fall 2024

EDUC 8230: Quantitative Methods I, University of Colorado Boulder School of Education, Fall 2018, 2019

EDUC 8240: Quantitative Methods II, University of Colorado Boulder School of Education, Spring 2021, 2022, 2023

EDUC 8710: Introduction to Measurement in Survey Research, University of Colorado Boulder School of Education, Fall 2017, 2020, 2021, 2023, 2025

EDUC 8720: Advanced Topics in Measurement: Item Response Theory, University of Colorado Boulder School of Education, Spring 2018

DOCTORAL ADVISEES

1. Kaitlin Mork, started fall 2017, graduated spring 2023
2. Sandy Student, co-advised with Derek Briggs, started fall 2018, graduated spring 2023
3. Medjy Pierre-Louis, co-advised with Derek Briggs, started fall 2019, graduated spring 2024
4. Kyla McClure, co-advised with Derek Briggs, started fall 2020, graduated fall 2025
5. Erik Whitfield, co-advised with Oded Gurantz, started fall 2022
6. Nico Buchbinder, co-advised with Derek Briggs, started fall 2023
7. Luke Leiden, co-advised with Derek Briggs, started fall 2025

DISSERTATION COMMITTEES

1. Jessica Alzen (Education; completed 2017)
2. Michael Turner (Education; completed 2018)
3. Rajendra Chattergoon (Education; completed 2020)
4. Amy Burkhardt (Education; completed 2020)
5. Spencer Dudley (Education; completed 2021)
6. Chris Vardeman (CMC; completed 2022)
7. Kaitlin Mork (*chair*, Education; completed 2023)
8. Sandy Student (Education; completed 2023)
9. Hannah Denker (Education; completed 2023)
10. Alexander Bentz (Economics; completed 2024)
11. Michelle Doughty (Education; completed 2024)
12. Medjy Pierre-Louis (Education; completed 2024)
13. Anna Noble (Education; proposal defended 2023)
14. Anna Deese (Education; proposal defended 2024)
15. Riley Loria (Psychology; proposal committee member 2025)
16. Lorraine Glidewell (Education; proposal defended 2025)
17. Chelsea Taylor (Psychology; completed 2025)
18. Kyla McClure (Education; completed 2025)

UNDERGRADUATE THESIS COMMITTEES

- Landon Jacquinot (completed 2020)

SERVICE AND PROFESSIONAL ACTIVITIES

SCHOOL OF EDUCATION SERVICE

- Faculty Retreat Planning Committee (2017-2018)
- Coordinate Weekly REM Program Area Seminar ("REMinar") (2018-present)
- NEPC Schools of Opportunity Reviewer (2018-2019)
- School of Education Awards Committee member (2020-2024)

- School of Education Place-Based Seed Grants reviewer (2020-present)
- School of Education Doctoral Mentorship Pathways Program mentor & selection committee (2020-present)
- School of Education Research and Evaluation Methodology faculty search committee member (2021)
- School of Education Scholarship Application Reviewer (2023)
- School of Education Curriculum Committee (2024-2025)
- School of Education Faculty Governance Council (2025-present)

UNIVERSITY-LEVEL SERVICE

- Panelist for CU Boulder THRIVE Program for New Faculty, "Thriving in the First Year: What I Wish I had Known" (2023)
- Provost's Faculty Achievement Award Selection Committee (2024, 2025)
- Boulder Faculty Assembly Working Group to Review the Boulder FCQ Process (2025)

STATE AND NATIONAL SERVICE

- National Council on Measurement in Education, *Publications Committee Member* (2013-2016)
- Stanford Education Data Archive, *Development Team Member* (2016-present)
- National Council on Measurement in Education Special Conference on Classroom Assessment, *Planning Committee Member* (2019)
- Measures for Early Success: Supporting Early Learners and Educators with Innovative, Equitable Assessments, *Technical Advisory Group Member* (2022)
- Edmentum, *Technical Advisory Committee Member* (2022-present)
- Colorado Department of Education Technical Advisory Panel for Longitudinal Growth, *Member* (2022-present)
- AERA 2024 Annual Meeting Cognition and Assessment SIG, *Program Chair* (2023-2024)
- Proposal Reviewer, *Spencer Small Grants* (2024)
- International Objective Measurement Workshop (IOMW) 2025 Conference, *Planning Committee Member* (2025)
- Technical Advisory Committee to the Montana Office of Public Instruction, *Member* (2025-Present)

PROFESSIONAL AFFILIATIONS

American Educational Research Association (AERA), National Council on Measurement in Education (NCME), Society for Research on Educational Effectiveness (SREE)

EDITORIAL ROLES & PEER REVIEWING

Editorial Positions: *Journal of Educational and Behavioral Statistics* (Editorial Board, 2023-Present)

Ad-Hoc Journal Reviews: *American Educational Research Journal; Educational Measurement: Issues and Practice; Educational Assessment; Educational and Psychological Measurement; Educational Researcher; AERA Open; Journal of Educational Measurement; Journal of Modern Applied Statistical Methods; Psychology in the Schools; School Effectiveness and School Improvement; Public Affairs Quarterly; Journal of Experiential Education; Journal of Educational and Behavioral Statistics*

Conference Submission Reviewer: NCME Annual Meeting; AERA Annual Meeting; SREE Annual Meeting

TRAINING SESSIONS AND WORKSHOPS (National & Local)

Research Possibilities in STEM Education in Early Education using Large Scale Data Sets: SEDA and ABCD. (with Elizabeth Hoffman). (December, 2022). Presentation for the AERA-NSF Grants Program 2022 Fall Research Conference. Washington, DC.

Assessment & Measurement: Guidance Interpreting Effect Sizes in Educational Research Part 2. (with Sandy Student). (March, 2022). Association of Colorado Educational Evaluators (ACEE) March Membership Meeting.

Assessment & Measurement: Guidance Interpreting Effect Sizes in Educational Research Part 1. (with Sandy Student). (February, 2022). Association of Colorado Educational Evaluators (ACEE) February Membership Meeting.

AERA-ICSPR Series in STEM Data and Data Use: Introduction to the Stanford Education Data Archive (SEDA) (with Sean F. Reardon, Andrew Ho, and Erin Fahle). (March, 2021). On-line webinar. <https://www.aera.net/Professional-Opportunities-Funding/Professional-Development-Courses/PEERS-STEM-Data-and-Data-Use-Series>

Using School-Level Data from the Stanford Education Data Archive (with Sean F. Reardon, Andrew Ho, and Erin Fahle). (March, 2019). Half-day workshop presented at the Society for Research on Educational Effectiveness Annual Meeting, Washington, DC.

The Stanford Education Data Archive: Using big data to study academic performance (with Sean F. Reardon, Andrew Ho, and Erin Fahle). (April, 2018). Half-day workshop presented at the National Council on Measurement in Education Annual Meeting, New York, NY.

The Stanford Education Data Archive: Using big data to study academic performance (with Sean F. Reardon, Andrew Ho, and Erin Fahle). (February, 2018). Half-day workshop presented at the Society for Research on Educational Effectiveness Annual Meeting, Washington, DC.

Diving Into Data. (July 2017). Panelist for Education Writer's Association Conference, University of Colorado School of Education, Boulder, CO.

The Stanford Education Data Archive: Using big data to study academic performance (with Sean F. Reardon, Andrew Ho, and Erin Fahle). (April, 2017). Half-day workshop presented at the American Educational Research Association Annual Meeting, San Antonio, TX.

The Stanford Education Data Archive: Using big data to study academic performance (with Sean F. Reardon, Andrew Ho, and Erin Fahle). (March, 2017). Half-day workshop presented at the Society for Research on Educational Effectiveness Annual Meeting, Washington, DC.

The Stanford Education Data Archive: Using big data to study academic performance (with Sean F. Reardon, Andrew Ho, Kenneth Shores and Erin Fahle). (May, 2016). Workshop presented at the Education and Inequality in 21st Century America Conference, Stanford Center for Education Policy Analysis, Stanford, CA.

Exploratory factor analysis in R and Stata. (April, 2016). Workshop presented at the Stanford GSE Methodology Lunch Series, Stanford, CA.

The concept of validity and some novel validation methods (with Bruno Zumbo). (October, 2011). In-conference workshop presented at the Northeastern Educational Research Association Annual Meeting, Rocky Hill, CT.