

CERTIFICATION

I have read the following and certify that this resume is a current and accurate statement of my professional record.

September 28, 2018

Signature: *Zachary K. Collier*

RESUME OF

Zachary K. Collier, Ph.D.
Assistant Professor
Evaluation, Measurement, and Statistics
Center for Research in Education and Social Policy
University of Delaware

EDUCATION

- Ph.D. Research Evaluation Methodology – Quantitative Studies, University of Florida, 2018
- M.A. Research Evaluation Methodology – Quantitative Studies, University of Florida, 2015
- B.S. Special Education – Concentration in Emotional Behavior Disorders, Winthrop University, 2013

FUNDED

- 2017 The Big Educational Challenge Proposal, Educational Testing Service
- 2017 Dissertation Fellowship, Educational Testing Service (\$70,000)
- 2016 Travel Grant, The University of Florida's Office of Graduate Minority Programs (\$600)
- 2015 McKnight Doctoral Fellowship, The Florida Education Fund (\$65,000)

Pending Grants

- 2018 The Veggie Meter: Noninvasive Measurement of a Key Indicator of Dietary Quality, National Institutes of Health (\$104,026)

2018 Refinement and Validation of the RELATE Tool for Inclusive Classroom Observation, Institute of Educational Sciences (\$1,400,000)

HONORS AND AWARDS

2018 Recipient, Data Science Institute Faculty Fellowship, University of Delaware

2017 Recipient, Dissertation Fellowship, Educational Testing Service

2016 Recipient, University Women's Club Scholarship

2016 Recipient, First Place Paper Award, Florida Graduate Student Statewide Conference

2016 Recipient, First Place Paper Award, University of Florida Graduate Student Conference

2016 Recipient, Distinguished Paper Award, American Education Research Association

2016 Recipient, Educational Testing Service Summer Internship

2015 Recipient, Distinguished Paper Award, Florida Education Research Association

2015 Recipient, McKnight Doctoral Fellowship, Florida Education Fund

PROFESSIONAL EXPERIENCE

2018-Present Assistant Professor, Evaluation, Measurement, and Statistics, University of Delaware

2017-2018 Research Scientist in the Student and Teacher Research Center, Educational Testing Service, Princeton, N.J.

2016 Intern for Dr. Heather Buzick and Dr. John Lockwood, Educational Testing Service, Princeton, N.J.

2014-2017 Graduate Research Assistant for Dr. Walter L. Leite, Lastinger Center for Teaching and Learning, University of Florida

- 2013-2014 Sixth grade special education teacher, Westwood Middle School, Gainesville, FL
- 2013 High school teacher in a treatment school for students with emotional and behavioral disorders, New Hope Carolinas, Rock Hill, S.C.

PUBLICATIONS

Collier, Z. & Leite, L. (2017). Testing the Effectiveness of Three-Step Approaches with Auxiliary Variables in Latent Class and Profile Analysis. *Structural Equation Modeling: A Multidisciplinary Journal*, 24, 819-830.

Leite, L., **Collier, Z.** (2018). Data Mining in Educational Research. *The SAGE Encyclopedia of Educational Research, Measurement, and Evaluation*.

Mitten, C., **Collier, Z.**, & Leite, W. (in press). Online Resources for Mathematics: Exploring How and Why they Support Student Learning. *School Science and Mathematics Journal*.

W. L. Leite, Z. Jing, D. D. Cetin-Berber, A. C. Huggins-Manley, **Z. K. Collier**, & C. R. Beal. (under review). Quasi-experimental Evaluation of Usage Patterns of Virtual Learning Environments with Multilevel Mixture Models and Propensity Score Weighting. *Journal of Computer Assisted Learning*.

Program Evaluation Reports:

Leite, L. **Collier, Z.** (2017). Evaluation of Palm Beach County STEM Initiative. (pp. 1-39). Gainesville, FL: Lastinger Center for Teaching and Learning, University of Florida.

Collier, Z., Leite, L, (2016). Algebra Nation Usage on Ethnicity and Socio Economic Status (pp. 1-5). Gainesville, FL: Lastinger Center for Teaching and Learning, University of Florida.

Mitten, C., **Collier, Z.**, Leite, L, (2015). Online Resources: Do They Affect Student Learning? (pp. 1-19). Gainesville, FL: Lastinger Center for Teaching and Learning, University of Florida.

Collier, Z., Leite, L, (2014). Algebra Nation Teacher Survey Report (pp. 1-21). Gainesville, FL: Lastinger Center for Teaching and Learning, University of Florida.

Collier, Z., Leite, L. (2014). How the use of Algebra Nation Impacts Schools (pp. 1-37). Gainesville, FL: Lastinger Center for Teaching and Learning, University of Florida.

Manuscripts in Preparation:

Collier, Z., Buzick, H., Lockwood, J. (in prep.). Bridging Racial Divides in the Educator Workforce using Large-Scale Assessment Data from Perspective Teachers.

Collier, Z. (in prep.). Data Mining Techniques to Estimate Propensity Scores for Categorical Treatments.

Collier, Z. (in prep.). Data Mining Techniques to Estimate Propensity Scores for Continuous Treatments.

Collier, Z. (in prep.). Software Implementation of Neural Networks to Estimate Propensity Scores.

CONFERENCE PRESENTATIONS

Collier, Z., & Leite, W. (2017, April). Teaching Neural Networks to Estimate Propensity Scores. American Education Research Association Conference. San Antonio, Texas.

Collier, Z., Buzick, H., Lockwood, J. (2017, April). Bridging Racial Divides in the Educator Workforce using Large-Scale Assessment Data from Perspective Teachers. American Education Research Association Conference. San Antonio, Texas.

Collier, Z., & Leite, W. (2016, May). Characterizing Latent Classes using Auxiliary Variables in Mixture IRT Models: A Simulation Study of the Influence of Different Response Scales on Measurement Invariance. Modern Modeling Methods Conference. Mansfield, Connecticut.

Collier, Z., & Leite, W. (2016, May). Testing the Effectiveness of Three-Step Approaches with Auxiliary Variables in Latent Class and Profile Analysis. Modern Modeling Methods Conference. Mansfield, Connecticut.

Collier, Z., & Leite, W. (2016, April). Testing the Effectiveness of Three-Step Approaches with Auxiliary Variables in Latent Class and Profile Analysis. Florida Statewide Conference. Gainesville, Florida.

Leite, W. & **Collier, Z.** (2016, April). Modeling Cross-Classified Data With and Without the Crossed Factors' Random Effects' Interaction. American Education Research Association Conference. Washington, D.C..

Collier, Z., & Leite, W. (2016, April). Testing the Effectiveness of Three-Step Approaches with Auxiliary Variables in Latent Class and Profile Analysis. American Education Research Association Conference. Washington, D.C.

Mitten, C., **Collier, Z.,** & Leite, W. (2016, April). Online Resources for Mathematics: Exploring How and Why they Support Student Learning. American Education Research Association Conference. Washington, D.C..

Cugini, S., **Collier, Z.,** Leite, W., Adams, T. (2016, February). The Impact of Algebra Nation. Research Council on Mathematics Learning. Orlando, Florida.

Collier, Z., & Leite, W. (2015, November). Testing the Effectiveness of Three-Step Approaches with Auxiliary Variables in Latent Class and Profile Analysis. Florida Education Research Association Conference. Altamonte Springs, Florida.

Mitten, C., **Collier, Z.,** & Leite, W. (2015, November). Online Resources for Mathematics: Exploring How and Why they Support Student Learning. Florida Education Research Association Conference. Altamonte Springs, Florida.

Collier, Z. & Raborn, A (2015, April). Ethnicity Stability Detection in the SAT Critical Reading Subtest. Eleventh Annual SAGE Research Symposium. Gainesville, FL.

PROFESSIONAL SERVICE

American Education Research Association

2016-2017 Member, Robert L. Linn Distinguished Address Award Committee, San Antonio, Texas

Florida Education Research Association

2015 Member, Educational Researcher of the Year Award Committee, Altamonte Springs, Florida

2014 Member, Educational Researcher of the Year Award Committee, Cocoa Beach, Florida

Reviewer:

2017-Present Reviewer, *Structural Equation Modeling Journal*

Ad Hoc Reviewer:

2015 Reviewer, *Journal of Educational and Behavioral Statistics*

2015 Reviewer, *Educational Researcher*

Professional Affiliations:

2017 American Evaluation Association

2017 Northeastern Educational Research Association

2015-Present Florida Education Research Association

2014-Present American Education Research Association