Ray E. Reichenberg

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Employment

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Title Institution/Company Year(s) **Research Assistant** University of Nebraska – Lincoln 2019 -Nebraska Center for Research on Children, Professor Youth, Families & Schools Postdoctoral Research The George Washington University 2018 - 2019Graduate School of Education and Human Scientist Development Research/Teaching Arizona State University 2010 - 2018 Assistant The Sanford School Intern (summer) Arizona Department of Education 2015 Research & Evaluation Gifted/Talented Specialist Tempe Elementary School District 2008 - 2010 Classroom Teacher Tempe Elementary School District 2007 - 2008 Education Degree *Program* (Specialization) Institution Year Ph.D. Family & Human Development Arizona State University 2018 (Measurement/Statistical Analysis) M.A. Educational Psychology Arizona State University 2013 (Measurement/Methodological Studies) M.Ed. Curriculum & Instruction Arizona State University 2009 (Elementary Education) B.S. Marketing Arizona State University 2003

Curriculum Vitae (Updated: 9/2019)

Terminal Projects

Dissertation: *The Impact of Information Quantity and Quality on Parameter Estimation for a Selection of Dynamic Bayesian Networks with Latent Variables* (approved: July 2018) Co-chairs: Dr. Roy Levy; Dr. Natalie Eggum-Wilkens

Thesis: A Comparison of DIMTEST and Generalized Dimensionality Discrepancy Approaches to Assessing Dimensionality in Item Response Theory (approved: July 2013) Co-chairs: Dr. Roy Levy; Dr. Marilyn Thompson

Publications (in press & published)

- **Reichenberg, R.** (2018). Dynamic Bayesian networks in educational measurement: Reviewing and advancing the state of the field. *Applied Measurement in Education, 31*(4), *335-350*. DOI: 10.1080/08957347.2018.1495217.
- Lindstrom-Johnson, S., Reichenberg, R., Bradshaw, C., Haynie, D., & Cheng, T.L. (2016).
 Parent and adolescent discrepancies in perceptions of violence: Covariates and outcomes.
 Journal of Youth and Adolescence, 45(10), 2125-2137. DOI: 10.1007/s10964-016-0505-3.
- Lai, K., Green, S.B., Levy, R., Reichenberg, R., Xu, Y., Thompson, M.S., Yel, N., Eggum-Wilkins, N.D., Kunze, K.L., & Iida, M. (2016). Assessing model similarity in structural equation modeling. *Structural Equation Modeling: An Interdisciplinary Journal*, 23(4), 491-506. DOI: 10.1080/10705511.2016.1154464.
- Eggum-Wilkins, N.D., Reichenberg, R.E., Eisenberg, N., & Spinrad, T. (2016). Components of effortful control and relations with children's shyness. *International Journal of Behavioral Development*, 40(6), 544-554. DOI: 10.1177/0165025415597792.

Manuscripts Under Review (alphabetical)

- Corry, M., **Reichenberg, R.E.**, & Dardick, W. (under review). An exploratory study of self-efficacy for K-12 online educators.
- Jager, J., Xia, Y., Reichenberg, R.E., Putnick, D.L., & Bornstein, M.H. (under review). Improving the generalizability of psychological research through the increased use of homogeneous convenience samples: A Monte Carlo simulation.
- Kurz, A., **Reichenberg, R.E.**, Elliott, S.N., & Yel, N. (under review). Opportunity-to-learn performance levels and student achievement growth.

- Lindstrom-Johnson, S., **Reichenberg, R.E.**, Shukla, K., Waasdorp, T., & Bradshaw, C. (under review). Improving the measurement of school climate: A novel application of item response theory.
- **Reichenberg, R.E.**, Levy, R. (under review). Considerations for fitting dynamic Bayesian networks with latent variables: A Monte Carlo study.

Manuscripts in Preparation (alphabetical)

- Dardick, W., **Reichenberg, R.E.**, & Corry, M. (in preparation). A meta-analysis of the use and utility of process data in digital learning research.
- Dardick, W., **Reichenberg, R.E.**, Corry, M., & Choi, J. (under review). The Teacher Empowered Assessment Framework: Leveraging process data to link large-scale and classroom assessment.
- **Reichenberg, R.E.**, Levy, R., Dardick, W., & Corry, M. (in preparation). A review of methods for modeling psychometrically rich assessment data.

Research Presentations

- **Reichenberg, R.E.** (2019, April). *Considerations for fitting dynamic Bayesian networks with latent variables: A Monte Carlo study.* Presented at the annual meeting of the National Council for Measurement in Education, Toronto, Ontario, Canada.
- **Reichenberg, R.E.** (2016, April). *Performance of DIMTEST and generalized dimensionality discrepancy statistics for assessing unidimensionality*. Presented at the annual meeting of the National Council for Measurement in Education, Washington D.C.
- **Reichenberg, R.**, Yel, N., & Kurz, A. (2015, April). *Setting opportunity-to-learn standards for effective teaching*. Presented at the annual meeting of the American Educational Research Association, Chicago, IL.
- Jager, J., **Reichenberg, R.E.**, Putnick, D.L., & Bornstein, M.H. (2015, March). *More than just convenient: The scientific merits of homogenous convenience samples.* Presented at the bi-annual meeting of the Society for Research in Child Development, Philadelphia, PA.
- Green, S.B., Lai. K., Levy, R., Xu, Y., Yel, N., Thompson, M.S., Eggum-Wilkins, N., Kunze, K., Iida, M., & Reichenberg, R., (2014, April). Assessing model similarity in structural equation modeling. Presented at the annual meeting of the American Educational Research Association, Philadelphia, PA.

- Brem, S.K., Sinatra, G.M., Stump, G.S., Heddy, B., Nelson, K., & Reichenberg, R.E. (2013, August). From molecules to mammals: Domain specificity in reasoning about emergent systems. Presented at the 15th Biennial Conference of the European Association for Research in Learning and Instruction, Munich, Germany.
- Stump, G.S., Brem, S.K., Sinatra, G.M., Reichenberg, R.E., & Heddy, B., Muto-Nelson, K. (2013, August). *Triangulating ants, protector geese, and slime mold armies: Routes to misconceptions about emergence*. Presented at the 15th Biennial Conference of the European Association for Research in Learning and Instruction, Munich, Germany.
- Brem, S.K., Stump, G.S., Sinatra, G.M., Reichenberg, R.E., & Heddy, B. (2012, August). *Misconceptions regarding emergent phenomenon vary by domain*. Presented at the 34th Annual Meeting of the Cognitive Science Society, Sapporo, Japan.

Academic Teaching Experience

Instructor

SOC 390 – Social Statistics I (UG)	Arizona State University	2013-2017
STP 420 – Introductory Applied Statis	stics (UG) Arizona State University	2011-2012

Teaching Assistant

FAS 508: Structural Equation Modeling (G), SOC 390: Social Statistics I (UG), FAS 361 – Research Methods (UG), FAS 500 – Research Methods (G), SOC 585 – Sociological Theory (G), SOC 598 – Deviance (G), COE 501 – Intro to Research/Evaluation in Education (G)

Honors, Awards, and Funding

Ruth Cowden Memorial Scholarship School of Social and Family Dynamics Total funding: approx. \$15,000	2014-2017
Conference Travel Funding ASU Graduate and Professional Student's Association Total funding: \$1,900	2014-2015
The Sanford School Seed Grant: co-writer ASU School of Social and Family Dynamics Total funding: \$5,000	2014
School Improvement Project Grant: Graduate Assistant Institute of Education Sciences (#R305H130080) Total funding: \$385,739	2013
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VOCTEC Program: Research Associate (Assessment & Program Evaluation) USAID (#AID-OAA-L-11-00005 & #AID-492-LA-12-00002) Total funding: approx. \$10,000,000	2011		
Understanding Emergent Processes Grant: Graduate Assistant National Science Foundation (#0910115) Total funding: \$674,180	2009		
Service Activities/Leadership Positions			
Graduate Student Committee American Educational Research Association – Div. D	2014-2016		
Graduate Student Issues Committee National Council on Measurement in Education	2014-2016		
Membership Committee – Graduate Student Liaison American Educational Research Association	2013-2014		
Early Career Scholar Award Committee – Graduate Student Liaison American Educational Research Association	2011-2012		
Review & Editorial			
Conference Proposal Reviewer National Council on Measurement in Education	2013-2019		
Grant Reviewer ASU Graduate and Professional Student's Association	2012-2015		
Software Skills			
Fluent: R/S+, SPSS, Mplus, WinBUGS/JAGS, Netica, Adobe Creative Suite, Microsoft Office Competent: Python, SAS, BayesiaLab, IRTPRO, FlexMIRT, Stata, STAN (via R), NetLogo, SQL, TensorFlow, XML/JSON			
Professional License(s)			
Arizona State Teaching Certificate Expires: 2021 Grades K 8: Structured English Immersion endorsement			

Grades K-8; Structured English Immersion endorsement

Workshops & Trainings Attended

Bayesian Networks in Educational Assessment, Preconference workshop hosted by the National Council for Measurement in Education, Chicago, IL: April 2015.

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New England Complex Systems Institute (NECSI) Summer Program, Boston, MA: Summer 2012.

Professional Affiliations

Psychometric Society American Educational Research Association (Division D)	2010-Present 2011-Present
National Council on Measurement in Education	2011-Present
American Psychological Association (Division 5)	2013-Present