View online

Daniel **Anderson**

Research Assistant Professor

Curriculum Vita

I am primarily interested in data science and computational social science, broadly defined as the intersection between computer science and statistics, as applied to large-scale research in education. I am particularly interested in systematic inequalities that influence students' learning and growth over time. I am also a strong proponent of open and reproducible workflows.

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Education

2011 — 2015	Ph.D., Educational Methodology, Policy and Leadership, University of Oregon *Dissertation:* Teacher and School Contributions to Student Growth
2008 — 2009	M.S. Educational Leadership, University of Oregon *Terminal Project:* Educational Accountability: An Examination of Policy and Measurement Practices
2003 — 2007	B.S. Elementary Education, Utah State University

Brief professional history

2018 —	**Research Assistant Professor**, Behavioral Research and Teaching, University of Oregon
2015 — 2018	**Research Associate**, Behavioral Research and Teaching, University of Oregon (*on-leave during post-doc*)
2016 — 2017	**IES Post-Doctoral Research Fellow**, Center on Teaching and Learning, University of Oregon
2009 — 2015	**Research Assistant**, Behavioral Research and Teaching, University of Oregon

Additional training (received)

Deep Learning with Keras and TensorFlow in R (2020). Two-day workshop lead by Dr. Bradley Boehmke

Applied Machine Learning (2019). Two-day workshop lead by Dr. Max Kuhn

Summer Institute on Computational Social Science (2018). Remote week-long workshop lead by Drs. Matthew Salganik & Chris Bail

Master R Developer Workshop (2017). Two-day workshop lead by Dr. Hadley Wickham

Institute of Education Sciences: Cluster-randomized trials (2016). Two-week long workshop lead by Drs. Larry V. Hedges & Spyros Konstantopoulos

Teaching

Icons link to additional content

Data science specialization

I have led the design, development, and teaching of a new five-course graduate-level data science specialization offered through the University of Oregon's College of Education. The following lists the sequence of courses in the specialization, as well as the year/quarter in which I have taught the courses.

1. *EDLD 651: Introduction to Educational Data Science (EDS)*. (Fall, 2018). CRN: 12074; 3 credit hours.
2. *EDLD 652: Data visualization for EDS*. (Winter, 2019/2020/2021 [planned]). CRN: 27553/27120; 3 credit hours.
3. *EDLD 653: Functional programming for EDS*. (Spring, 2019/2020/2021 [planned]). CRN: 35699/32066; 3 credit hours.
4. *EDLD 654: Machine learning for EDS*. (Spring/Fall, 2020). CRN: 37108/16924; 3 credit hours.
5. *Capstone*. (Winter, 2021 [planned]). 4 credit hours.

Additional courses taught

1. *Hierarchical Linear Modeling II*. (spring, 2021 [planned]). 3 credit hours.
2. *Multiple regression in educational research*. (Fall, 2018). CRN: 17258; 3 credit hours.
3. *Survey of educational research methods*. (Summer, 2018). CRN: 40797; 3 credit hours.
4. *Exploring data with R*. (Spring/Fall, 2017). CRN: 17214/37117; 4 credit hours.

Related experience

1. *Data processing, analysis, and visualization w/R*. (Fall/Winter/Spring, 2015/2016). Taught internally to BRT researchers credit hours.
2. *Evidence-based decision making*. (Winter, 2017). CRN: 22130 [co-taught w/Dr. Nancy Heaps]; 4 credit hours.
3. *Multiple regression in educational research [supervised teaching]*. (Fall, 2015). 4 credit hours.
4. *Public elementary school teacher*. (2007-08).

Scholarship

Icons link to additional content

Peer-Reviewed Publications

2020 17. **Anderson, D.**, Rowley, B., Irvin, P. S., Rosenberg, J. M., & Stegenga, S (2020). Evaluating content-related validity evidence using a text-based, machine learning procedure. *Educational Measurement: Issues and Practice*. doi: 10.1111/emip.12314

2019 16. Kovensky, R., **Anderson, D.**, and Leve, L (2019). Early adversity and sexual risk in adolescence: externalizing behaviors as a mediator. *Journal of Child & Adolescent Trauma*. *13*, 173-184. doi: 10.1007/s4065

15. **Anderson, D.** (2019). Exploring teacher and school variance in students' within-year reading and mathematics growth. *School Effectiveness and School Improvement*. *30*, 510-530. doi: 10.1080/09243453.2019.1618349

14. Shanley, L., Clarke, B., **Anderson, D.**, Turtura, J., Doabler, C., Kurtz-Nelson, E., & Fien, H (2019). Exploring the utility of assessing early mathematics intervention response via embedded assessment. *School Psychology*. *34*, 541-554. doi: 10.1037/spq0000326

13. Nese, J. F. T., Farley, D., & **Anderson, D.** (2019). Educator-reported instructional characteristics of grade 1 reading interventions within a CBM assessment system. *Learning Disabilities: Research and Practice*. *34*, 97-109. doi: 10.1111/ldrp.12191

12. Tindal, G., and **Anderson, D.** (2019). Changes in status and performance over time for students with specific learning disabilities. *Learning Disabilities Quarterly*. *42*, 3-16. doi: 10.1188/0731948718806660

2018 11. Rosenberg, J, Beymer, P. N., **Anderson, D.**, van Lissa, C.J., and Schmidt, J. A (2018). tidyLPA: An R package to easily carry out latent profile analysis (LPA) using open-source or commercial software. *Journal of Open Source Software*. *3*(30), 978. 10.21105/joss.00978

10. Fien, H., **Anderson, D.**, Nelson, N. J., Kennedy, P., Baker, S. K., & Stoolmiller, M (2018). Examining the impact and school-level predictors of impact variability of an 8th grade reading intervention on at-risk students' reading achievement. *Learning Disabilities Research & Practice*. *33*, 37-50. doi: 10.1111/ldrp.12161

2017 9. **Anderson, D.**, Kahn, J, and Tindal, G (2017). Exploring the robustness of a unidimensional item response theory model with empirically multidimensional data. *Applied Measurement in Education*. *30*, 163-177. doi: 10.1080/08957347.2017.1316277

8. Park, B. J., **Anderson, D.**, Tindal, G., & Alonzo, J (2017). A validity argument for a mathematics curriculum-based measure: Implications for response to intervention decision-making. *Journal of Educational Administration and Policy*. *2*, 5-18. 10.22553/keas/2017.2.1.5

2016

7. Farley, D., **Anderson, D.**, Irvin, P. S., & Tindal, G (2016). Modeling reading growth in Grades 3-5 with an alternate assessment. *Remedial and Special Education*. *38*, 195-206. doi: 10.1177/0741932516678661

6. Saven, J. L., **Anderson, D.**, Nese, J. F. T., Farley, D., & Tindal, G (2016). Patterns of statewide test participation for students with significant cognitive disabilities. *The Journal of Special Education*. *49*, 209-220. doi: 10.1177/0022466915582213

2015

5. **Anderson, D.**, Farley, D., & Tindal, G (2015). Test design considerations for students with significant cognitive disabilities. *The Journal of Special Education*. *49*, 3-15. doi: 10.1177/0022466913491834

4. **Anderson, D.**, Irvin, P. S., Alonzo, J., & Tindal, G (2015). Gauging item alignment through online systems while controlling for rater effects. *Educational Measurement: Issues and Practice*. *34*, 22-33. doi: 10.1111/emip.12038

2013

3. Patarapichayatham, C., **Anderson, D.**, and Kamata, A (2013). Middle school transition: An application of latent transition analysis (LTA) on easyCBM benchmark mathematics data. *The International Journal of Educational Administration and Development*. *4*, 745-756.

2012

2. Nese, J. F. T., Biancarosa, G., **Anderson, D.**, Lai, C.-F., Alonzo, J., and Tindal, G (2012). Within-year oral reading fluency with CBM: A comparison of models. *Reading and Writing*. *25*, 887-915. doi: 10.1007/s11145-011-9304-0

2011

1. **Anderson, D.**, Lai, C., Alonzo, J. and Tindal, G (2011). Examining a grade-level math CBM designed for persistently low-performing students. *Educational Assessment*. *16*, 15-34. doi: 10.1080/10627197.2011.551084

Manuscripts under review for publication

2. **Anderson, D.**, Gau, J. M., Beck, L., Unruh, D., Gioia, G., McCart, M., Davies, S. C., Slocumb, J., Gomez, D., and Glang, A. E (under review). Management of return to school following brain injury: An evaluation model.

1. Rosenberg, J. M., Borchers, C., Dyer, E. B., **Anderson, D.**, and Fischer, C (under review). Advancing new methods for understanding public sentiment about educational reforms: The case of Twitter and the Next Generation Science Standards .

Book chapters

2. Rosenberg, J. M., Lawson, M. A., **Anderson, D.**, Rutherford, T., & Jones, R. S (2020). Making data science "count": Data science and Learning, Design, and Technology research. In E. Romero-Hall (Ed.). *Research Methods in Learning Design & Technology* doi: 10.4324/9780429260919 Routledge: New York, NY

1. Tindal, G., and **Anderson, D.** (2011). Validity evidence for making decisions about accommodated and modified large-scale tests. In Elliot, S. N., Kettler, R. J., Beddow, P. A., & Kurz, A. (Eds.). *Accessible tests of student achievement: Issues, innovations, and applications* (pp. 183-200). New York, NY: Springer

National & International Conference Presentations

2020

32. **Anderson, D.** Rosenberg, J. M. Sáez, L., & Seeley, J. R (September, 2020). *Using extreme gradient boosting to estimate community effects on school readiness*. Poster presented at the Conference on Educational Data Science, hosted virtually.

31. **Anderson, D.** (April, 2020). *A pedagogical framework for deeloping computational social scientists in educational research*. Poster presented at the annual meeting of the American Educational Research Association, *(conference canceled)*.

30. Nese, J.F. T., **Anderson, D.**, Kamata, A (April, 2020). *Preliminary consequential validity evidence for a computerized oral reading fluency assessment*. Paper presented at the annual meeting of the American Educational Research Association, *(conference canceled)*.

2019

29. **Anderson, D.**, Rowley, B., Stegenga, S., Irvin, P. S., and Rosenberg, J. M (April, 2019). *Evaluating content-related validity evidence using text modeling*. Paper presented at the annual meeting of the National Council on Measurement in Education, Toronto, ON.

2018

28. **Anderson, D.**, and Tindal, G (October, 2018). *Changes in status and performance for students with learning disabilities*. Poster presented at the annual meeting of the Council for Learning Disabilities, Portland, OR.

27. **Anderson, D.**, and Stevens, J. J (April, 2018). *Exploring and visualizing school achievement and school effects*. Paper presented at the annual meeting of the National Council on Measurement in Education, New York, NY.

26. Stegenga, S., **Anderson, D.**, Munger, K., and Wennerstrom, E. K (March, 2018). *Big Data… and Babies!? A Mixed Methods Systematic Scoping Review of Strenghts, Challenges, and Implications of Big Data Use in Early Intervention and Eartly Childhood*. Poster presented at the Conference on Research Innovations in Early Intervention, San Diego, CA.

2017 25. **Anderson, D.**, Stevens, J. J., and Nese, J. F. T (April, 2017). *Visualizing Achievement Gaps Across the Full Distribution*. Paper presented at the annual meeting of the National Council on Measurement in Education, San Antonio, TX.

24. Stevens, J. J., **Anderson, D.**, Nese, J. F. T., and Tindal, G (April, 2017). *Using Effect Size Measures to Estimate and Report Achievement Gaps*. Paper presented at the annual meeting of the National Council on Measurement in Education, San Antonio, TX.

23. Pilger, M., Fien, H., Nelson, N. J., **Anderson, D.** and Otterstedt, J (February, 2017). *Self-Regulation and Math Achievement: Potential Mitigating Benefits of Instructional Gaming*. Paper presented at the annual meeting of the National Association of School Psychologists, Washington, DC.

22. Nese, J. F. T., **Anderson, D.**, and Farley, D (February, 2017). *What Does Reading Intervention Look Like?*. Poster presented at the Pacific Coast Research Conference, Coronado, CA.

2016 21. **Anderson, D.**, and Stevens, J. J (December, 2016). *Visualizing Achievement Gaps Across the Full Scale*. Poster presented at the Principal Investigators Meeting, Institute of Education Sciences, Washington, DC.

20. **Anderson, D.** (May, 2016). *Exploring the Latino-White Achievement Gap Across Disability Classifications Over Time*. Poster presented at the Education and Inequality in 21st Century America conference at Stanford University, Palo Alto, CA.

19. **Anderson, D.**, and Stevens, J. J (April, 2016). *Cohort and content variability in value-added model school effects*. Paper presented at the annual meeting of the National Council on Measurement in Education, Washington, DC.

2015 18. **Anderson, D.**, and Stevens, J. J (April, 2015). *Exploring the impact of cohort variability on teacher effects*. Paper presented at the annual meeting of the National Council on Measurement in Education, Chicago, IL.

17. **Anderson, D.** (April, 2015). *Within-year variance in mathematics growth between students, teachers, and schools*. Poster presented at the annual meeting of the American Educational Research Association, Chicago, IL.

16. **Anderson, D.**, Irvin, P. S., Nese, J. F. T, Alonzo, J., Tindal, G (April, 2015). *National middle school mathematics within-year growth norms*. Paper presented at the annual meeting of the American Educational Research Association, Chicago, IL.

15. **Anderson, D.**, Kahn, J. D., Alonzo, J, and Tindal, G (April, 2015). *Exploring the item factor structure of a CCSS-aligned middle school mathematics CBM*. Paper presented at the annual meeting of the American Educational Research Association, Chicago, IL.

14. Farley, D., **Anderson, D.**, Irvin, P. S., Saven, J. L., and Tindal G (April, 2015). *Modeling reading growth for alternate assessments based on alternate achievement standards (AA-AAS)*. Paper presented at the annual meeting of the American Educational Research Association, Chicago, IL.

2013

13. **Anderson, D.**, Irvin, P. S., Alonzo, J., & Tindal, G (April, 2013). *Modeling rater effects in a formative mathematics alignment study*. Paper presented at the annual meeting of the National Council on Measurement in Education, San Francisco, CA.

12. Irvin, P. S., **Anderson, D.**, Saven, J., Alonzo, J. and Tindal, G (April, 2013). *Within-year growth in math: Implications for progress-monitoring using RTI*. Paper presented at the annual meeting of the American Educational Research Association, San Francisco, CA.

11. Saven, J., **Anderson, D.**, Nese, J. F. T., Alonzo, J., and Tindal, G (April, 2013). *Teacher decision making and within-year growth in math*. Paper presented at the annual meeting of the American Educational Research Association, San Francisco, CA.

10. Patarapichayatham, C., Nese, J. F. T., & **Anderson, D.** (April, 2013). *Within-year grade 2 math growth: Using a 2PL second-order item response theory growth model*. Paper presented at the annual meeting of the National Council on Measurement in Education, San Francisco, CA.

9. **Anderson, D.**, Alonzo, J., and Tindal, G (February, 2013). *Best practices in oral reading fluency administration*. Paper presented at the annual meeting of the National Association of School Psychologists, Seattle, WA.

8. Patarapichayatham, C., **Anderson, D.**, & Kamata, A (February, 2013). *Middle School Transition: An Application of Latent Transition Analysis (LTA) on easyCBM® Benchmark Mathematics Data*. Paper presented at the Conference on Educational Reform,SiemReap, Cambodia.

2012

7. **Anderson, D.** (June, 2012). *An analysis of growth in alternate assessments*. Paper presented at the annual meeting of the Council of Chief State School Officers (CCSSO), National Conference on Student Assessment, Minneapolis, MN.

6. Alonzo, J., Park, B.J., Lai, C.F., **Anderson, D.**, and Irvin, P. S (February, 2012). *The appropriateness of different types of CBM measures for first- and second-grade students receiving literacy instruction in Spanish*. Poster presented at the Pacific Coast Research Conference, Coronado, CA.

2011

5. Park, B. J., **Anderson, D.**, Alonzo, J., and Tindal, G (April, 2011). *Use of Student Growth to Predict State Assessment Performance*. Paper presented at the annual meeting of the American Educational Research Association, New Orleans, LA.

4. Park, B. J., **Anderson, D.**, Nese, J. F. T., Alonzo, J., and Tindal, G (April, 2011). *The Classification Accuracy of Mathematics Screening Measures*. Poster presented at the annual meeting of the American Educational Research Association, New Orleans, LA.

2010

3. Nese, J. F. T., **Anderson, D.**, and Tindal, G (May, 2010). *The invariance of the easyCBM® mathematics measures across educational setting, language, and ethnic groups*. Paper presented at the annual meeting of the National Council of Measurement in Education, Denver, CO.

2. **Anderson, D.**, Park, B. J., and Tindal, G (May, 2010). *An examination of the easyCBM® benchmark tests and the Oregon statewide tests in grades 6-8 mathematics*. Paper presented at the annual meeting of the American Educational Research Association, Denver, CO.

1. **Anderson, D.** (May, 2010). *Accountability plans and the growth model pilot program: An examination of state policy effects on the percentage of schools making adequate yearly progress*. Poster presented at the annual meeting of the American Educational Research Association, Denver, CO.

Regional conferences

4. **Anderson, D.** (September, 2018). *My research and the COE*. Presentation at the Joint Meeting of the University of Oregon's Data Science Initiative and Oregon Health and Science University.

3. **Anderson, D.** (June, 2018). *Contribute to open source with pretty slides*. Presentation at the annual Cascadia R Conference.

2. **Anderson, D.** (April, 2018). *Developing your first R package: A case study with esvis*. Presentation at the Eugene R Users Group Meetup.

1. **Anderson, D.** (June, 2017). *esvis: An R package for effect size visualizations*. Presentation at the annual Cascadia R Conference.

Technical reports (selected)

I am a co-author on over sixty technical reports. Below is a sample of 10 that are among the most cited.

10. **Anderson, D.**, Alonzo, J., Tindal, G., Farley, D., Irvin, P. S., Lai, C. F., Saven, J. L., Wray, K. A (2014). *Technical Manual: easyCBM* (Technical Report No. 1408). Eugene, OR: Behavioral Research and Teaching, University of Oregon.

9. **Anderson, D.** (2013). *Hierarchical Linear Modeling (HLM): An Introduction to Key Concepts Within Cross-Sectional and Growth Modeling Frameworks* (Technical Report No. 1308). Eugene, OR: Behavioral Research and Teaching, University of Oregon.

8. **Anderson, D.**, Irvin, P. S., Patarapichayatham, C., Alonzo, J., & Tindal, G (2012). *The development and scaling of the easyCBM CCSS middle school mathematics measures* (Technical Report No. 1207). Eugene, OR: Behavioral Research and Teaching, University of Oregon.

7. **Anderson, D.**, Park, B. J., Lai, C. F., Alonzo, J., & Tindal, G (2012). *An examination of test-retest, alternate form reliability, and generalizability theory study of the easyCBM reading assessments: Grade 1* (Technical Report No. 1216). Eugene, OR: Behavioral Research and Teaching, University of Oregon.

6. Lai, C.F., Nese, J.F.T., Jamgochian, E.M., Kamata, A., **Anderson, D.**, Park, B.J., Alonzo, J., & Tindal, G (2010). *Technical adequacy of the easyCBM primary-level reading measures (Grades K-1), 2009-2010 version* (Technical Report No. 1003). Eugene, OR: Behavioral Research and Teaching, University of Oregon.

5. Sáez, L., Park, B. J., Nese, J. F. T., Jamgochian, E. M., Lai, C. F., **Anderson, D.**, Kamata, A., Alonzo, J., & Tindal, G. (2010) (2010). *Technical Adequacy of the easyCBM Reading Measures (Grades 3-7), 2009-2010 Version* (Technical Report No. 1005). Eugene, OR: Behavioral Research and Teaching, University of Oregon.

4. Nese, J. F. T., Lai, C. F., **Anderson, D.**, Park, B. J., Tindal, G., & Alonzo, J (2010). *The alignment of easyCBM math measures to curriculum standards* (Technical Report No. 1002). Eugene, OR: Behavioral Research and Teaching, University of Oregon.

3. Nese, J. F. T., Lai, C. F., **Anderson, D.**, Jamgochian, E. M., Kamata, A., Sáez. L., Park, B. J., Alonzo, J., & Tindal, G (2010). *Technical adequacy of the easyCBM mathematics measures: Grades 3-8, 2009-2010 version* (Technical Report No. 1007). Eugene, OR: Behavioral Research and Teaching, University of Oregon.

2. **Anderson, D.**, Lai, C. F., Nese, J. F. T., Park, B. J., Sáez. L., Jamgochian, E. M., Alonzo, J., & Tindal, G (2010). *Technical adequacy of the easyCBM primary-level mathematics measures (grades K-2), 2009-2010 version* (Technical Report No. 1006). Eugene, OR: Behavioral Research and Teaching, University of Oregon.

1. Jamgochian, E. M., Park, B. J., Nese, J. F. T., Lai, C. F., Sáez. L., **Anderson, D.**, Alonzo, J., & Tindal, G (2010). *Technical adequacy of the easyCBM grade 2 reading measures* (Technical Report No. 1004). Eugene, OR: Behavioral Research and Teaching, University of Oregon.

External Funding Activity

Icons link to additional content

Under review

1. Community, opportunity, and disparity in educational systems: Project CODES. July 2021 to June 2025. Proposed budget: $1,699,963. **Role:** Principal Investigator. FTE: 0.30.

2. Collaborative Research: Growing Agency for Sensemaking of Scientific Phenomena (Project GrASSP). September 2020 to August 2024. Proposed budget: $1,476,155. **Role:** Co-Principal Investigator. PI: P. Shawn Irvin. FTE: 0.15.

Current projects

1. Community health and school readiness: Closing the gap. February 2020 to January 2021. Total budget: $48,903.17. **Role:** Principal Investigator. FTE: 0.00.
2. Pennsylvania Alternate System of Assessment (PASA). April 2020 to August 2020. Total budget: $215,000. **Role:** Co-Principal Investigator. PI: Gerald Tindal. FTE: 0.45.
3. Virginia Alternate Assessment - Essentialization contract. July 2020 to October 2020. Total budget: $83,000. **Role:** Statistical analyst/psychometrician. PI: Gerald Tindal. FTE: 0.20.
4. Oregon Extended Assessment. September 2019 to August 2020. Total budget: $628,012. **Role:** Statistical analyst/psychometrician. PI: Gerald Tindal. FTE: 0.24.
5. Evaluation of return to school programs for traumatic brain injury. September 2019 to August 2023. Total budget: $2,189,469. **Role:** Statistical analyst/advisor. PI: Ann Glang. FTE: 0.10.

Completed projects

1. Developing middle school mathematics progress monitoring measures. June 2010 to June 2014. Total budget: $1,631,403. **Role:** Project Manager. PI: Gerald Tindal. FTE: 0.51 to 0.61 across project years.
2. National research and development center on assessment and accountability. July 2011 to June 2018. Total budget: $11,677,134. **Role:** Research Associate. PI: Gerald Tindal. FTE: 0.10 to 0.47 across project years.
3. Reliability and validity evidence for progress meaures in reading. June 2010 to May 2014. Total budget: $1,596,638. **Role:** Research Assistant. PI: Gerald Tindal. FTE: 0.28 to 0.45 across project years.

Submitted (unfunded)

Note - only applications submitted as Principal Investigator are displayed.

1. Digital Assessments of Writing Using Multiple Metrics to Reflect Improvement for Students . September 2020 to August 2021. Proposed budget: $1,399,163. **Role:** Principal Investigator. FTE: 0.35.
2. Reproducible collaboration: Interfacing between Microsoft Word and R Markdown . January 2019 to March 2020. Proposed budget: $25,000. **Role:** Principal Investigator. FTE: 0.13.
3. Applying Computational Research Methods to the Evaluations of Achievement Gaps . September 2019 to August 2021. Proposed budget: $224,885. **Role:** Principal Investigator. FTE: 0.35.

4. Putting Large-Scale Data to Work in Applied Educational Settings. September 2018 to June 2020. Proposed budget: $70,000. **Role:** Principal Investigator. FTE: 0.375.
5. Open and Reproducible Research in Education. November 2017 to October 2018. Proposed budget: $54,574. **Role:** Principal Investigator. FTE: 0.35.
6. County Moderators of District Expenditures on Student Achievement. January 2017 to December 2017. Proposed budget: $19,946. **Role:** Principal Investigator. FTE: 0.19.
7. Collaborative Research: Measuring the Application of Science Reasoning (Project MARS) . July 2016 to July 2017. Proposed budget: $2,968,980. **Role:** Principal Investigator. FTE: 0.65.

Software development

Icons link to additional content

I am active in the R community and have developed a number of packages. My GitHub repositories for R rank in the top 30 (of 8,590) nationally and top 100 (of 72,387) worldwide. Below is a summary of packages I have authored and contributed to, as well as a few interactive data applications.

Author

6. **Anderson, D.** and Heiss, A (2020). equatiomatic: Convert R models to LaTeX equations. R package version 0.1.
5. Barrett, T. S. & **Anderson, D.** (2019). biosketchr: Rmarkdown for biosketches. R package version 0.1.4.
4. **Anderson, D.** (2018). slidex: Convert microsoft PowerPoint slides to markdown/HTML slides. R package version 0.0.0.9000.
3. **Anderson, D.** (2018). esvis: Visualization and estimation of effect sizes. R package version 0.2.0.
2. **Anderson, D.** (2016). sundry: A sundry of convenience functions. R package version 0.0.0.9000.
1. **Anderson, D.** (2015). r2Winsteps: A package for interfacing between R and the Rasch modeling software Winsteps. R package version 0.0.0.9000.

Contributor

2. Xie, Y (2018). xaringan: Presentation ninja. R package version 0.6.3.
1. Rosenberg, J. M (2018). tidyLPA: Easily carry out latent profile analysis. R package version 0.1.3.

Web applications

In addition to the below, I have also developed interactive web applications and websites for non-profit and statewide agencies, which are generally password protected (and not directly shareable).

2. **Anderson, D.** (2019). Geographical variance in achievement gaps.
1. **Anderson, D.** (2019). Early learning alliance.

Professional Service

Working Committees

4. *Core Member (two-year appointment): Social Systems Data Science Network*. (2019-current). University of Oregon.
3. *Faculty Advisory Committee: Research Advanced Computing Services*. (2018-current). University of Oregon.
2. *COE Quantitative Curriculum Review Committee Member*. (2019-current). University of Oregon.
1. *Panel Member, Next Generation Assessment Review for Accessibility for Students with Disabilities*. (August, 2015). Sponsored by HumRRO and the Thomas B. Fordham Institute.

Doctoral committees

I have served on the following doctoral committee.

1. Sondra Stegenga. (2018-2019). Dissertation title: *Maximizing pilot phase measures to inform quality improvement: Using a sequential mixed methods design with interrupted time series to examine feasibility, uptake, and drivers of an evidence based practice in part c/early intervention systems*. University of Oregon.

Conference organization

I was the lead organizer of the 2020 Cascadia R Conference, which included planned keynotes on open science and machine learning, with presenters from academia (University of Washington) and industry, with machine learning engineers who use R in production with T-Mobile. The conference also included planned workshops on data visualization, reproducible and dynamic report generation with R Markdown (lead by doctoral students from my courses), interactive web application development with shiny, and introductory machine learning. Conference presenters were from around the Pacific Northwest, and an emphasis on gender and ethnic representation was emphasized when considering prospective presenters. The conference was canceled due to COVID-19.

Workshops delivered

2. *Developing transparent and reproducible research with R*. (April, 2019). Training provided at the Annual meeting of the American Educational Research Association, Toronto, ON.

1. *A taste of R: Mini-course on R (4 sessions, two hours each)*. (Winter, 2017). Training provided for University of Oregon faculty in the College of Education.

Peer review service

I serve on the editorial review board for Reading Research Quarterly and have served as an ad hoc reviewer for the following journals:

Educational Researcher	Journal of Special Education
American Educational Research Journal	Remedial and Special Education
Educational Measurement: Issues and Practice	Open Education Studies
Applied Psychological Measurement	Studies in Educational Evaluation
Educational Assessment	Language Testing

In addition to these journals, I have served as a reviewer for the annual conferences for the American Educational Research Association and the Council for Exceptional Children.

Awards

2. Outstanding reviewer: *Educational Researcher*. (2017).

1. Terminal project of distinction. (2009). Awarded for outstanding Master's degree Terminal Project, University of Oregon College of Education.

Professional Affiliations

3. American Educational Research Association

2. National Council of Measurement in Education

1. Data Visualization Society