

**CURRICULUM VITAE**  
**Cengiz Zopluoglu, Ph.D.**  
**Associate Professor**  
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Department of Special Education  
College of Education  
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4/29/2025

**EDUCATION**

- 2013      Ph.D. in Quantitative Methods in Education, Department of Educational Psychology, College of Education and Human Development, University of Minnesota  
Dissertation title: *Assessing Dimensionality of Latent Structures Underlying Dichotomous Item Response Data with Imperfect Models*  
Dissertation chair: Dr. Ernest C. Davenport
- 2009      M.A. in Quantitative Methods in Education, Department of Educational Psychology, College of Education and Human Development, University of Minnesota  
Dissertation title: *The Effects of Test Length, Amount of Copying, and Ability Levels of Examinees in Answer Copying Pairs on the Power of the Omega Index*  
Dissertation chair: Dr. Ernest C. Davenport
- 2005      B.A. in Elementary School Mathematics Teaching, Abant Izzet Baysal University, Bolu, Turkey

**EMPLOYMENT**

- 2020 – Present      Associate Professor  
College of Education, University of Oregon
- 2013 – 2020      Assistant Professor  
School of Education and Human Development, University of Miami
- 2009 – 2013      Graduate Assistant, Teaching and Research,  
College of Education and Human Development, University of Minnesota
- Summer 2012      Psychometrics Research Intern, ACT, Inc., Iowa
- 2005 – 2006      Mathematics Teacher, Gazipasa Elementary School, Bolu, Turkiye

## PUBLICATIONS

An asterisk (\*) signifies a student co-author.

### A. Refereed Journal Articles

40. Durán, L., Zegers, M., **Zopluoglu, C.**, \*Siebert, J.M., Pratt, A., Pei, F., & Gorno-Tempini, M.L. (accepted, in press). Innovations in Conceptual Scoring of a Bilingual Expressive Vocabulary Universal Screening Measure. *American Journal of Speech-Language Pathology*.
39. **Zopluoglu, C.** & Lockwood, JR (2024). A comparative study of item response theory models for mixed discrete-continuous responses. *Journal of Intelligence*, 12(3), 26. <https://doi.org/10.3390/jintelligence12030026>
38. \*Duff, J.H., \*Scarpa, M., **Zopluoglu, C.**, & Prilleltensky, I. (2024). The development and initial validation of the Multidimensional Fairness Scale. *Social Justice Research*, 37, 213-238. <https://doi.org/10.1007/s11211-024-00440-2>
37. Dietz, S., Prilleltensky, I., McMahon, A., **Zopluoglu C.**, Lipsky, M. (2023). Assessing a culture of belonging in a higher education context: Development and initial validation of the Culture of Belonging Barometer. *Journal of Student Affairs Research and Practice*, 61(2), 202-218. <https://doi.org/10.1080/19496591.2023.2221210>
36. \*Kasli, M., **Zopluoglu, C.**, & Toton, S. (2023). A deterministic gated lognormal response time model to identify examinees with item preknowledge. *Journal of Educational Measurement*, 60(1), 148-169. <https://doi.org/10.1111/jedm.12340>
35. Wang J., \*Combs T., **Zopluoglu C.** (2022). Fitting hyperbolic cosine unfolding models using the Stan Language. *Journal of Applied Measurement*, 23(1/2), 61-73.
34. \*Scarpa, M.P., **Zopluoglu, C.**, & Prilleltensky, I. (2022). Mattering in the community. Domain and demographic differences in a US sample. *Journal of Community Psychology*, 50(3), 1481-1502. <https://doi.org/10.1002/jcop.22728>
33. \*Scarpa, M.P., **Zopluoglu, C.**, & Prilleltensky, I (2022). Assessing multidimensional mattering: Development and exploratory validation of the Mattering in Domains of Life Scale (MIDLS). *Journal of Community Psychology*, 50(3), 1430-1453. <https://doi.org/10.1002/jcop.22725>
32. **Zopluoglu, C.**, \*Kasli, M., & Toton, S. (2021). The effect of item preknowledge on response time: Analysis of two datasets using the multiple-group lognormal response time model with a gating Mechanism. *Educational Measurement: Issues and Practices*, 40(3), 42-51. <https://doi.org/10.1111/emip.12428>

31. \*Patel, Z.S., Jensen-Doss, A. & **Zopluoglu, C.** (2021). Illustrating the applicability of IRT to implementation science: Examining an instrument of therapist attitudes. *Administration and Policy in Mental Health Services Research*, 48, 921-935. <https://doi.org/10.1007/s10488-021-01139-1>
30. \*Lee, J., **Zopluoglu, C.**, Andersen, L., Stanton, A., Magidson, J., Kagee, A., Joska, J.A., O’Cleirigh, C., & Safren, S.A. (2021). Improving the measurement of food insecurity among people with HIV in South Africa: A Psychometric Examination. *Public Health Nutrition*, 24(12), 3805-3817. <https://doi.org/10.1017/S1368980021001312>
29. \*Park, S.E., Ahn, S., & **Zopluoglu, C.** (2021). Differential item functioning effect size from the multigroup confirmatory factor analysis for a meta-analysis: A simulation study. *Educational and Psychological Measurement*, 81(1), 182-199. <https://doi.org/10.1177/0013164420925885>
28. de l’Etoile, S. K., Bennett, C., & **Zopluoglu, C.** (2020). Infant movement response to auditory rhythm. *Perceptual and Motor Skills*, 127(4), 651-670. <https://doi.org/10.1177/0031512520922642>
27. Prilleltensky, I., Dietz, S., **Zopluoglu, C.**, Clarke, A., Lipsky, M., & Hartnett, C. (2020). Assessing a culture of mattering in a higher education context. *Journal for the Study of Postsecondary and Tertiary Education*, 5, 58-104. <https://doi.org/10.28945/4539>
26. **Zopluoglu, C.** (2020). A finite mixture item response theory model for continuous measurement outcomes. *Educational and Psychological Measurement*, 80(2), 346–364. <https://doi.org/10.1177/0013164419856663>
25. **Zopluoglu, C.** (2019). Computation of response similarity index M4 in R under the dichotomous and nominal item response models. *International Journal of Assessment Tools in Education*, 6(5), 1-19. <https://doi.org/10.21449/ijate.527299>
24. **Zopluoglu, C.** (2019). Detecting examinees with item preknowledge in large-scale testing using Extreme Gradient Boosting (XGBoost). *Educational and Psychological Measurement*, 79(5), 931–961. <https://doi.org/10.1177/0013164419839439>
23. Kohli, N., \*Peralta, Y., **Zopluoglu, C.**, & Davison, M.L. (2018). A note on estimating single-class piecewise mixed-effects models with unknown change points, *International Journal of Behavioral Development*, 42(5), 518-524. <https://doi.org/10.1177/0165025418759237>
22. Sideridis, G.D., & **Zopluoglu, C.** (2018). Validation of response similarity analysis for the detection of academic cheating: An experimental study. *Journal of Applied Measurement*, 19(1), 59-75.

21. \*Sari, H.I., Huggins-Manley, A.C., & **Zopluoglu, C.** (2017). Comparing item selection methods in multidimensional computerized adaptive testing under different types of multidimensional structures. *International Journal of Recent Scientific Research*, 8 (8), 19269-19276. <http://recentscientific.com/sites/default/files/8247-A-2017.pdf>
20. de l'Etoile, S., \*Behura, S., & **Zopluoglu, C.** (2017). Acoustic parameters of infant-directed singing in mothers of infants with Down syndrome. *Infant Behavior and Development*, 49, 151-160. <https://doi.org/10.1016/j.infbeh.2017.09.001>
19. **Zopluoglu, C.**, & Davenport, E.C. (2017). A note on using eigenvalues in dimensionality assessment. *Practical Assessment, Research & Evaluation*, 22 (7), 1-10. <https://scholarworks.umass.edu/pare/vol22/iss1/7/>
18. Brogaard, B., Marlow, K., Overgaard, M., Schwartz, B., **Zopluoglu, C.**, Tomson, S., Neufeld, J., Sinke, C., Owen, C., Eagleman, D. (2017). Deaf hearing: Implicit discrimination of auditory content in a patient with mixed hearing loss. *Philosophical Psychology*, 30(1-2), 21-43. <https://doi.org/10.1080/09515089.2016.1268680>
17. Myers, N. D., Ahn, S., \*Lu, M., \*Celimli, S., & **Zopluoglu, C.** (2017). Reordering and reflecting factors for simulation studies with exploratory factor analysis. *Structural Equation Modeling: A Multidisciplinary Journal*, 24(1), 112-128. <https://doi.org/10.1080/10705511.2016.1230721>
16. **Zopluoglu, C.** (2016). Classification performance of answer-copying indices under different types of IRT models. *Applied Psychological Measurement*, 40(8), 592-607. <https://doi.org/10.1177%2F0146621616664724>
15. Kohli, N., Harring J.R., & **Zopluoglu, C.** (2016). A finite mixture of nonlinear random coefficient models for continuous repeated measures data. *Psychometrika*, 81(3), 851-880. <https://doi.org/10.1007/s11336-015-9462-0>
14. **Zopluoglu, C.** (2015). Evaluating the sampling performance of exploratory and cross-validated DETECT procedure with imperfect models. *Multivariate Behavioral Research*, 50(6), 632-644. <https://doi.org/10.1080/00273171.2015.1070708>
13. Kohli, N., Hughes, J., Wang, C., **Zopluoglu, C.**, & Davison, M. (2015). Fitting a linear-linear piecewise growth mixture model with unknown knots: A comparison of two common approaches to inference. *Psychological Methods*, 20(2), 259-275. <http://dx.doi.org/10.1037/met0000034>
12. Kohli, N., Sullivan, A., Sadeh, S., & **Zopluoglu, C.** (2015). Longitudinal mathematics development of students with learning disabilities and students without disabilities: A comparison of linear, quadratic, and piecewise linear mixed effects models. *Journal of School Psychology*, 53(2), 105-120. <https://doi.org/10.1016/j.jsp.2014.12.002>

11. **Zopluoglu, C.**, Harring J.R., & Kohli, N. (2014). FitPMM: An R routine to fit finite mixture of piecewise mixed-effect models with unknown random knots. *Applied Psychological Measurement*, 38(7), 583-584. [Computer software]. <https://doi.org/10.1177/0146621614540482>
10. Myers, N.D., Jin, Y., Ahn, \*S., Celimli, S., & **Zopluoglu, C.** (2015). Rotation to a partially specified target matrix in exploratory factor analysis in practice. *Behavior Research Methods*, 47(2), 494-505. <https://doi.org/10.3758/s13428-014-0486-7>
9. Van Norman E., Christ, T. J., **Zopluoglu, C.** (2013). The effects of baseline estimation on the reliability, validity, and precision of CBM-R growth estimates, *School Psychology Quarterly*, 28(3), 239-255. <http://dx.doi.org/10.1037/spq0000023>
8. Christ, T. J., Monaghan, B., **Zopluoglu, C.** & Van Norman, E. R. (2013). Curriculum-Based measurement of oral reading: Evaluation of growth estimates derived with pre-post assessment methods. *Assessment for Effective Intervention*, 38(3), 139-153. <https://doi.org/10.1016/j.jsp.2012.11.001>
7. **Zopluoglu, C.** (2013). A comparison of two estimation algorithms for Samejima's continuous IRT model. *Behavior Research Methods*, 45(1), 54-64. <https://doi.org/10.3758/s13428-012-0229-6>
6. Christ, T.J., **Zopluoglu, C.**, Monaghan, B., & Van Norman, E.R. (2013). Curriculum-based measurement of oral reading: Multi-study evaluation of schedule, duration and dataset quality on progress monitoring outcomes. *Journal of School Psychology*, 51(1), 19-57. <https://doi.org/10.1016/j.jsp.2012.11.001>
5. **Zopluoglu, C.** (2013). CopyDetect: An R package to compute statistical indices for detecting answer copying on multiple-choice tests. *Applied Psychological Measurement*, 37(1), 75-77. [Computer software]. <https://doi.org/10.1177/0146621612463119>
4. **Zopluoglu, C.** & Davenport, E.C. (2012). The empirical power and type-I error rates of the GBT and Omega indices in detecting answer copying on multiple-choice tests. *Educational and Psychological Measurement*, 72(6), 975-1000. <https://doi.org/10.1177/0013164412442941>
3. Christ, T. J., **Zopluoglu, C.**, Long, D. J., & Monaghan, B.D. (2012). Curriculum-Based measurement of oral reading (CBM-R): Quality of progress monitoring outcomes. *Exceptional Children*, 78(3), 356-373. <https://doi.org/10.1177/001440291207800306>
2. **Zopluoglu, C.** (2012). EstCRM: An R package for Samejima's continuous IRT model. *Applied Psychological Measurement*, 36(2), 149-150. [Computer software]. <https://doi.org/10.1177/0146621612436599>

1. **Zopluoglu, C.** (2012). A cross-national comparison of intra-class correlation coefficient in educational achievement outcomes. *Journal of Measurement and Evaluation in Education and Psychology*, 3(1), 242-278. <http://dergipark.gov.tr/epod/issue/5803/77225>

## **B. Book Chapters**

1. Zopluoglu, C. (2017). Similarity, answer copying, and aberrance: Understanding the status quo. In G.J. Cizek & J.A. Wollack, *Handbook of Detecting Cheating on Tests*. Taylor & Francis.

## **C. Technical Reports (Not peer-reviewed)**

7. Durán, L., Zegers, M., Siebert, J., Zopluoglu, C., Murphy, H., Bell, P., Pei, F., Gorno-Tempini, M.L. (2024). *Multitudes Universal Screener Technical Manual, 1<sup>st</sup> edition*. San Francisco, CA: Dyslexia Center, University of California San Francisco.
6. Zopluoglu, C. (2023). *Automated Essay Scoring: Exploring the utility and potential for large language models for the WriteRightNow platform*. Eugene, OR: Behavioral Research and Teaching, University of Oregon.
5. Zopluoglu, C. (2023). *NAEP Automated scoring of math items: Challenge Accepted*. Eugene, OR: University of Oregon. Submitted to the National Center for Education Statistics.
4. Zopluoglu, C. (2021). *Forecasting recidivism: Mission impossible*. Eugene, OR: University of Oregon. Submitted to the National Institute of Justice. <https://www.ojp.gov/library/publications/forecasting-recidivism-mission-impossible>
3. Zopluoglu, C. (2015). *2015 GER Assessment: Measuring quantitative reasoning and scientific reasoning proficiency for the 2015 senior sample at the University of Miami*. Coral Gables: University of Miami.
2. Zopluoglu, C. (2014). *2014 GER Assessment: Measuring quantitative reasoning and scientific reasoning proficiency for the 2014 senior sample at the University of Miami*. Coral Gables: University of Miami.
1. Zopluoglu, C. (2014). *2013 GER Assessment: Measuring information literacy, quantitative reasoning, and scientific reasoning proficiency for the 2013 senior sample at the University of Miami*. Coral Gables: University of Miami.

## WORKS IN PROGRESS

### Articles

**Zopluoglu, C.** (accepted with minor revisions, revisions submitted on 2/11/25). Simultaneous detection of compromised items and examinees with item preknowledge in online assessments using response time data. *Journal of Educational Measurement*.

### Book Chapter

Kasli, M., Rubio, C., **Zopluoglu, C.** (in press, final revisions were sent to the publisher on 12/14/24). Garbage in, Garbage out! A commentary on bias in standardized assessments. In S. Ahn and A. Mann (Eds.), *Bias and beyond: Rethinking data practices and inspiring collective dialogue*.

## PRESENTATIONS

\* These are all peer reviewed presentations.

26. Siebert, J. M., Catts, H., Petscher, Y., Pei, F., Gorno Tempini, M., & Zopluoglu, C. (2024, April). *Universal reading screening for California: Linguistically sensitive task selection and prediction evaluation*. Paper presented at the annual meeting of the National Council on Measurement in Education, Philadelphia, PA.
25. Pratt, A., Jasso, J., Duran, L., Zegers, M., & Zopluoglu, C. (2024, April). *Item difficulty in English/Spanish sentence repetition tasks and correlations with English proficiency*. Paper presented at the annual meeting of the National Council on Measurement in Education, Philadelphia, PA.
24. Zegers, M., Zopluoglu, C., Siebert, J. M. (2024, April). *Spanish word reading: Considerations for item selection, stimulus analysis, and item difficulty*. Paper presented at the annual meeting of the National Council on Measurement in Education, Philadelphia, PA.
23. Durán, L., Zopluoglu, C., Zegers, M., & Siebert, J. M. (2024, April). *Conceptual scoring in universal screening: An example using expressive vocabulary*. Paper presented at the annual meeting of the National Council on Measurement in Education, Philadelphia, PA.
22. Durán, L., Zegers, M., Zopluoglu, C., Pei, F., & Gorno-Tempini, M. (2024, February). *Conceptual scoring of expressive vocabulary in a new bilingual universal screening measure*. Paper presented at the annual meeting of the Pacific Coast Research Conference, Coronado Bay, CA.
21. Kezer, M., Zopluoglu, C., Hodges, S. (2023, February). *Predicting normative judgments of moral dilemmas using natural language processing*. Poster presented at the annual meeting of the Society for Personality and Social Psychology, Atlanta, GA.
20. Zopluoglu, Cengiz. (2022, April). *Simultaneous estimation of compromised items and examinees with item preknowledge using response time data*. Paper presented at the annual meeting of National Council on Measurement in Education, San Diego, CA.



19. Man, K., Harring, J.R., & Zopluoglu, C. (2019, October). *Application of a new method for multiple-group analysis of jointly modeling the item responses, response times, and visual fixation counts*. Paper presented at the Conference on Test Security, Miami, FL.
18. Zopluoglu, C., Belov, D., & Wollack, J.A. (2019, October). *Validation of graph theory approach to detect test collusion network using an experimental real dataset*. Paper presented at the Conference on Test Security, Miami, FL.
17. Kasli, M. & Zopluoglu, C. (2019, October). *A deterministic gated lognormal response time model to identify examinees with item preknowledge*. Paper presented at the Conference on Test Security, Miami, FL.  
\*\*\*\*\* Above represents new work since last promotion in 2019 \*\*\*\*\*
16. Zopluoglu, C. (2018, October). *Response similarity analysis using R*. Workshop at the Conference on Test Security, Park City, UT.
15. Zopluoglu, C. (2018, October). *Detecting examinees with item preknowledge using Extreme Gradient Boosting (XGBoost)*. Paper presented at the Conference on Test Security, Park City, UT.
14. Kasli, M. & Zopluoglu, C. (2018, October). *Do people with item preknowledge really respond faster to items they had prior access? An empirical investigation*. Paper presented at the Conference on Test Security, Park City, UT.
13. Zopluoglu, C. (2018, April). *Dimensionality as it relates to primary latent factors, sub-scores, and item parcels*. Paper presented at the annual meeting of National Council on Measurement in Education, New York, NY.
12. Zopluoglu, C. (2017, April). *A finite mixture IRT model for continuous measurement outcomes*. Paper presented at the annual meeting of National Council on Measurement in Education, San Antonio, TX.
11. Zopluoglu, C. (2016, November). *A finite mixture IRT model for continuous measurement outcomes*. Paper presented at the annual meeting of Florida Educational Research Association, Cocoa Beach, FL.
10. Sari, H.I., Zopluoglu, C., & Huggins-Manley, A.C. (2015, April). *Comparing item selection methods in multidimensional computerized adaptive testing under different types of multidimensional structures*. Paper presented at the annual meeting of American Educational Research Association, Chicago, IL.
9. Zopluoglu, C. & Davenport, E.C. (2015, April). *A note on using eigenvalues in dimensionality assessment*. Paper presented at the annual meeting of National Council on Measurement in Education, Chicago, IL.



8. Zopluoglu, C. (2014, November). *Evaluating the sampling performance of exploratory and cross-validated DETECT procedure with imperfect models*. Paper presented at the annual meeting of Florida Educational Research Association, Cocoa Beach, FL.
7. Zopluoglu, C. (2014, November). *Performance of response similarity indices under different types of IRT models*. Paper presented at the annual meeting of Florida Educational Research Association, Cocoa Beach, FL.
6. Elbaum, B., Noyes-Grosser, D.M., Siegenthaler, K., Romanczyk, R.G., Cavalari, R.N., Carter, R.L., Barczykowski, A.L., Zopluoglu, C. (2014, May). *Assessing family outcomes of early intervention: Utility of items specific to families of a child with autism spectrum disorder*. Paper presented at the International Meeting for Autism Research, Atlanta, GA.
5. Kohli, N., Haring, J. R., & Zopluoglu, C. (2014, July). *A finite mixture of nonlinear random coefficient models for continuous repeated measures data*. Paper presented at the annual meeting of the International Meeting of the Psychometric Society (IMPS), Madison, WI.
4. Zopluoglu, C., Chen, T.T., Huang, C.Y., & Mroch, A.A. (2013, October). *The performance of statistical indices in detecting answer copying on multiple-choice examinations using dichotomous item scores*. Paper presented at the 2<sup>nd</sup> Annual Conference on the Statistical Detection of Potential Test Fraud, Madison, WI.
3. Bulut, O. & Zopluoglu, C. (2013, April). *Item parameter recovery of the Graded Response Model using the R package ltm: A Monte Carlo Simulation study*. Paper presented at the annual meeting of American Educational Research Association, San Francisco, CA.
2. Zopluoglu, C., Chen, T.T., Huang, C.Y., & Mroch, A.A. (2013, April). *Using previous test performance to improve the efficiency of statistical indices in detecting answer copying on multiple-choice examinations*. Paper presented at the annual meeting of American Educational Research Association, San Francisco, CA.
1. Zopluoglu, C., & Davenport, E.C. (2011, April). *The effects of answer copying on the ability level estimates of cheater examinees in answer copying pairs*. Paper presented at the annual meeting of American Educational Research Association, New Orleans, LA.

## GRANTS

AY = Academic Year

SM = Summer Months

### External Funding

1. Literacy screener for Alaska Indigenous Languages (Dr. Gina Biancarosa, PI)  
Alaska Department of Education and Early Development  
Budget: \$5,180,000  
Funding period: 09/2023 – 09/2028  
Effort: 1.35 SM  
Role: Statistical and Psychometric Consultant
2. Simultaneous detection of compromised items and examinees with item preknowledge using both response accuracy and response time data (Dr. Cengiz Zopluoglu, PI)  
Duolingo, Inc.  
Budget: \$112,623  
Funding period: 03/2024 – 03/2025  
Effort: 30% AY, 2 SM  
Role: PI
3. Rediscovering the continuous response model: An alternative modeling approach for scoring Items in Duolingo English Test (Dr. Cengiz Zopluoglu, PI)  
Duolingo, Inc.  
Budget: \$94,084  
Funding period: 03/2021 – 07/2023  
Effort: 20% AY, 3 SM  
Role: PI
4. Teacher and peer speech in inclusion classrooms: Malleable factors affecting language outcomes for children with disabilities (Dr. Daniel S. Messinger, PI)  
National Center for Special Education Research, Institute of Education Sciences  
Budget: \$1,399,735  
Funding period: 07/01/2018 – 06/30/2022  
Effort: 7% AY  
Role: Statistical Consultant/Data Analyst
5. Intergroup dialogue program (Dr. Laura Kohn-Wood, PI)  
Jessie Ball Du Pont Fund  
Budget: \$257,288  
Funding period: 01/01/2018 – 12/31/2018  
Effort: 2% AY; 1 SM  
Role: Statistical Consultant/Data Analyst
6. Exceptional student education (ESE) parent survey (Dr. Batya Elbaum, PI)  
Florida Department of Education  
Budget: \$422,195  
Funding period: 09/01/2016 – 08/31/2017  
Effort: 3.74% AY, 0.5 SM  
Role: Statistical Consultant/Data Analyst

7. Exceptional student education (ESE) parent survey (Dr. Batya Elbaum, PI)  
Florida Department of Education  
Budget: \$142,175  
Funding period: 07/01/2016 – 06/30/2017  
Effort: 0.5 SM  
Role: Statistical Consultant/Data Analyst
8. Culturally informed family-based treatment of adolescents (Dr. Dan Santisteban, PI)  
National Institute on Drug Abuse  
Budget: \$613,352  
Funding period: Financial Year 2014 and 2015  
Effort: 33.5 % AY  
Role: Statistical Consultant/Data Analyst
9. Modeling the dynamics of early communication (Dr. Daniel Messinger, PI)  
National Institute of General Medical Sciences  
Budget: \$2,078,308  
Funding period: Financial Year 2014  
Effort: 1.11 % AY  
Role: Statistical Consultant/Data Analyst

#### **Grants submitted with pending status**

1. Developing robust and fair automated scoring technology for constructed mathematics responses in educational assessment by leveraging recent advancements in Natural Language Processing (PI: Cengiz Zopluoglu)  
Statistical and Research Methodology in Education, Institute of Education Sciences  
Budget: \$855,340  
Funding period: 9/2025 – 8/2028  
Effort: 30% AY, 3 SM  
Role: PI
2. Development of an observational coding system for measuring clinician humility in psychotherapy with diverse youth (PI: Alayna Park)  
National Institutes of Health, Division of Minority and Health Disparities  
Budget: \$186,000 (subaward to UO)  
Funding period: 12/2025 – 10/2027  
Effort: 15% AY (Year 2)  
Role: Co-I
3. Project Measure (PI: Lillian Duran)  
U.S. Department of Education, Office of Special Education Programs  
Budget: \$2,500,000  
Funding period: 9/2025 – 8/2030  
Effort: 5% AY (Year 1, Year 4-5), 15% AY (Year 2-3)  
Role: Key Personnel

4. Impact of vertically scaling oral reading fluency on screening for dyslexia risk  
(PI: Patrick Kennedy)  
National Institutes of Health, Division of Child Health and Human Development  
Budget: \$275,000  
Funding period: 1/2026 – 12/2027  
Effort: 15% AY  
Role: Key Personnel

**Grants submitted but not funded**

1. TutorMpower: a human+intelligent tutor for K-5 math learning and connection  
Department of Education 2024 Small Business Innovation Research (SBIR), Phase 1A  
Budget: \$33,451 (subaward to UO)  
Funding period: 09/2024 – 4/2025  
Effort: 15% AY  
Role: Consultant/Data Analyst
2. Innovation, diversity, equity and accessibility, LDRC (PI: Lillian Duran)  
National Institutes of Health, Division of Child Health and Human Development  
Budget: \$1,851,211  
Funding period: 07/2023 – 6/2028  
Effort: 8% AY  
Role: Co-I
3. WriteRightNow: An intelligent teacher assistant to automatically assess English-language writing skills for low-performing students, English-Learners, and students with disabilities (PI: Cengiz Zopluoglu)  
2022 Learning Engineering Tools, The Learning Agency  
Budget: \$99,642  
Funding period: 08/2023 – 7/2024  
Effort: 2.25 SM  
Role: PI
4. Simultaneous detection of compromised items and examinees with item preknowledge using both response accuracy and response time data (Dr. Cengiz Zopluoglu, PI)  
Statistical and Research Methodology in Education, Institute of Education Sciences  
Budget: \$294,870  
Funding period: 07/2022 – 06/2024  
Effort: 20% AY, 3 SM  
Role: PI
5. Detecting examinees with item preknowledge in large-scale testing using the extreme gradient boosting algorithm trained by simulated dataset (Dr. Cengiz Zopluoglu, PI)  
National Academy of Education/Spencer Postdoctoral Fellowship  
Budget: \$70,000  
Funding period: 2018-2019 Academic Year  
Role: PI

6. A finite mixture item response model for continuous measurement outcomes (Dr. Cengiz Zopluoglu, PI)  
Innovations in Applied Public Health Research, Center for Disease Control and Prevention  
Budget: \$141,152  
Funding period: 02/01/2016 – 07/31/2017  
Effort: 25% AY, 1 SM  
Role: PI
7. A finite mixture item response model for continuous measurement outcomes (Dr. Cengiz Zopluoglu, PI)  
Statistical and Research Methodology in Education, Institute of Education Sciences  
Budget: \$197,047  
Funding period: 09/01/2015 – 02/28/2017  
Effort: 25% AY, 1 SM  
Role: PI
8. Detecting unusual answer similarity using artificial neural networks (Dr. Cengiz Zopluoglu, PI)  
National Academy of Education/Spencer Postdoctoral Fellowship  
Budget: \$70,000  
Funding period: 2015-2016 Academic Year  
Role: PI
9. The impact of missing data on the item parameter estimation for the continuous response model (Dr. Cengiz Zopluoglu, PI)  
Statistical and Research Methodology in Education, Institute of Education Sciences  
Budget: \$100,250  
Funding period: 09/2014 – 06/2015  
Effort: 25% AY, 1SM  
Role: PI

### **Consulting Contracts**

1. Multitudes: UCSF Dyslexia Center Early Screening and Intervention Pilot Program (Dr. Maria L. G. Tempini, PI)  
University of California – San Francisco Dyslexia Center  
Budget: \$10,000,000  
Funding period: 03/22 – 10/25  
Effort: 8-10 hours per month  
Role: Statistical and Psychometric Consultant
2. Virginia alternate assessment program (Dr. Gerald Tindal, PI)  
Virginia Department of Education  
Budget: \$1,366,327  
Funding period: 09/23 – 8/26  
Effort: ~3 hours per month  
Role: Statistical and Psychometric Consultant

3. Pennsylvania alternate system of assessment technology (Dr. Gerald Tindal, PI)  
University of Pittsburgh  
Budget: \$215,000  
Funding period: 04/15/2020 – 08/31/2020  
Effort: 1 SM  
Role: Statistical Consultant/Data Analyst

## TEACHING

### Graduate Courses

*University of Oregon, Eugene, Oregon (Instructor)*

| Course Number | Course Name  | Term   | Enrollment |
|---------------|--|--------|------------|
| 2024-2025     | <i>Two course buyouts from an external grant, one course release due to grant activity</i>                             |        |            |
| EDLD 653      | Function Programming for Educational Data Science  | Spr25  | 10         |
| EDLD 654      | Machine Learning for Educational Data Science  | Fall24 | 12         |
| SPED 607      | Seminar: Rasch Analysis (1 credit)   | Fall24 | 5          |
| 2023-2024     | <i>One course release due to grant activity</i>  |        |            |
| EDLD 653      | Function Programming for Educational Data Science  | Spr24  | 13         |
| EDLD 652      | Data Visualization for Educational Data Science  | Win24  | 14         |
| EDLD 640      | Educational Data Science Capstone Project  | Win24  | 11         |
| EDLD 654      | Machine Learning for Educational Data Science  | Fall23 | 17         |
| 2022-2023     | <i>Taught full load without any course release despite grant activity due to unexpected departure of an instructor</i> |        |            |
| EDLD 653      | Function Programming for Educational Data Science  | Spr23  | 18         |
| EDLD 652      | Data Visualization for Educational Data Science  | Win23  | 19         |
| EDLD 640      | Educational Data Science Capstone Project  | Win23  | 12         |
| EDLD 654      | Machine Learning for Educational Data Science  | Fall22 | 14         |
| EDUC 642      | Multiple Regression in Educational Research  | Fall22 | 21         |
| 2021-2022     | <i>One course buyout from an external grant, one course release due to grant activity</i>                              |        |            |
| EDUC 614      | Educational Statistics   | Win22  | 36         |
| EDLD 654      | Machine Learning for Educational Data Science  | Fall21 | 15         |
| EDUC 642      | Multiple Regression in Educational Research  | Fall21 | 33         |
| 2020-2021     | <i>One course buyout from an external grant, one course release from startup package</i>                               |        |            |
| EDUC 614      | Educational Statistics   | Win21  | 32         |
| EDUC 642      | Multiple Regression in Educational Research  | Fall20 | 39         |

*University of Miami, Coral Gables, Florida (Instructor)*

| Course Number    | Course Name                                  | Term   | Enrollment |
|------------------|--|--------|------------|
| <b>2019-2020</b> |  |        |            |
| EPS 702          | Quantitative Methods I                       | Fall19 | 15         |
| EPS 705          | Measurement and Psychometric Theory          | Fall19 | 14         |
| <b>2018-2019</b> |  |        |            |
| EPS 704          | Computer Applications in Educational Science | Sum19  | 5          |
| EPS 702          | Item Response Theory                         | Spr19  | 10         |
| EPS 705          | Measurement and Psychometric Theory          | Fall18 | 17         |
| <b>2017-2018</b> |  |        |            |
| EPS 704          | Computer Applications in Educational Science | Sum18  | 13         |
| EPS 702          | Item Response Theory                         | Spr18  | 8          |
| EPS 702          | Quantitative Methods II                      | Spr18  | 20         |
| EPS 702          | Quantitative Methods II                      | Fall17 | 8          |
| EPS 705          | Measurement and Psychometric Theory          | Fall17 | 10         |
| <b>2016-2017</b> |  |        |            |
| EPS 704          | Computer Applications in Educational Science | Sum17  | 9          |
| EPS 702          | Item Response Theory                         | Spr17  | 15         |
| EPS 702          | Quantitative Methods II                      | Spr17  | 12         |
| EPS 702          | Quantitative Methods II                      | Fall16 | 11         |
| EPS 705          | Measurement and Psychometric Theory          | Fall16 | 11         |
| <b>2015-2016</b> |  |        |            |
| EPS 704          | Computer Applications in Educational Science | Sum16  | 10         |
| EPS 706          | Categorical Data Analysis                    | Spr16  | 17         |
| EPS 702          | Quantitative Methods II                      | Spr16  | 11         |
| EPS 702          | Quantitative Methods II                      | Fall15 | 15         |
| EPS 705          | Measurement and Psychometric Theory          | Fall15 | 6          |
| <b>2014-2015</b> |  |        |            |
| EPS 704          | Computer Applications in Educational Science | Sum15  | 7          |
| EPS 701          | Quantitative Methods II                      | Spr15  | 24         |
| EPS 702          | Quantitative Methods II                      | Fall14 | 19         |
| EPS 705          | Measurement and Psychometric Theory          | Fall14 | 8          |
| <b>2013-2014</b> |  |        |            |
| EPS 707          | Item Response Theory                         | Spr14  | 5          |
| EPS 705          | Measurement and Psychometric Theory          | Fall13 | 7          |

*University of Minnesota, Minneapolis, MN (Teaching Assistant)*

EPS 8282 Statistical Analysis of Longitudinal Data  
 EPS 8268 Hierarchical Linear Modeling in Educational Research  
 EPS 8261 Statistical Methods I: Probability & Inference  
 EPS 5261 Introductory Statistical Methods (Online Class)  
 EPS 3261 Basic and Applied Statistics (Online Class)



## Doctoral Dissertations

### *Chair*

2021 completion Murat Kasli (University of Miami), "A Deterministic Gated Lognormal Response Time Model to Identify Examinees with Item Preknowledge"

### *Member*

2025 – Present Cruz Godar (University of Oregon)  
 2025 – Present Tony Daza (University of Oregon)  
 2025 – Present Rikki Wheatley (University of Oregon)  
 2024 completion Jason Small (University of Oregon), "The cost and cost-effectiveness of training school-based personnel in motivational interviewing"  
 2024 completion Lemya Alhmoudi (University of Oregon), "Examining implementation fidelity of shared book reading training by early childhood special education teachers in the United Arab Emirates"  
 2024 completion Maria C. Cabrera (University of Oregon), "Thermal Comfort and Indoor Air Quality in Low Socioeconomic Status Classrooms"  
 2024 completion Trinh Le (University of Oregon), "Narrative Language Production: Examining How Young Spanish-English Learners Use the English Language"  
 2024 completion Merly Klaas (University of Oregon), "The Relationship of Early Childhood Education Access, Quality, and Neighborhoods on Children Developmental Outcomes in Indonesia"  
 2023 completion Cherice Cochrane (University of Oregon), "Effect of Race Matching on Student's Sense of Belonging and Academic Achievement"  
 2023 completion Claire Zhang (University of Oregon), "Teacher Characteristics, Teacher-Student Relationship, and Student Academic Outcomes in Chinese Junior High Schools"  
 2022 completion Heather Terral (University of Oregon), "School Wellness and Discipline in Oregon High Schools"  
 2022 completion Fang-Yu Lin (University of Oregon), "Linking Early Intervention Service Delivery Approaches to Young Children's Social-Emotional Development in Taiwan"  
 2021 completion Melissa Harman (University of Oregon), "School-level Matthew Effects in Reading: An Analysis of Within-Year Benchmark Data"  
 2020 completion Kiet D. Huynh (University of Miami), "Responding to Heterosexism and Racism: The Effects on Trauma and Well-Being for LGB People of Color"  
 2019 completion Evan S. Thomas (University of Miami), "Externalizing Problems and Hispanic/Latinx Adolescents: A Bioecological Perspective"  
 2019 completion Andrew N.L. Buskard (University of Miami), "Relative Efficacy, Enjoyment, and Adherence of Four Common Progression Models in Strength Training for Older Adults"  
 2019 completion Edwing A. Medina (University of Miami), "The Effect of Cognitively Guided Instruction (CGI) on the Use of Representational Modeling by First and Second Grade English Learners (ELs) and Their English Proficient (EPs) Peers during Individualized Assessments of Arithmetic Word Problem Solving"

|      |            |   |
|------|------------|---|
| 2019 | completion | W.H.B. McAuliffe (University of Miami), “Psychometric Problems with the Self-Report Altruism Scale: Can Studies of Trait Altruism be Trusted”   |
| 2018 | completion | Chelsea T. Morris (University of Miami), “Parent-Teacher Agreement on Ratings of Kindergarten Children’s Problem Behavior: At the Intersection of Disability, Gender, and Race”   |
| 2017 | completion | Seniz Celimli (University of Miami), “A Comparison of Geomin versus Target Rotation Criteria in Exploratory Factor Analysis with Correlated Factors and Large and Complex Pattern Matrices”   |
| 2017 | completion | Mark Puccinelli (University of Miami), “Treatment and Moderator Effects in a Randomized Controlled Trial of Culturally Informed and Flexible Family Treatment for Adolescents (CIFFTA): An Investigation of the Relationships between Stress, Acculturation, and Parenting Practices” |
| 2016 | completion | Jonathan Duff (University of Miami), “The Development and Initial Validation of a Multidimensional Scale of Perceived Fairness”   |
| 2015 | completion | Malhotra Krithika (University of Miami), “Domestic Violence Practitioners’ Use of Research Evidence Attitudes and Organizational Social Context”  |

### List of Advisees in the Master’s program

*\* I served as the primary advisor for the following students during their master’s studies in the Research, Measurement, and Evaluation program at the University of Miami, and organized and graded their final qualification examinations.*

| Name                | Degree | Period      |
|---------------------|--------|-------------|
| Xuqi Liu            | M.A.   | 2019 – 2020 |
| Nasser Hassan       | M.A.   | 2019 – 2020 |
| Joseph Wright       | M.A.   | 2016 – 2019 |
| Dorothy Sanchez     | M.A.   | 2016 – 2019 |
| Claudia Perez       | M.A.   | 2016 – 2019 |
| Melissa Dietrick    | M.A.   | 2016 – 2018 |
| Adam Clarke         | M.A.   | 2016 – 2018 |
| Maria Martinez      | M.A.   | 2016 – 2018 |
| Suat Babayigit      | M.A.   | 2015 – 2018 |
| Richard Munoz       | M.A.   | 2015 – 2017 |
| Jazzeraï Yarborough | M.A.   | 2014 – 2017 |
| Katherine Zambrana  | M.A.   | 2014 – 2016 |
| Violeta Rodriguez   | M.A.   | 2013 – 2015 |
| Heath Gregg         | M.A.   | 2013 – 2015 |
| Monica Morell       | M.A.   | 2013 – 2015 |

## SERVICE

### A. Institutional Service

#### University of Oregon

|                |   |
|----------------|---|
| 2023 – Present | Member, Senate Committee on Courses, University of Oregon |
| 2023 – 2024    | Proxy Faculty Member, School of Computer and Data Science |

#### College of Education

|             |  |
|-------------|--|
| 2024 – 2025 | Member, COE Scholarship Committee  |
| 2022 – 2024 | Member, CNNTF Personnel Committee  |
| 2022 – 2023 | Member, COE Scholarship Committee  |
| 2020 – 2022 | Member, COE Curriculum Committee   |
| 2022        | Developer, R workshop community canvas site<br>Developed a community canvas website for an online workshop to teach the basics of R programming for all incoming graduate students. The website has 12 modules (each module has an interactive HTML note, interactive HTML tutorial, a knowledge checkpoint quiz, and about 1 hour video tutorial). As of Mar 2025, 84 students completed at least one module on this website. |
| 2021 – 2022 | Member, EDUC Quantitative Task Force<br>Participated and contributed to substantive revision of EDUC quantitative research sequence in collaboration with Dr. Gina Biancarosa and Dr. David Liebowitz.<br>EDUC 641 Applied Statistics in Education and Human Services I<br>EDUC 643 Applied Statistics in Education and Human Services II<br>EDUC 645 Applied Statistics in Education and Human Services III                   |

#### Department

|                |   |
|----------------|---|
| 2023 – present | Reviewer, Doctoral Admissions Applications (SPED)   |
| 2023           | Peer Review of Teaching, EDLD 663   |
| 2022           | Peer Review of Teaching, EDLD 650   |
| 2021 – 2024    | Coordinator, Educational Data Science Specialization (EMPL)<br>Taught four of the five courses in the specialization<br>Revised the content of two courses:<br>EDLD 653: Functional Programming<br><a href="#">EDLD 654: Applied Machine Learning</a><br>Processed paperwork for the students upon completion of the five-course sequence<br>Served as the primary contact person for all questions regarding to specialization |

## **B. Profession**

2021 – 2024 Member, AERA Educational Statistician SIG Executive Committee  
2021 – 2023 Chair, NCME Alicia Cascallar Award Committee  
2020 – 2021 Member, NCME Alicia Cascallar Award Committee  
2019 – 2021 Member, Conference Organizing Committee, Conference on Test Security  
2018 – 2019 Program Chair, Conference on Test Security

## **C. Past Service**

2018 – 2020 Director, Doctoral Program  
Research, Measurement, and Evaluation (RME)  
School of Education and Human Development, University of Miami  
2014 – 2020 Director, Master's Program  
Research, Measurement, and Evaluation (RME)  
School of Education and Human Development, University of Miami  
2013 – 2020 Statistical Consultant, STATS-U  
Community & Educational Well-Being Research Center  
School of Education and Human Development, University of Miami  
2018 - 2019 Member, Search Committee, Two Clinical Line Faculty Hire  
Higher Education Leadership Ed.D Program, University of Mia  
2018 - 2019 Member, Search Committee, Tenure Line Faculty Hire  
Higher Education Leadership Ed.D Program, University of Miami  
2017 - 2018 Member, Search Committee, Tenure Line Faculty Hire  
Research, Measurement, and Evaluation Ph.D. Program  
University of Miami  
2016 - 2017 Member, Search Committee, Tenure Line Faculty Hire  
Research, Measurement, and Evaluation Ph.D. Program  
University of Miami  
2014 – 2017 EPS Department Representative, School Council  
School of Education and Human Development, University of Miami

## **D. Editorial Service**

### **Ad Hoc Reviewer (2019-present), total = 46**

*Applied Psychological Measurement* (k=1)  
*Journal of Educational and Behavioral Statistics* (k=3)  
*Journal of Educational Measurement* (k=6)  
*Journal of Applied Measurement* (k=1)  
*Educational Measurement: Issues and Practices* (k=3)  
*Educational and Psychological Measurement* (k=4)  
*Multivariate Behavioral Research* (k=1)  
*Measurement in Physical Education and Exercise Science* (k=1)  
*International Journal of Assessment Tools in Education* (k=1)  
*Journal of Community Psychology* (k=1)  
*Journal of Modern Applied Statistical Methods* (k=2)  
*Annual Meeting of National Council on Measurement in Education – 2019* (k=8)  
*Annual Meeting of National Council on Measurement in Education – 2021, Discussant* (k=4)  
*American Educational Research Association – Educational Statistician SIG – 2022* (k = 2)  
*American Educational Research Association – Educational Statistician SIG – 2023* (k = 2)  
*American Educational Research Association – Educational Statistician SIG – 2024* (k = 3)  
*American Educational Research Association – Division D – 2024* (k = 3)

### **Ad Hoc Reviewer (2013-2019), total = 30**

*Journal of Educational and Behavioral Statistics* (k=2)  
*Journal of Educational Measurement* (k=3)  
*Educational and Psychological Measurement* (k=3)  
*International Journal of Testing* (k=1)  
*Psychological Methods* (k=1)  
*Educational Assessment* (k=2)  
*Educational Researchers* (k=2)  
*Eurasia Journal of Mathematics, Science, and Technology Education* (k=1)  
*Measurement in Physical Education and Exercise Science* (k=1)  
*International Journal of Intercultural Relations* (k=1)  
*Journal of Personality Assessment* (k=3)  
*Reading and Writing: An Interdisciplinary Journal* (k=1)  
*Annual Meeting of National Council on Measurement in Education – 2017* (k=6)  
*Annual Meeting of Florida Educational Research Association – 2016* (k=3)

### **Editorial Board Member, Statistical Consulting**

*Journal of Personality Assessment*, 08/2016 – 08/2018

## PROFESSIONAL AFFILIATIONS

|                |  |
|----------------|--|
| 2013 – Present | Member, National Council on Measurement in Education |
| 2010 – 2024    | Member, American Educational Research Association    |

## AWARDS

|             |  |
|-------------|--|
| 2023        | <a href="#"><u>National Center for Education Statistics, Mathematics Automated Scoring Challenge for NAEP, Runner-up Prize</u></a>                 |
| 2023        | Top Cited Article in <i>Educational Measurement: Issues and Practice</i> , among work published in an issue between Jan 1, 2021, and Dec 15, 2022. |
| 2021        | National Institute of Justice, Recidivism Forecasting Challenge, 3 <sup>rd</sup> place in Large Team Category                                      |
| 2017        | Top 5 Most Cited Papers in <i>Journal of School Psychology</i> 2014-2016   |
| 2013        | Graduate Student Research Award, University of Minnesota   |
| 2013        | Graduate Student Travel Award for AERA, University of Minnesota  |
| 2011        | Graduate Student Travel Award for AERA, University of Minnesota  |
| 2007 – 2013 | Fellowship for Graduate Education in the U.S., Ministry of National Education, Turkey  |

## **PROFESSIONAL DEVELOPMENT**

- |      |  |
|------|--|
| 2024 | Bayesian Latent Variable Modeling in Educational Research<br>1-day in-person training workshop by Dr. Ed Merkle<br>NCME Annual Conference  |
| 2021 | NAEP Process Data Summer Training<br>4-hour online training workshop by Dr. Martinn Hooper (AIR)   |
| 2021 | Machine Learning<br>4-day online training workshop by Dr. Kevin Grimm (Arizona State University)   |
| 2021 | Data Science<br>23-week long online course (2-hours a week) by Data Society<br>Organized by Social Data Science Network at the University of Oregon                                |
| 2020 | Bayesian Estimation of IRT Models Using OpenBUGS and Stan<br>1-day in-person training workshop by Drs. Hong Jiao, Yong Luo, Kaiwen Man,<br>and Dandan Liao, NCME Annual Conference |
| 2020 | Analyzing Complex Survey Data<br>2-day online training workshop by Dr. Laura Stapleton (University of Maryland)  |
| 2019 | Introduction to Bayesian Statistical Modeling<br>3-day in-person training workshop by Dr. Roy Levy<br>University of Miami  |
| 2018 | Computerized Adaptive Testing<br>1-day in-person training workshop by Drs. David Shin & Yuehmei Chien<br>NCME Annual Conference  |
| 2017 | Cognitive Diagnosis Modeling<br>1-day in-person training workshop by Drs. Jimmy de la Torre & Wenchao Ma<br>NCME Annual Conference   |
| 2015 | Modern Statistical Techniques for Longitudinal Data Analysis<br>3-day in-person training workshop by Dr. Jeffrey R. Harring<br>University of Miami                                 |