Andrea E. Weinberg

Arizona State University

Mary Lou Fulton College for Teaching and Learning Innovation andrea.weinberg@asu.edu

I. Education

Spring 2013	Ph.D., Education & Human Resource Studies Colorado State University, Fort Collins, CO
Summer 2006	M.Ed., Education & Human Resource Studies Colorado State University, Fort Collins, CO
Fall 1999	Teaching Certification: K-12 Special Education West Texas A&M University, Canyon, TX
Spring 1999	B.B.A., Accounting West Texas A&M University, Canyon, TX

II. Academic Appointments

2023 - present	Associate Professor (Tenure Track) Arizona State University, Mary Lou Fulton College for Teaching and Learning Innovation (MLFC) Affiliate Faculty, Regional Center of Expertise (RCE) for Education on Sustainable Development - Greater Phoenix Senior Scholar, Julie Ann Wrigley Global Futures Laboratory Affiliate Faculty, Institute of Social Science Research (ISSR)
2017 - present	Assistant Professor (Tenure Track) Arizona State University, MLFC
2013 - 2017	Assistant Professor (Non-Tenure Track) Colorado State University, School of Education
2008 - 2013	Research Associate I, II, Research Scientist Colorado State University, School of Education
2006 - 2008	Graduate Research Assistant Colorado State University, Research & Development Center for Student Learning,

III. K-12 Teaching Experience

2002 - 2006	Mathematics and Science Special Education Teacher Roosevelt High School, Johnstown, CO
2001 - 2002	Special Education Teacher & Department Chair El Rito Elementary, El Rito, NM
1999 - 2001	Special Education Teacher A. J. Moore Academy, Waco, TX

A. Refereed Journal Articles: Published

- * Indicates graduate student status at time of submission $^{\Delta}$ Indicates undergraduate student status at time of submission
- 27. Diaz-Clark, E. D., Otto, J. L., Wright, D. S., *Lin Hunter, D. E., Sample McMeeking, L. B., **Weinberg, A. E.,** & Balgopal, M. M. (2024). Under pressure: How do science teachers use capital to achieve agency during turbulent times? *Science Education,* 108(3), 680-700. https://doi.org/10.1002/sce.21852
- 26. **Weinberg, A. E.**, Jordan, M. E., *Jongewaard, R. (2024). "Real Work, Real Consequences": An Action-Oriented Pedagogies (AOP) Framework for Sustainability Education in K-12 Classrooms. *Sustainability Science*, 19, 2027-2040. https://doi.org/10.1007/s11625-024-01560-z
- 25. **Weinberg, A. E.**, Stevenson, C. A., & *Ruiz, E. A. (2024). Third Space through collaboration, coteaching, and pedagogies of practice: Exploring outcomes and opportunities. *The New Educator*. 21(1), 21-46. https://doi.org/10.1080/1547688X.2024.2410154
- 24. Merritt, E., **Weinberg, A. E.**, Lapan, C., Rimm-Kaufman, S. (2024). Igniting kid power: The impact of environmental service-learning on elementary students' awareness of energy problems and solution. *Energy Research & Social Science.* 116, 103670. https://doi.org/10.1016/j.erss.2024.103670
- 23. Trott, C. D., **Weinberg, A. E.**, Frame, S. M., Peterson, J., & Even, T. (2023). Civic science education for youth-driven water security in Jacmel, Haiti: A behavioral development approach to strengthening climate resilience *International Journal of Behavioral Development*. https://doi.org/10.1177/01650254231188661
- 22. *Audrain, R. L., *Ruiz, E. A., Wyatt, L. G., Nailor, N., **Weinberg, A. E.** (2023). Sustaining teachers through collaboration and autonomy: Outcomes of a professional development experience. *The New Educator*. https://doi.org/10.1080/1547688X.2023.2203202
- 21. Merritt, E. M., **Weinberg, A. E.**, & Archambault, L. M. (2023). Exploring Energy Through the Lens of Equity: Funds of Knowledge Conveyed Through Video-Based Discussion. *International Journal of Science and Mathematics Education*, *21*, 2237–2260. https://doi.org/10.1007/s10763-023-10352-3
- 20. *Cicchino, A., **Weinberg, A. E.**, Sample McMeeking, L. B., Balgopal. M. M. (2023). Critical pedagogy of place to enhance ecological engagement activities. *Conservation Biology*, 37(2), e14023. https://doi.org/10.1111/cobi.14023
- 19. *Wright, D. D., **Weinberg, A. E.**, & Sample McMeeking, L. B., *Lin Hunter, D. E., Balgopal, M. B. (2022). I will survive: Teachers reflect on motivations to remain in education amidst a global pandemic. *Journal of Research in Science Teaching*. 60(6), 1266-1291. https://doi.org/10.1002/tea.21831
- 18. Balgopal, M. M., **Weinberg, A. E.**, Sample McMeeking, L. B., *Lin Hunter, D. E., & *Wright, D. S. (2022). A sense of belonging: The role of higher education in retaining quality STEM teachers. *PLOS one*. https://doi.org/10.1371/journal.pone.0272552
- 17. *Wakefield, W., **Weinberg, A. E.**, *Pretti, E., Merritt, E. M., & Trott, C. D. (2022). "When I act consciously, I can see a brighter world around me": Preservice teacher readiness to support

- transformative sustainability learning for K-8 students. *Environmental Education Research*. https://doi.org/10.1080/13504622.2022.2085246
- 16. Boveda, M., & Weinberg, A. E. (2022). Centering racialized educators in collaborative teacher education: Developing intersectional consciousness to prepare a diverse special education teacher workforce. Teacher Education and Special Education, 45(1), 8-26. https://doi.org/10.1177/08884064211062874
- 15. **Weinberg, A. E.**, Balgopal, M., & Sample McMeeking, L.B. (2021). Professional growth and identity development of STEM teacher educators in a community of practice. *International Journal of Science and Mathematics Education*, 19, 99-120. https://doi.org/10.1007/s10763-020-10148-9
- 14. Boveda, M., & **Weinberg, A. E.** (2020). Facilitating intersectionally conscious collaborations in physics education. *The Physics Teacher, 58,* 480-483. https://doi.org/10.1119/10.0002066
- 13. Trott, C. D., & **Weinberg, A. E.** (2020). Science education for sustainability: Strengthening science engagement through climate change learning and action. *Sustainability.* 12(16), 6400. https://doi.org/10.3390/su12166400
- 12. **Weinberg, A. E.**, Trott, C. D., *Wakefield, W., Merritt, E. M., & Archambault, L. M. (2020). Looking inward, outward, and forward: Exploring the process of transformative learning in teacher education for a sustainable future. *Sustainability Science*. 15, 1767-1787. https://doi.org/10.1007/s11625-020-00831-9
- 11. **Weinberg, A. E.**, Sebald, A., Stevenson, C. A., & *Wakefield, W. (2020). Toward conceptual clarity: A scoping review of coteaching in teacher education. *The Teacher Educator*. 55(2), 190-213. https://doi.org/10.1080/08878730.2019.1657214
- Trott, C. D., Sample McMeeking, L. B., & Weinberg, A. E. (2019). Participatory action research experiences for undergraduates: Forging critical connections through community engagement. Studies in Higher Education. 45(11), 2260-2273 https://doi.org/10.1080/03075079.2019.1602759
- 9. *Wright, D., Balgopal, M. M., Sample McMeeking, L. B., & **Weinberg, A. E.** (2019). Developing resilient K-12 teachers to broaden participation of students in STEM. *Advances in Developing Human Resources*. 21(1) 16-34. https://doi.org/10.1177/152342231884483
- 8. Trott, C. D., **Weinberg, A. E.**, & Sample McMeeking, L. B. (2018). Prefiguring sustainability through participatory action research experiences for undergraduates: Reflections and recommendations for student development. *Sustainability*. 10(9) 3332. https://doi.org/10.3390/su10093332
- 7. **Weinberg, A. E.**, Trott, C. D., & Sample McMeeking, L. B. (2018). Who produces knowledge? Transforming undergraduate students' views of science through participatory action research. *Science Education*. 102(6) 1155-1175. https://doi.org/10.1002/sce.21453
- 6. **Weinberg, A. E.** & Sample McMeeking, L. B. (2017). Toward meaningful interdisciplinary education: High school teachers' views of mathematics and science integration. *School Science and Mathematics*, 117(5), 204-213. https://doi.org/10.1111/ssm.12224
- 5. Sample McMeeking, L. B., Weinberg, A. E., *Boyd, K. J., & Balgopal, M. M. (2016). Student perceptions of interest, learning, and engagement from an informal traveling science museum.

- School Science and Mathematics, 116(5), 253-264. https://doi.org/10.1111/ssm.12176
- 4. Rathburn, S. & **Weinberg, A. E.** (2011). Undergraduate student satisfaction and achievement at the GetWET observatory: A fluid learning experience at Colorado State University. *Journal of Geoscience Education*, 59(2), 47-55. https://doi.org/10.5408/1.3543936a
- 3. **Weinberg, A. E.**, Basile, C. B., & Albright, L. (2011). The effects of an experiential learning program on middle school students' mathematics and science motivation. *Research in Middle Level Education*, 35(3), 1-12. https://doi.org/10.1080/19404476.2011.11462086
- 2. **Fritz (Weinberg), A. E.**, Stevenson, C. A., & Cooner, D. D. (2009). Training new teachers to teach literacy: The university-public school partnership. *Reading Improvement*. 46(1).), 19-29. https://link.gale.com/apps/doc/A196962248/AONE?u=anon~741ab2da&sid=googleScholar&xid=b754c452
- 1. Stevenson, C. A., Cooner, D. D., & Fritz (Weinberg), A. E. (2008). Self-perceptions of standards acquisition during the principal internship. *The International Electronic Journal for Leadership in Learning*, 12(5). https://files.eric.ed.gov/fulltext/EJ940557.pdf

B. Peer-Reviewed Book Chapters

- * Indicates graduate student status at time of submission
- 7. *LeSueur, B., *Pinkerton, T., & **Weinberg, A. E.** (in press). Action research to bridge the gap between coursework and field experiences. In S. Ewell, J. Giblin, and J. McNabb (Eds.), Contemporary perspectives through action research across educational disciplines: Higher education. Information Age.
- *Audrain, R. L., Weinberg, A. E., Bennett, A., O'Reilly, J, & Basile, C. G. (2022). Ambitious and sustainable post-pandemic workplace design for teachers: A portrait of the Arizona teacher workforce. In M. Reimers (Ed.), *Primary and secondary education during COVID-19* (pp. 353-381). Springer Nature. https://doi.org/10.1007/978-3-030-81500-4
- 5. Sebald, A., Frederiksen, H., Decker, D., Roth, J., Fothergill, W., Cooner, D., Searle, J. J., Drager, J., Castor, J., Stevenson, C., Lewis, A., & Weinberg, A. E. (2018). Preparing educators for sustainability: One center's journey. In T. E. Hodges, A. C. Baum, *Handbook of research on field-based teacher education* (pp. 1-31). IGI Global. https://doi.org/10.4018/978-1-5225-6249-8
- 4. **Weinberg, A. E.** & Albright, L. (2011). Integrating biology and mathematics in high school classrooms. In Roberts, F. (Ed), *BioMath in the schools* (pp. 212-245). American Mathematical Society. ISBN: 978-0-8218-4295-9
- 3. **Fritz (Weinberg), A. E.**, & Morgan, G. A. (2010). Sampling. In N. J. Salkind (Ed.), *Encyclopedia of research design* (vol. 3, pp. 1302-1305). SAGE. https://dx.doi.org/10.4135/9781412961288
- 2. **Fritz (Weinberg), A. E.** (2008). Instructor's manual to accompany SPSS for intermediate statistics: Use and interpretation (3rd ed.). Erlbaum/Taylor & Francis Group.
- Fritz (Weinberg), A. E. (2008). Appendix B: Review of basic Statistics. In N. L. Leech, K. C. Barrett, & G. A. Morgan, SPSS for intermediate statistics: Use and interpretation (3rd ed., pp. 242-253). Erlbaum/Taylor & Francis. ISBN-13: 978-0805862676

E. Non-Refereed Publications

^{*} Indicates graduate student status at time of submission

- 6. Jordan, M. E., **Weinberg, A. E.**, Oster, N. (2024). Introducing Roles for Action Oriented Pedagogies. figshare. Online resource. https://doi.org/10.6084/m9.figshare.25893274.v4
- 5. **Weinberg, A. E.**, Jordan, M. E., (2023). Action-Oriented Pedagogies: A Framework for K-12 Sustainability Education. figshare. Online resource. https://doi.org/10.6084/m9.figshare.23833974.v2
- 4. **Weinberg, A. E.**, & Boveda, M. (2021). *Intersectionally Conscious Collaboration educator preparation version* (Version 2). figshare. https://doi.org/10.6084/m9.figshare.17288243.v2
- 3. Wyatt, L., Nailor, N., Madden, B., *Audrain, R. L., & Weinberg, A. E.(accepted) ASU's Networked Cohorts: Forging enduring virtual communities among teachers amidst the COVID-19 Pandemic. In Best Practices Clearinghouse: Supporting the Reopening and Continuing Operation of Schools, Colleges and Universities, and Early Childhood Education Providers. Department of Education.https://bestpracticesclearinghouse.ed.gov/docs/ResourcesLibrary PDF/ED31-534.pdf
- 2. Boveda, M., & **Weinberg, A. E.**, (2020). *Intersectionally conscious collaboration (ICC) protocol: Teacher educators* version1.figshare. Online resource. https://doi.org/10.6084/m9.figshare.13252085.v4
- 1. Cobb, R. B., Lipscomb, S., Wolgemuth, J., Schulte, T., Veliquette, A., Alwell, M., Batchelder, K., Bernard, R., Hernandez, P., Holmquist-Johnson, H., Orsi, R., Sample McMeeking, L., Wang, J., & Weinberg, A. E. (2013). *Improving post-high school outcomes for transition-age students with disabilities: An evidence review* (NCEE 2013-4011). Washington, DC: National Center for Education Evaluation and Regional Assistance, Institute of Education Sciences, U.S.

V. PRESENTATIONS

A. Refereed Presentations

- * Indicates graduate student status at time of submission, $^{\Delta}$ Indicates undergraduate student status at time of submission, $^{\#}$ Indicates practitioner/educator/teacher at time of submission
- 64. *Oster, N., *Anayatova, D., **Weinberg, A. E**., Jordan, M. E., *Adeloju, E. (March 2025). *Preservice Teachers' Visions for Action-Oriented Pedagogies for Sustainability Education*. Comparative and International Education Society (CIES) Annual Conference. Chicago, IL.
- 63. Suloff, S., **Weinberg, A. E.** (April 2025). *Safety Science and Sustainability: Online resources to inspire student action.* National Science Teaching Association (NSTA) National Conference. Philadelphia, PA.
- 62. Suloff, S., Weinberg, A. E., *Adeloju, E., *Coleman, J., Jordan, M. E., (April 2025). *Using Nature Journaling to Promote Science Practices in the Classroom*. National Science Teaching Association (NSTA) National Conference. Philadelphia, PA.
- 61. *Oster, N., *Adeloju, E., *Anayatova, D., Jordan, M. E., , **Weinberg, A. E**. (January 2025). Advancing Education for Planetary Futures Through Action-Oriented Pedagogies: Insights from Two Studies. Learning Planet Festival. Virtual https://www.learning-planet.org/event/advancing-education-for-planetary-futures-through-action-oriented-pedagogies-insights-from-two-studies/

- 60. Silova, I. (organizer), speaker panel included **Weinberg, A. E**. (January 2025). *Key Insights on Education for Planetary Futures*. Learning Planet Festival. Virtual. https://www.learning-planet.org/event/key-insights-on-education-for-planetary-futures/
- 59. Suloff, S., Jordan, M. E., , **Weinberg, A. E.**, *Oster, N., *Adeloju, E. (January 2025). *Co-creating Preferred Futures: The Xplorlabs Educator Fellowship Experience*. Learning Planet Festival. . Virtual. https://www.learning-planet.org/event/co-creating-preferred-futures-the-xplorlabs-educator-fellowship-experience/
- 58. *Curtiss, B., *Hubert, L., *Adeloju, E., *Oster, N., Jordan, M. E., , **Weinberg, A. E**. (November 2024). Empowering student action: Integrating safety science and sustainability with Xplorlabs. Arizona Science Teachers' Association. Mesa, AZ
- 57. Gamboa, M., Dolphin, K., Ode, P., Neuwald, J., *Otto, J., **Weinberg, A. E.**, Balgopal, M. (May 2024). Reading-to-reason in science (RtRiS): Teaching scientific processes through primary scientific literature (PSL) in undergraduate biology lecture-based courses. NSF IUSE PI Summit, Washington, DC.
- 56. Thompson, N. L., *Ruiz E. A., **Weinberg, A. E.**, *Button, J., Wakefield, W. (April 2024). *Photo-based reflection: An arts-based approach to promote reflection on educator collaboration and position preservice teachers as co-researchers*. American Education Research Association (AERA) Annual Meeting, Philadelphia, PA.
- 55. *Mader, J., Sample McMeeking, L. B., **Weinberg, A. E.** Wright, D., *Scheer, M., *Rhemer, D., Southerland, S., Balgopal, M. (March 2024). *Does "teaching science for social justice" change over time for science teachers?* National Association of Research on Science Teaching (NARST) Annual Conference, Denver, CO.
- 54. *Ruiz, E. A., Boveda, M., **Weinberg, A. E.** (March 2024). *Intersectionally Conscious Collaboration: Developing a Protocol for University-Based Teacher Education*. Council for Exceptional Children (CEC) Annual Conference, San Antonio, TX.
- 53. *Basu. M., Nielsen, A., Silova, I., *Anayatova, D. **Weinberg, A. E.** (March 2024) *Illuminating Alternative Imaginaries for Educational Futures: The Power of Crowd-sourced Art.* Comparative and International Education Society (CIES) Annual Conference, Virtual.
- 52. Karsgaard, C., Silova, I., **Weinberg, A. E.**, Fischman, G., *Anayatova D., Goebel, J. (March 2024). *Co-Visioning Graduate Education for Planetary Futures With Students, Educators, and Activists*. Comparative and International Education Society (CIES) Annual Conference., Virtual.
- 51. Nielsen, A., Silova, I., Karsgaard, C., *Basu, M., Tsotniashvili, K., **Weinberg, A. E.** (March 2024) Weather watchers: Reconfiguring relationships between children and the earth. Comparative and International Education Society (CIES) Annual Conference, Virtual.
- 50. **Weinberg, A. E.**, Silova, I., Karsgaard, C., Fischman, G., *Anayatova, D. (March 2024). *Global Futures Oriented Research Collective on Education for Sustainability (G-FORCES)*. Comparative and International Education Society (CIES) Annual Conference, Virtual.
- 49. **Weinberg, A. E.** (January 2024). Cultivating Community: A Sustainability and Learning Garden Workday at Broadmor Elementary. Learning Planet Festival, Virtual. https://www.learning-planet.org/event/garden-workday-at-broadmor-elementary-school/

- 48. Jordan, M. E., King, J., Duong, H., **Weinberg, A. E.**. (January 2024) *Manifesto to decarbonize research methods*. Learning Planet Festival, Virtual. https://www.learning-planet.org/event/manifesto-to-decarbonizing-research-methods/
- 47. *Diaz-Clark, E., Balgopal, M., **Weinberg, A. E.** (April 2023). *Centering Social Justice in Place-Based PBE*. National Association of Research on Science Teaching (NARST) Annual Conference, Chicago, IL.
- 46. *Jongewaard, R., **Weinberg, A. E.**, & Jordan, M. E., (April 2023). *Preservice Teachers' Visions for Action-Oriented Pedagogies* [Paper presentation]. American Education Research Association (AERA) Annual Meeting, Chicago, IL.
- 45. Balgopal, M., Cocchino, A., **Weinberg, A. E.**, & Sample McMeeking, L. B., (August 2022). *A Model for Critical Pedagogy of Place*. Ecological Society of America (ESA) & Canadian Society for Ecology and Evolution (CSEE) Joint Meeting, Montreal, CA. [withdrawn]
- 44. Sebald, A., **Weinberg, A. E.**, Wakefield, W., Stevenson, C. A. (April 2022). Co-teaching during student teaching: the role of university coaches and mentor teachers. National Field Experience Conference, Greeley, CO.
- 43.*Pretti, E. D, **Weinberg, A. E.**, Merritt, E. M., & Wakefield, W. (April 2022). Future teachers' misunderstandings about sustainability science: from common sense to factual misconceptions [Conference session]. Annual Conference of the Comparative and International Education Society (CIES), Minneapolis, MN.
- 42. **Weinberg, A. E.** ^a Olakkengil, J. R., ^a Rodriguez Portals, L., ^a Valenzuela, E. C., *Ruiz, E. A., Balgopal, M. M., & Sample McMeeking, L. B. (April 2022). *Sweet lemonade from sour lemons: STEM teachers leveraging critical hope in times of crises* [Conference session]. Annual Conference of the Comparative and International Education Society (CIES), Minneapolis, MN.
- 41. **Weinberg, A. E.**, *Cocchino, A., Sample McMeeking, L. B., & Balgopal, M. (March 2022). *Critical pedagogy of place to enhance ecological engagement activities: Expanding "place" beyond the biophysical*. National Association of Research on Science Teaching (NARST) Annual Conference, Vancouver, BC, Canada.
- 40. Balgopal, M., *Wright, D., **Weinberg, A. E.**, Sample McMeeking, L. B., & Diaz-Clark, E. (March 2022). How some early-career STEM teachers achieved agency during the COVID-19 pandemic. National Association of Research on Science Teaching (NARST) Annual Conference, Vancouver, BC, Canada.
- 39. **Weinberg, A. E.**, *Jongewaard, R., & Jordan, M. E., (October 2021). *Action-oriented pedagogies for sustainability education*. The Scholarly Consortium for Innovative Psychology in Education Annual Conference, Virtual Conference.
- 38. *Gibbs, N. P., *Piepgrass, N. A., **Weinberg, A. E.**, Oakes, W. P., & Nagashima, J. T. (October 2021). *Dispositions for Principled Innovation: A scoping review of research on values-centered dispositions in teacher preparation.* [Paper presentation]. From Values Education to Principled Innovation, Mohamed I University, Oujda, Morocco, Virtual Conference.
- 37. *Schmidt, A., & **Weinberg, A. E.** (October 2021). *Teachers' perceptions of using outdoor spaces for learning during a global pandemic.* North American Association of Environmental Education (NAAEE) Annual Conference, Virtual Conference.

- 36. *Wright, D., Balgopal, M., & **Weinberg, A. E.**, Sample McMeeking, L. B. (April 2021). *Using an ecological model to study novice STEM teacher professional resilience during the COVID-19 pandemic*. National Association of Research on Science Teaching (NARST) Annual Conference, Virtual Conference.
- 35. **Weinberg, A. E.**, & Boveda, M. (April 2021). *Intersectionally Conscious Collaboration: Validation of a protocol in a university-based teacher education program.* American Educational Research Association (AERA) Annual Conference, Virtual Conference.
- 34. *Wright, D., Balgopal, M., **Weinberg, A. E.**, & Sample McMeeking, L. B. (October 2020) *Instilling a Sense of Place*. Hands-on workshop presented at the Life Science Discovery Conference, Virtual Conference.
- 33. Sebald, A., **Weinberg, A. E.**, & *Wakefield, W. (October 2020). *Toward conceptual clarity: A summary of the co-teaching literature*. National Conference on Coteaching, Virtual Conference.
- 32. **Weinberg, A. E.**, & *Schmidt, A. (October 2020). *VCAR: An empowerment- and action-oriented methodology for participant-driven research*. North American Association of Environmental Education (NAAEE). Virtual Conference.
- 31. *Wakefield, W., **Weinberg, A. E.**, & Merritt, E. M. (October 2020). *Embracing complexity when teaching about pollution in marine ecosystems*. North American Association of Environmental Education (NAAEE). Virtual Conference.
- 30. Zuiker, S., Riske, A., Merritt, E., Marston, S., *Wakefield, W., **Weinberg, A. E.**, & Thompson, M. (October 2020). *Gardening by design: Understanding and enhancing garden-based teaching in schools*. North American Association of Environmental Education (NAAEE). Virtual Conference.
- 29. Sebald, A., Stevenson, C. A. **Weinberg, A. E.**, & *Wakefield, W. (April 2020). Co-teaching during student teaching: The role of university coaches and mentor teachers. National Field Experience Conference, Greely, CO. (Conference Cancelled)
- 28. **Weinberg, A. E.**, Trott, C. D., *Wakefield, W. W., & Merritt, E. M. (April 2020). "It challenges my beliefs and my comfortability": Transformative learning in a sustainability science course for preservice elementary teachers. American Educational Research Association (AERA) Annual Conference, San Francisco, CA. (Conference Cancelled)
- 27. **Weinberg, A. E.**, & Trott, C. D. (March 2020). *University-community partnerships for transdisciplinary learning and collaborative sustainability action: From instructing 'what is' to imagining 'what if?'*. Comparative and International Education Society (CIES) Annual Conference, Miami, FL. (Converted to Virtual Conference)
- 26. Weinberg, A. E., & Boveda, M. (December 2019). Intersectionally Conscious Collaboration: Validation of a protocol in a university-based teacher education program. Arizona Educational Research Organization (AERO) Annual Conference, Tempe, AZ.
- 25. **Weinberg, A. E.**, Balgopal, M., Sample McMeeking, L. B., & *Wright, D. (July 2019). *Bridging preservice and inservice teaching through a structured mentoring program*. Annual National Science Foundation (NSF) Noyce Summit, Washington DC.
- 24. Sebald, A., Weinberg, A. E., Pike, E., & Stevenson, C.A. (October 2018). Toward a unifying framework for research in co-teaching in teacher education. National Conference on Co-

- Teaching. St. Cloud, MN.
- 23. Sample McMeeking, L. B, **Weinberg, A. E.**, & Trott, C. D. (October 2018). *Interdisciplinary pedagogical content knowledge: Identifying teacher perceptions about efficacy and integrating.* School Science and Mathematics Convention. Little Rock, AR.
- 22. **Weinberg, A. E.**, Sample McMeeking, L. B., & Trott, C. D. (October 2018). *ICMI: A theoretical and practical framework for integrating STEM*. School Science and Mathematics Convention. Little Rock, AR.
- 21. Sample McMeeking, L. B., & Trott, C. D & **Weinberg, A. E.** (June 2018). *Participatory Action Research Experiences for Undergraduates: Exploring Challenges and Opportunities of a Coordinated Approach*. Network of STEM Education Centers Conference. Columbus, OH.
- 20. *Wright, D., **Weinberg, A. E.**, Balgopal, M., & Sample McMeeking, L. B. (March 2018). *An examination of persistence in becoming a rural teacher "insider"*. National Association of Research on Science Teaching (NARST) Annual Conference, Atlanta, GA.
- 19. Sample McMeeking, L. B., **Weinberg, A. E.**, & *Trott, C. D. (November 2017). *Interdisciplinary science and mathematics education: A systematic review.* School Science and Mathematics Convention, Lexington, KY.
- 18. *Pike, E., Stevenson, C. A., & **Weinberg, A. E.**, & Sebald, A. (October 2017). *Co-teaching in teacher preparation: A study of approaches and evidence*. Colorado Association for Teacher Educators Annual Conference, Greeley, CO.
- 17. Sebald. A., **Weinberg, A. E.**, & *Pike, E. (October 2017). Coteaching in teacher preparation: A scoping review of existing scholarship and research. Coteaching in Clinical Practice Conference, Bloomington, MN.
- *Wright, D., Balgopal, M., Weinberg, A. E., & Sample McMeeking, L. B. (July 2017). Teacher professional resilience through place-based mentoring. Annual NSF Noyce Summit, Washington DC.
- 15. **Weinberg, A. E.**, Sample McMeeking, L. B., *Trott, C. D., & *Howe, J. (April 2017). *Interdisciplinary science and mathematics education: A systematic review and meta-analysis*. American Educational Research Association (AERA) Annual Conference, San Antonio, TX.
- 14. **Weinberg, A. E.**, & Stevenson, C. (April 2017) *A quasi-experimental examination of an innovative professional development school model*. American Educational Research Association (AERA) Annual Conference, San Antonio, TX.
- 13. *Long, S. A., & **Weinberg, A. E.**, (January 2017). *Mentoring of novice STEM teachers in high-needs schools*. Conference on Academic Research in Education (CARE), Las Vegas, NV.
- 12. **Weinberg, A. E.**, & Sample McMeeking, L. B. (April 2016) *Mathematics and science curriculum integration: An exploratory study of use and skill transfer.* American Educational Research Association (AERA) Annual Conference, Washington, DC.
- 11. Stevenson, C. A., & **Weinberg, A. E.** (April 2016). The influence of an innovative professional development school model for early childhood education teacher preparation. American Educational Research Association (AERA) Annual Conference, Washington, DC.
- 10. Sample McMeeking, L. B., Weinberg, A. E., & *Boyd, K. J. (April 2015). Participatory action

- research experiences for undergraduates. American Educational Research Association (AERA) Annual Conference, Chicago, IL.
- 9. Stevenson, C. A., & **Weinberg, A. E.** (April 2014). *Mutually beneficial partnerships for essential learning in early childhood and elementary settings*, National Field Experience Conference, Greeley, CO.
- 8. **Weinberg, A. E.**, & Sample McMeeking, L. B. (April 2014). *Computational thinking: An investigation of the existing scholarship and research*. American Educational Research Association (AERA) Annual Conference, Philadelphia, PA.
- 7. Sample McMeeking, L. B., & **Weinberg, A. E.** (December 2013). *Participatory action research experiences for undergraduates*. American Geophysical Union Annual Conference, San Francisco, CA.
- 6. **Weinberg, A. E.**, Wolgemuth, J., & Albright, L. (April 2011). *In the short-term: Measuring the impact of brief math and science interventions on student motivation.* American Educational Research Association (AERA) Annual Conference, New Orleans, LA.
- 5. **Weinberg, A. E.,** & Albright, L. (April 2010). The integration of biology and mathematics using BioMath modules: Longer-term effects on teachers and students. American Educational Research Association (AERA) Annual Conference, Denver, CO.
- 4. **Weinberg, A. E.**, Basile, C. G., & Albright, L. (April 2009). *The meaning of summer science and math camp for middle school youth: A statewide evaluation*. American Educational Research Association (AERA) Annual Conference, San Diego, CA.
- 3. Fritz (Weinberg), A. E., Morgan, G. A., Philofsky, A., Hepburn, S., & Fidler, D. (May 2008). Comparisons of parental perceptions of mastery motivation in children with autism, down syndrome, and developmental disabilities with those who are typically developing. Developmental Psychology Research Group Retreat, Estes Park, CO.
- 2. Cooner, D. D., Stevenson, C. A., & **Fritz (Weinberg), A. E.** (July 2007). *Mapping the journey toward the principalship: A mixed methods design*. Mixed Methods Annual Conference, Cambridge, England.
- 1. Gloeckner, G. W., Fritz (Weinberg), A. E., A. E., & Stevenson, C. A. (July 2007). *Aha moments in learning mixed methods research: Ph.D. students and professor share moments of clarity.* Mixed Methods Annual Conference, Cambridge, England.

B. Invited Presentations

- 14. Silova, I., **Weinberg, A. E.**, *Anayatova, D., *Nabulega, S., (March 2025). *Manifesto for Decarbonizing Scholarship and Research*. Teachers College Doctoral Council Conference. Poster.
- 13. Silova, I., **Weinberg, A. E.**, Jordan, M. E., Cashion, M. (August 2023). *Panel Discussion: Education for a Sustainable Future*. Underwriters Laboratories Research Institutes Symposium.
- 12. Silova, I., **Weinberg, A. E.**, Jordan, M. E., Darira, S., Clement, V. (February 2023). *The Turning Points of Education Transformation: Mobilizing the Power of Science, Art, and Imagination for Ecological Justice* [Keynote Address]. US Summit on Transforming Education, Virtual. https://www.youtube.com/watch?v=kpLrCvUZeYI&list=PLdS7e2jwuDEcbVMxrlF3px41qMoYoK

- ZJf&index=10.
- 11. **Weinberg, A. E.,** et al. (January 2023). *Learning Futures Collaboratives: Reimagining Education for Planetary Futures* [Panelist] Learning Planet Festival. Virtual.
- 10. **Weinberg, A. E.**, Audrain, R. L. (October 2021) *Next education workforce: Teacher practices and beliefs.* Mary Lou Fulton Teachers College Leadership Circle.
- 9. **Weinberg, A. E.** (December 2020) *Sustainability Education*. Invited guest expert speaker at the "Exploring a Potential Consensus Study on Education for Living in a Changing Climate". Sponsored by the National Academies of Sciences Education, and Medicine's Board on Science Education.
- 8. **Weinberg, A. E.**, Boveda, M., & Tesoriero, G. (November 2020). *Disrupting ableism, leveraging place-based learning and ecological caring, and centering racial justice*. Panel at the Advancing Coherent and Equitable Systems of Science Education (ACESSE) 50+ Virtual Network Meeting, University of Washington.
- 7. Boveda, M., & **Weinberg, A. E.** (November 2020). *Setting your trajectory.* Faculty Advancement Session. ASU, Tempe, AZ. [presenters listed alphabetically]
- 6. Gee, E., Harris, K., Mathur, S., & **Weinberg, A. E.** (October 2019) *Recruitment, advising, & mentoring doctoral students.* Faculty Advancement Session. ASU, Tempe, AZ. [presenters listed alphabetically]
- 5. **Weinberg, A. E.** (September 2018) *A scoping review of coteaching in teacher education.* ASU MLFTC Faculty Research Spotlight.
- 4. Anderson, K., Kim, J., & **Fritz (Weinberg), A. E.**, (March 2018) *How'd they do that: Advice from early career colleagues with grant writing experience*. Junior Faculty Development Workshop. ASU, Tempe, AZ. [presenters listed alphabetically]
- 3. Cooner, D. D., Drager, J., Searle, J., & Fritz (Weinberg), A. E. (November 2014). Developing highly effective teacher collaborators by means of innovative coteaching training and practice throughout teacher preparation at Colorado State University. Colorado's Educator Preparation Faculty Summit, Denver, CO.
- 2. Stevenson, C. A. & Fritz (Weinberg), A. E. (April 2014). Mutually beneficial partnerships for essential learning in early childhood and elementary settings. National Field Experience Conference, Greeley, CO.
- 1. Balgopal, M., Butler, C., Stevenson, C. A., & Fritz (Weinberg), A. E. (December 2013). *K-12 STEM teacher education at Colorado State University*. University of Northern Colorado's Colorado STEM Teacher Symposium.

VI. SPONSORED PROJECTS

A. Externally Funded Grants: Ongoing (month and year indicate start and end dates)

 October 2024 - September 2028. Professional Learning to Navigate Student Uncertainty for Productive Struggle around Equity-oriented Sensemaking PI: Y-C. Chen, co-PIs: A. E. Weinberg, M. E. Jordan, A. Holton. National Science Foundation: Discovery Research in K-12 Award #2404966. \$2,311,990 total awarded

- 5. September 2024 August 2023. Educators' motivations and experiences with action-focused environmental education: Examining multi-level educational, ecological, and psychosocial impacts. PI: C. Trott, University of Cincinnati; co-PIs A. E. Weinberg, ASU; V. Derr, California State University, Monterrey Bay. National Oceanic and Atmospheric Administration (NOAA). Invited proposal. \$15,000 total awarded.
- 4. September 2024 August 2027. Empowering Youth Action: Investigating Online Platforms for Climate Education. Pl: A. E. Weinberg, co-Pls: I. Silova, M. E. Jordan, R. Pandya, V. Desimoni. UL Research Institutes' Discoveries in Safety Grants Program. \$599,348 total awarded.
- 3. May 2024 April 2026. *ULRI Sustainability Education Fellowship*. PI: M. E. Jordan, co-PIs: **A. E. Weinberg**. Underwriters Laboratories Research Institutes. \$500K total awarded.
- September 2023 August 2024. AccelNet-Design: Global Futures Oriented Research Collective on Education for Sustainability (G-FORCES). Pl: I. Silova, co-Pls: A. Weinberg; G. Fischman; C. Karsgaard. NSF Solicitation 21-511: Accelerating Research through International Network-to-Network Collaborations (AccelNet) Program. \$250,000 total awarded.
- July 2022. Reading to Reason in Science (RtRiS): Teaching scientific processes through reading-to-learn in undergraduate biology lecture-based courses. Senior Personnel: A. E. Weinberg, PI: M. Balgopal, co-PI: P. Ode. National Science Foundation Solicitation 21-579: Improving Undergraduate STEM Education (IUSE). \$299,493 total awarded. \$7,500 consultant fee for external evaluation.

C. Externally Funded Grants: Concluded (month and year indicate start dates)

- 12. July 2020 December 2022 (with no cost extension). Supplemental Research: Studying novice teachers' adaptive capacity using the Panarchy model. PI: A. E. Weinberg, Co-PI: M. Balgopal, L. Sample McMeeking, D. Wright, Colorado State University. National Science Foundation. \$158,000 total requested, \$18,009 ASU.
- 11. October 2018 September 2022. Reimagining the Education Workforce for the 21st Century: Preparing Teachers through Personalized Learning Modules and Diversified Clinical Experiences (REW), PI: C. Basile; Co-PIs: B. Maddin; N. L. Thompson, A. E. Weinberg, T. Foulger. US Department of Education CFDA Number 84.336S, Teacher Quality Partnership Grant Program. \$4,979,769 awarded.
- 10. January 2016 December 2022 (with no cost extension). CSU Noyce Phase II: Empowering Scholars and STEM Teachers, PI: M. Balgopal, Department of Biology, CSU; Co-PIs: A. E. Weinberg, School of Education, CSU (at MLFTC, ASU since August 2017); P. Kennedy, Department of Mathematics, CSU (replaced by L. B. Sample-McMeeking in 2018); J. Nerger, College of Natural Sciences, CSU; T. Siller, Department of Engineering, CSU. NSF Award: 1540794, \$799,487 total budget.
- July 2015 June 2019. Mathematical and Computational Methods for Planning for a Sustainable Future (PS-Future), PI: M. Cozzens, DIMACS, Rutgers University, Co-PIs: T. Carpenter & R. Jordan, DIMACS, Rutgers University, Evaluation Research Team: L. B. Sample McMeeking, CSU, & A. E. Weinberg, ASU. NSF Solicitation 15-588: Discovery Research K-12 (DRK-12) Program. NSF Award: 1503414, \$1,469,396 total budget
- 8. July 2017. 2nd Annual Workshop on PK-12 Education for the Planet Earth of Tomorrow (Theme: STEM Equity), PI/Organizer: A. E. Weinberg, School of Education, CSU; Co-Organizer: J. Howe, CSU School of Education & Poudre School District Administrator. Supported by the NSF-

- funded DIMACS Special Program: Mathematics of Planet Earth 2013+ at Rutgers University, \$12,000 total contract for direct participant support.
- January 2011-December 2016. Colorado State University Noyce Scholarship Program. PI: A. E. Weinberg; Co-PIs: C. A. Stevenson, School of Education, CSU; P. Kennedy, Department of Mathematics, CSU; J. Nerger, College of Natural Sciences, CSU; T. Siller, Department of Engineering, CSU. NSF Solicitation: 10-514: Robert Noyce Teacher Scholarship Program. NSF Award: 1035298, \$1,200,000 total.
- 6. January 2016. Workshop on PK-12 Education for the Planet Earth of Tomorrow (Theme: Interdisciplinary Approaches to STEM Education), PI/Organizer: A. E. Weinberg, School of Education, CSU; Co-PI/Organizer: L. Sample McMeeking, CSU STEM Center. Supported by the NSF-funded DIMACS Special Program: Mathematics of Planet Earth 2013+ at Rutgers University, \$24,000 total contract for direct participant support.
- 5. February 2015. Paradigm Shift: Revolutionizing our Understanding of Antimicrobial Resistance Ecology through Whole Genome Analysis of Microbial Communities, PI: P. Morley, Clinical Sciences, CSU; Co-PIs: H. Yang, Animal Science, CSU; D. Woerner, Animal Science, CSU; D. C. Van Metre, Clinical Sciences, CSU; M. Thomas, Animal Science, CSU; J. Ruiz, Computer Science, CSU; S. J. Reynolds, Environmental and Occupational Health, University of Colorado Denver; C. S. McConnel, Clinical Sciences, CSU; R. J. Delmore, Animal Science, CSU; M. L. Bunning, Food Science & Human Nutrition, CSU; C. Boucher, Computer Science, CSU; K. Belk, Animal Science, CSU; A. E. Weinberg, School of Education, CSU; L. B. Sample McMeeking, STEM Center, CSU. USDA-NIFA GRANT: 119587, \$2,249,609 total budget.
- 4. October 2013. Expanding Literacy Strategies for Teacher Effectiveness, PI: C. A. Stevenson, School of Teacher Education & Principal Preparation (STEPP), CSU; Co-PIs: A. E. Weinberg, M. Balgopal, D. Cooner, School of Education, Colorado State University, Colorado Department of Higher Education CFDA Number: 84.367, Improving Teacher Quality Grant 2013-14, \$158,396 total budget.
- 3. September 2013. *Motivating First Year Calculus with Robotics*, PI: J. Cantrella, Mathematics Department, University of Georgia. Evaluation team: **A. E. Weinberg**; M. Cozzens, DIMACS, Rutgers University. NSF Solicitation: 12-527, Award # 124550, Transforming Undergraduate Education in Science, Technology, Engineering, and Mathematics (TUES) Program, \$10,000 total contract.
- June 2013. Mathematics of Planet Earth (MPE 2013+), PI: F. Roberts, Center for Discrete Mathematics & Theoretical Computer Science (DIMACS), Rutgers University; Co-PI: E. Fiorini, DIMACS, Rutgers University. Evaluation Team: A. E. Weinberg; M. Cozzens, DIMACS, Rutgers University, \$15,000 total contract.
- 1. September 2012. *Mathematical and Computational Methods for Planning for a Sustainable Future* (*PS-Future*), PI: M. Cozzens, DIMACS, Rutgers University, Co-Pls: T. Carpenter, DIMACS, Rutgers University, CSU Subaward recipient: **A. E. Weinberg**, NSF Solicitation 11-588: Discovery Research K-12 (DRK-12) Program, \$425,773 total budget.

D. Internally Funded Grants: Ongoing (month and year indicate start and end dates)

2. June 2024-.May 2025 Education, Sustainability, and Global Futures. PI: A. E. Weinberg, Co-PI: I. Silova, G. Fischman. ASU MLFTC Learning Futures Collaboratives Seed Grant Program. Approx. \$14,000 awarded.

1. March 2022. Positioning K-8 Students for Transformative Sustainability Learning: Teachers' Action-Oriented Pedagogies. Co-PI: A. E. Weinberg, Co-PI: M. E. Jordan. ASU Institute for Social Science Research Seed Grant Program. \$7,000 awarded.

E. Internally Funded Grants: Concluded (month and year indicate start and end dates)

- 11. June 2023-May2024. *Education, Sustainability, and Global Futures*. PI: **A. E. Weinberg**, Co-PI: I. Silova, G. Fischman. ASU MLFTC Learning Futures Collaboratives Seed Grant Program. Approx. \$14,000 awarded.
- 10. May 2022. Education, Sustainability, and Global Futures. Pl: A. E. Weinberg, Co-Pl: I. Silova, G. Fischman. ASU MLFTC Learning Futures Collaboratives Seed Grant Program. \$13,471 awarded.
- August 2021. Studying STEM Teacher Development Using the Panarchy model. PI: A. E. Weinberg, CoPIs: *E. A. Ruiz, L. Rodriguez Portales, E. Valenzuela, J. Olakkengil. Office of Scholarship & Innovation 2019 Internal Research Grant Program, Mary Lou Fulton Teachers College. \$310 awarded.
- 8. November 2020. Exploring Educators' Perceptions of Next Education Workforce Principles. Pl: A. E. Weinberg, CoPls: *R. L. Audrain & *A. Schmidt. ASU. Office of Scholarship & Innovation 2019 Internal Research Grant Program, Mary Lou Fulton Teachers College. \$310 awarded.
- 7. March 2020. *Multiple Perspectives on Energy Sources: Student Voices on Flipgrid*, Pls: E. Merritt, L. Archambault, **A. E. Weinberg**, ASU;. Office of Scholarship & Innovation 2019 Internal Research Grant Program, Mary Lou Fulton Teachers College. \$480 awarded.
- 6. September 2019. Teacher Candidate Affordances and Perceptions of Efficacy in Collectively-Taught Elementary and Typical Student Teaching Settings, PIs: A. E. Weinberg, M. Boveda, ASU. Office of Scholarship & Innovation 2019 Internal Research Grant Program, Mary Lou Fulton Teachers College. \$600 awarded.
- 5. June 2019. *Protocols for Coteaching and Collaborative Practices*. Pls: **A. E. Weinberg**, M. Boveda. Faculty Fund for Teaching Excellence and Student Success, Arizona State University, \$10,000 awarded.
- 4. June 2018 May 2019. Roles and Self-efficacy of Teachers and Education Professionals in Collectively-Taught Elementary Settings, PI: A. E. Weinberg, ASU. ASU Institute for Social Science Research Seed Grant Program. \$7,920.50 awarded.
- 3. May 2018 May 2019. Teacher Candidate Affordances and Perceptions of Efficacy in Collectively Taught Elementary and Typical Student Teaching Settings, PI: **A. E. Weinberg**, ASU; Co-PI: Brent Maddin, ASU. Office of Scholarship & Innovation 2017-18 Internal Research Grant Program, Mary Lou Fulton Teachers College. \$6,080 awarded.
- 2. December 2016. *EPPI-Reviewer Software Subscription*. PI: **A. E. Weinberg**, School of Education, CSU. School of Education Mini-Grant Award. \$1,000 total.
- 1. December 2016. A Long-Term Quasi-Experimental Study of Pedagogies of Practice within a Professional Development School Partnership. Pls: A. E. Weinberg & C. A. Stevenson, School of Education, CSU. School of Education Mini-Grant Award. \$21,000 total.

VII. AWARDS & RECOGNITION

2024 SUN Award Recognizes individual excellence. Sun award

2024 The New Educator Taylor and Francis Outstanding Article Award: Sustaining teachers through collaboration and autonomy: Outcomes of a professional development experience (Audrain, Ruiz, Maresso Wyatt, Nailor, Weinberg 2023). I was corresponding author, mentoring graduate students Audrain and Ruiz as we collaborated with education practitioners Maresso Wyatt and Nalior.

2021 Outstanding Faculty Mentor Award Nominee Nominated by graduate students for ASU's Graduate College's mentoring award for my dedication to the craft of mentoring and commitment to students.

2020 Excellence in Integrating Teaching and Scholarship. Awarded by ASU's Mary Lou Fulton Teachers College's leadership and faculty. Annually, MLFTC honors one faculty member for their commitment to student success and working together to change the world. Awardees must have demonstrated that they explicitly link theory with practice, conduct use-inspired research, maintains a sustained research agenda about teaching, engage in cutting-edge teaching practice, and must have a reputation for being a model teacher and mentor.

2019 Arizona Educational Research Organization (AERO) Early Career Research Award. Recognized as a promising early career researcher.

2019 ASU Catalyst Award. Andrea Weinberg & Mildred Boveda were nominated for this award, which recognizes outstanding contributions in fostering and promoting diversity and inclusion at ASU and beyond.

School Science and Mathematics Journal "Top Downloaded Article" Award (2017-2018). Weinberg & Sample McMeeking (2017) recognized as a top 20 most read paper in the *School Science and Mathematics* journal.

2018, 2019 William T. Grant Scholars Program Nominee. Nominated to submit a proposal by ASU's Mary Lou Fulton Teachers College. Only one faculty member from each college is able to participate each year.

2017 Graduate Advising and Mentorship Award. Nominated for the CSU Graduate Student Council's *Graduate Advising and Mentorship Award*.

2011-12 NSF CADRE Fellow. The competitive CADRE Fellows program is a capacity-building experience for early career researchers and developers. Fellows learn about DRK-12 research beyond their projects, network with researchers and developers from across the country, and gain insights into the NSF's perspective on successful and effective research and development.

2009 National Center for Educational Statistics (NCES) International Databases Training Seminar. Awarded support from the NCES to attend a 3-day training program for International Student Assessment (PISA), the Trends in International Mathematics and Science Study (TIMSS), and the Progress in International Reading Literacy Study (PIRLS).

2009 Certified What Works Clearinghouse (WWC) Reviewer. Attended multi-day training, passed the WWC certification test, and have successfully published using WWC evidence standards and procedures.

VIII. UNIVERSITY TEACHING, COURSE DEVELOPMENT, & ADVISING

A. University Teaching

Note: Courses Taught at Arizona State University (♥) & Colorado State University (◊)

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	(face-to-face,	Credit	Taught
Course Title	online, hybrid)	Hours	(as of Sp22)
Graduate Courses (Ph.D.)			
Ψ DCI 691: Introduction to Teacher Education	f-t-f	3	2
Research and Practice	1-0-1	5	2
Ψ EPA 752: Research Design	f-t-f	3	1
Ψ DCI 792: Research	f-t-f	3	2
Ψ TEL 706: Introduction to Doctoral Studies	Н	3	1
♦ Introduction to Research Methods	0	3	3
♦ Program Evaluation	f-t-f	3	2
≬ Independent Study	f-t-f	3	1
Graduate Courses (M.Ed. & M.S.)			
Ψ LSE 599: Thesis	f-t-f	3	4
Ψ DCI 792: Research	f-t-f	3	2
◊ Action Research	f-t-f, o, h	3	6
♦ Curriculum Development	0	3	3
◊ Contexts of Schooling	f-t-f	3	1
	f-t-f	3	3
♦ Practicum Seminar	f-t-f	1	4
♦ Student Teaching Supervision	f-t-f	variable	3
♦ Student Teaching Seminar	f-t-f	1	3
♦ Teacher Preparation Capstone Seminar	f-t-f	1	3
Undergraduate Courses			
Ψ MTE 280: Mathematics for Elementary Teachers	f-t-f	3	1
Ψ SPE 416: Quality Practices in Collaborative	f-t-f	3	1
Classrooms	1 (1	Ü	•
Ψ SCN 400: Sustainability Science for Elementary	h	3	5
Teachers			
Ψ BLE 408: SEI for Linguistically Diverse Students/	ı	2	4
SPE 317: Special Education for Culturally and	h	3	1
Linguistically Diverse Children and Youth			
Ψ EDP 310: Educational Psychology (Learning in Context)	f-t-f	1	1
Ψ SOS 492: Honors Directed Study	f-t-f	3	1
♦ Literacy and The Learner	f-t-f	2	3
♦ Differentiated Instruction	f-t-f	3	1
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B. Curriculum Development

Co led the proposal, design and development of a degree program, MA in 2022-24 Education for Sustainability and Global Futures. The proposed degree program is aligned with the institutional mission of ASU as a global leader in innovative sustainability and resilience efforts by making an important contribution to fostering learning futures that can sustain the habitability of the planet, while attaining wellbeing for all humankind. This program is being co-designed using a participatory approach, engaging faculty across ASU, global partners, and also with prospective students, youth activists, educators, and educational leaders. 2021 TEL 706: Introduction to Doctoral Studies - Modified an 11-week online course to a 7-week hybrid course. 2021 SCN400: Sustainability Science for Elementary Teachers - Updated course content 2020 SCN 202: Sustainability Science Literacy for Engaged Global Citizens - Designed a new course that introduces relevant science concepts and issues essential for sustainability literacy (e.g., water, energy, climate). Developed both hybrid and online versions of the course. Obtained SG (general science) designation for this course, to be offered beginning Fall 2022. 2019 EDP310: Learning in Context - Collaborated with Drs. Steve Zuiker and Michelle Jordan to design a service-learning course that utilizes place-based pedagogies within garden spaces and simultaneously support school and community gardens. 2019 BLE408: SEI for Linguistically Diverse Students - Collaborated with Dr. Boveda to Convert from face-to-face to hybrid course format. Six other instructors used the course. 2019 SCN400: Sustainability Science for Elementary Teachers - Redesigned to align with teacher education program aims and concurrent courses 2021 DCI691: Teacher Education Research and Practice: Independently developed curriculum and taught course 2012-2016 Action Research - Independently developed curriculum and created 3 versions course: face-to-face, hybrid, online. These courses are still in use at Colorado State University. 2010 Program Evaluation - Independently designed and taught face-to-face and online courses 2006-2007 Literacy and the Learner - Literacy course for content area secondary teachers (e.g., mathematics, science). Collaborated to design and implement a complex 3-part course: lecture, recitation, lab. The weekly lectures occurred on campus. The recitation and labs were field-based, embedded in 2 local schools, and co-taught by practicing teachers.

C. Student Advising and Committees

ASU Mary Lou Fulton Teachers College PhD Co-Chair

NOTE: Assistant professors in MLFTC in must co-chair with an associate or full professor

Wendy Wakefield (Graduated Spring 2021, Co-Chair with Dr. Michelle Jordan). Dissertation Title: RESET-ting professional development: Fostering mid-career k-8 teachers' identities and actions as culturally responsive science and engineering educators

Note: Dr. Wakefield began a tenure-track position in Fall 2021.

Elizabeth Ruiz (Anticipated Spring 2024, Co-Chair with Dr. Sarup Mathur). Dissertation Title: *TBD Grants Received:* 2022 AERA Division H (Research, Evaluation, & Assessment in Schools) *Graduate Student Research Award* (\$1,500)

Awards Received: 2021 Knowledge Mobilization Spotlight Award, ASU MLFTC

2021 Robert B. Rutherford Scholarship Recipient, Teacher Educators for Children with Behavior Disorders (TECBD)

2020 Robert B. Rutherford Scholarship Recipient, TECBD

ASU Mary Lou Fulton Teachers College PhD Committee Member

Nicole Oster (Anticipated Spring 2027)

Dilraba Anayatova (Anticipated Spring 2025)

Esther DeLago Pretti (Graduated Spring 2022)

ASU Mary Lou Fulton Teachers College EdD Chair

Mandy Westfall-Senda

Trevor Johnston (Graduated Spring 2025)

Cassie Jay-Barron (Graduated Fall 2024)

Carleen Brown (Graduated Fall 2024)

Rebecca Heller (Graduated Fall 2024)

Catrina Kranich (Graduated Fall 2024)

Nominated: Hispanic Convocation Outstanding Student Award

Crystal Veber (Graduated Fall 2024)

Denise Kennedy (Degree Posthumously Awarded Spring 2023)

Michael Little-Crow (Graduated Spring 2023)

Jeanette Calo (Graduated Fall 2022)

Emily Greene (Graduated Fall 2022)

Jason Whetten (Graduated Fall 2022)

<u>Awards Received</u>: 2021 Institute of Social Sciences Graduate Research "Honorable Mention" (\$800 awarded)

ASU Mary Lou Fulton Teachers College EdD Committee Member

Jessica Button

Julie Case (Graduated Spring 2022)

Danica Hendrickson (Graduated Fall 2022)

ASU Mary Lou Fulton Teachers College Master's Chair

Sarah Suloff (Graduated Spring 2021). Thesis Title: *Nature journaling: A mediating activity for scientific practices*

ASU Mary Lou Fulton Teachers College Master's Committee Member

Isis Howard (Spring 2023). Thesis Title: Identity, community, and sustainability: A three-phase approach to integrating critical pedagogies and agency to foster holistic identity development

ASU Barrett Honors College Honors Advisor

- Eliana Valenzuela (Anticipated Spring 2023) STEM teachers leveraging critical hope in times of crises (with Joseph Olakkengil)
- Joseph Olakkengil (Anticipated Spring 2023) STEM teachers leveraging critical hope in times of crises (with Eliana Valenzuela)
- Ashley Dussault (Graduated Spring 2021). Honors Thesis Title: integrating systems thinking concepts into an elementary school gardening program: Analyzing sustainability education
- Stephanie Bai (Graduated Spring 2020). Honors Project: *Urban Biodiversity and Schoolyard Habitats*

ASU Barrett Honors Fellows 2020-2021: Research Experience

Eliana Valenzuela (Biology)

Joseph Olakkengil (Computer Science)

Limary Rodriguez Portales (Biology)

ASU Barrett Honors College Second Reader

Katherine (Kate) Klebosky (Spring 2017). Thesis/Creative Project Title: The relationship between flexible seating outcomes and Arizona teachers' attitudes towards flexible seating

CSU School of Education Ph.D. Committee Member

- Raynie Wood (Spring 2017). Dissertation Title: Establishment of an internationally based offshore branch campus: An Australian case study.
- Neely Clapp (Spring 2017). Dissertation Title: Teachers' and researchers' beliefs of learning and the use of learning progressions.

CSU Educational Sciences M.Ed. Advisor or Committee Member

- Spring 2017: Aimee Burnett, Macey Downey, Samantha (Sammy) Feliz, Mary Fowler, Taylor French, Rebecca (Becky) Fuller, Alexandra (Lexi) Pollock, Savannah Pullin, Alexandra (Alex) Schneider, Candice Silva, Rebecca Trehus
- Spring 2016: Haley Fletcher, Jessica Guidotti, Kelsey Jenkins, Nicole Kiesel, Gabrielle (Gabby) Mallette, Amber Pennell, Alison Schnitzler, Jillian (Jill) Titcomb, Madison Zelias

Spring 2015: Alison Ambrogio, Alicia Bermudez, Rachel Bruggen, Katelyn (Katy) Cunneen, Morgan Dorsey, Nichole Fritzche, Deandra Gardner, Nichole Guidotti, Johannes Paraan, Michelle Vandewoestyne

Spring 2014: Bryannita (Bry) Aiken, Mary Butterfield, Rachel Chapin, Leah Hittesdorf, Alison Horsch, Millicent Lippert, Tiffiny Pieper, Gabriella (Gabbi) Polen, Rachel Wilson

<u>Dual Major, Biological Science & Sociology Undergraduate Honors Advisor</u>

Spring 2014: Emily Hall

Social Work M.Ed. Outside Committee Member

Spring 2016: Christopher Barker, Evie (Evan) Decker, Sierra Weast

IX. SERVICE

A. International and National Leadership

Committee Membership

2022-2025	Co-chair, Division K (Teaching and Teacher Education) Section 3 (Teachers' Lives, Identities, and Journeys), American Educational Research Association
2020-2022	Finance Committee, School Science and Mathematics Association
2021-Present	Disrupting ableism, leveraging place-based learning and ecological caring, and centering racial justice committee of the Advancing Coherent and Equitable Systems of Science Education (ACESSE) 50+, University of Washington.

Editor-in-Chief

2023-Present	<u>-ducation</u> :	<u>tor Planetar</u> v	<u>/ Futures</u> Substack

NSF Review Panel

Spring 2024	NSF AccelNet Prop	posal Review Panel

Editorial Boards

2023-Present	Editorial Review Board, Review of Educational Research (RER)
2023-2024	Associate Editor, Education Policy Analysis Archives (EPAA)
2020 - Present	Editorial Review Board, The Teacher Educator
2019 - 2023	Editorial Review Board, Sustainability

Additional Editorial Commitments

2022 - Present Occasional Reviewer, Environmental Education Research

2022	Occasional Reviewer, The Lancet Planetary Health
2021 - Present	Occasional Reviewer, Frontiers in Communication
2020 - Present	Occasional Reviewer, Journal of Environmental Education
2020 - Present	Occasional Reviewer, Teaching and Teacher Education
2018 - Present	Occasional Reviewer, Science Education
2018	Reviewer, Visual Impairment and Deafblind Education Quarterly
2017 - 2019	Occasional Reviewer, Sustainability
2016 - Present	Occasional Reviewer, School Science and Mathematics
2014 - 2015	Occasional Reviewer, Networks: The Online Journal for Teacher
	Research
2011	Occasional Reviewer, The Journal of Geoscience Education

Book Review

Rowman & Littlefield Press (2023) Action Research: An Educational Leader's Guide to School Improvement

Corwin Press (2008) Five steps in statistics: A consumer's guide to inferential decision making.

B. Advisory Boards & Consultancies

Supporting Teacher Scholars through Education and Professional Development in Place-Based Education; National Science Foundation's Robert Noyce Teaching Scholarships, Track 1: Scholarships and Stipends program; NSF Award 1950290. Role: Advisory Board Leader, \$500 per year, \$1500 travel per year, 5 years

Noyce Scholar Retention in Racially and Culturally Non-dominant Communities: Studying the Relationship between Partnerships and Persistence in the Teaching Profession; National Science Foundation's Robert Noyce Teaching Scholarships, Track 4: Research; NSF Award 2050608. Role: Advisory Board Member.

C. Professional Development for Educators

- 2024 present. Xplorlabs Educator Fellowship. co-led with Michelle Jordan (PI). This yearlong fellowship integrates sustainability, safety science, and Action-Oriented Pedagogies to enhance classroom learning. The 2024-25 fellowship included 26 participants, including educators, mentor fellows, and students, and the 2025-26 will be of similar size.
- 2018 2023 <u>Sense of Place</u> Professional Development Series for Secondary STEM Teachers. This series for preservice and inservice STEM teachers is co-designed with Drs. Balgopal and Sample-McMeeking at Colorado State University. The focus is

integrating STEM education and social justice in secondary education STEM settings. Dates and topics are as follows:

March 12, 2020	Climate Modeling & Impacts on Diverse Communities
Nov. 13, 2019	CRISPR & Bioethics
Oct. 1, 2019	Organizational Routines & Classroom Diversity
April 22, 2019	Pollinator Biology & Communicating Across Diverse Audiences
Feb. 25, 2019	Community Nutrition & Formal Learning Assessments
Nov. 14, 2018	Public Health & Student Accommodations
Oct. 4, 2018	Graduate Studies for STEM Teachers
Oct. 2, 2018	Engineering Design & Strengths-Based Models
April 17, 2018	Watershed Science & Human Lives
Feb. 21, 2018	Citizen Science & Relationships with Diverse Stakeholders

2019 - present <u>Classroom, school, community, and beyond: Student-led action for change.</u>

Professional Development Series for Elementary teachers with the aim to integrate student-led action for lasting impact toward more sustainable classrooms, schools, and communities. This ongoing participatory PD series for eight inservice teachers occurred twice monthly in person from July 2019-March 2020, virtually March 2020-January 2022, and resumed in person February 2022.

July 2017

2nd Annual Workshop on PK-12 Education for the Planet Earth of Tomorrow (Theme: STEM Equity). Attended by over 80 STEM teachers from across the Northern Colorado region. I was the PI and Organizer, Co-Organized with John Howe, CSU School of Education & Poudre School District Administrator. Supported by the NSF-funded DIMACS Special Program: Mathematics of Planet Earth 2013+ at Rutgers University

July 2016

Workshop on PK-12 Education for the Planet Earth of Tomorrow (Theme: Interdisciplinary Approaches to STEM Education), Attended by 16 nationally recognized and/or award-winning teachers, who were identified based on their commitment to interdisciplinary approaches to STEM education. I was the PI and Organizer along with Co-PI/Organizer: L. Sample McMeeking, CSU STEM Center. Supported by the NSF-funded DIMACS Special Program: Mathematics of Planet Earth 2013+ at Rutgers University.

Dec 2016

Coteaching in student teaching. Professional Development Workshop (134 attendees). Colorado State University, Fort Collins, CO. with Decker, D., Drager, J., Fothergill, W., Fredericksen, H., Sebald, A., Stevenson, C. A., & Weinberg, A. E. [organizers listed alphabetically]

D. Research Conference Service (outside of leadership shown in section A.)

Proposal Reviewer

2021 Comparative and International Education Society (CIES)

2021	American Educational Research Association Division L: Educational Policies and Politics and the Socio-Political Issues in Mathematics and Science Education Special Interest Group (SIG)
2021	North American Association for Environmental Education (NAAEE)
2020	North American Association for Environmental Education (NAAEE)
2019	Comparative and International Education Society (CIES)
2018	American Educational Research Association <i>Division K: Teaching and Teacher Education</i>
2014-15	American Educational Research Association Division K: Teaching and Teacher

2014-15 American Educational Research Association Division K: Teaching and Teacher Education

Session Chair

2012 American Educational Research Association Division K Section 8: Teacher Professional Development: Impact on Teacher Practices and Student Learning.

C. University Level Service

2023 - Present	ASU Knowledge Enterprise Limited Submissions Review Panelist
2022-2024	ASU University Curriculum and Academic Programs Committee

D. College Level Service

Standing Committees (Elected Positions)

2024-2025	Tenure Track Personnel Evaluation Committee
2023-2024	Career-Track Personnel Evaluation Committee

2019-Summer 2022 MLFTC Curriculum Review Committee

Faculty Search Committees (Elected Positions)

2024	Faculty Search Committee: MLFTC Division 1, Secondary STEM Education, Non-Tenure Track
2023	Faculty Search Committee: Fulton Presidential Professor of Practice and Executive Director, Global Futures-Education Lab
2023	Faculty Search Committee: MLFTC Division 2, Learning Design and Technology, Non-Tenure Track
2022	Faculty Search Committee: MLFTC Division 1, Elementary Education, Social Studies, Tenure Track

Program Level Leadership and Service

2023 - Present	Leadership and Innovation EdD Program Committee
2022-2024	Leadership and Innovation EdD Leader Scholar Community Instructor-Chair
2022- Present	Program Development Team: MA in Education for Planetary Futures (with Iveta Silova & Gustavo Fischman)

2020-Present	Course Coordinator for TEL 706: Action Research in Doctoral Studies
2021-Present	MLFC EdD Admissions Review Committee (I participate in 2 to 3 review cycles each year, reviewing 10-15 applicants each time)
2022-Present	Course Coordinator for SCN 202: Sustainability Science Literacy for Engaged Global Citizens
2021-2023	Course Developer for SCN 202: Sustainability Science Literacy for Engaged Global Citizens
2020-2024	Course Coordinator for SCN 400: Sustainability Science for Elementary Teachers. In addition to keeping the course materials and content up to date for the 10-12 sections of this course offered each year, I promote and support a community of practice among instructors through regular meetings (3-4 times per semester)
2019-2022	ASU MLFTC Educational Policy and Evaluation Program Admissions Reviewer
2019-2024	ASU Learning, Literacies, and Technologies Program Admissions Reviewer
2018-2022	MLFTC Teacher Education Program Redesign

Miscellaneous College Level Service

2023 - present	"Informal faculty mento	r" for a pre-tenure faculty	, a role that is quite extensive
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2020-2021 MLFTC Faculty Awards Committee

2017-Present MLFTC Principled Innovation Steering Committee

E. Community Service

2023-present	Tempe Union Composite Youth Mountain Bike Team Coach. I co-organize practices, lead rides and skills drills, provide coaching and mentorship to student-athletes, support team-building, and foster a positive and inclusive cycling community.
2023-present	Pedal, Girl, Pedal Volunteer and Organizing Committee Member. I attend regular meetings to organize annual cycling events across Arizona. I am a volunteer coach at these events, supporting female and non-binary youth riders in developing confidence and skills in mountain biking.
2021-2023	Tempe Elementary ESSER III Advisory Committee - Parent Representative. Provided input on the allocation and implementation of ESSER III funding to support student learning, safety, and well-being in response to the COVID-19 pandemic. Represented parent perspectives in decision-making processes.
2019-2023	Tempe Elementary School Community Advisory Board/Site Council. Collaborated with school leadership, educators, and community members to provide guidance on policies, programs, and resource allocation. Advocated

for student and family needs to enhance educational experiences and school improvement initiatives.

2020-2021

Arizona Sustainability Alliance Liaison. I was the liaison between the Broadmor Learning Patch (school garden) and the AZSA, whose volunteers supported garden workdays through their Help-A-Farm program. Further, AZSA helped interns from Arizona State University as they assisted with garden maintenance and garden-based learning.

2020-2021

Broadmor Elementary Learning Patch Remote Learning Sub-Committee. I supervised an undergraduate Barrett Honors student (Ashley Dussault) and worked with community volunteers to support the garden-based learning during the period of time that most of the K-5 students in the local school district were learning remotely (March 2020-August 2021). We created monthly video-based lessons (with separate versions for K-2 and 3-5 learners). Videos and associated activities were posted by teachers on Google Classroom.

2019-Present

Broadmor Learning Patch Board Member & Work Day Chair. I was a board member for the learning garden at Broadmor Elementary. Pre-pandemic, the robust garden-based education program was facilitated by community volunteers. Each student in the school (student enrollment was approximately 680 in 2019-2020) came with their teacher and class for monthly hour-long garden-based lessons. In addition, I was the designated garden workday captain, which meant I organized the monthly garden workdays.

2019-2020

KidZone "Urban Biodiversity and Schoolyard Habitats" Program. I supervised an undergraduate Barrett Honors student (Stephanie Bai) as she implemented a semester-long project with K-3 students in a before school program. The culminating product was a grant application to support the development of a schoolyard habitat. Students were positioned to take a leadership role in the development of ideas for the grant. After learning about habitats and the role of biodiversity in dense human (e.g., urban) settings, student groups used art-based methods to present their ideas for the "schoolyard habitats" grant.

2018-2021

Broadmor Elementary "Garden to Cafeteria" Program. I collaborated with five 2nd grade teachers on a year-long place/project-based learning project conceptualized alongside students. We worked with students on the Food Safety plan, part of the process to become certified by the Arizona Department of Health Services to serve food from the school garden in the cafeteria.