Eileen G. Merritt

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Education

University of Virginia, Curry School of Education, Charlottesville, VA

Ph.D., Educational Psychology/ Applied Developmental Science, 2012

• Specialization: Elementary Science and Mathematics Education M.Ed., Science Education, 1994

College of William and Mary, Williamsburg, VA

B.A., Elementary Education, 1987

Higher Education Experience

Adjunct Associate Professor, College of Natural Resources and the Environment, Virginia Tech (2023-)

Course at VT:

• FREC 3754, Environmental Education Service-Learning

Research Scientist, College of Natural Resources and the Environment, Virginia Tech (2020-2022)

Assistant Professor, Elementary Sustainability Science Education, Mary Lou Fulton Teachers College, Arizona State University, 2016 – May, 2020

• Senior Sustainability Scholar, Julie Ann Wrigley Global Institute of Sustainability

Courses at ASU

- SCN 400 Sustainability Science for Teachers (hybrid and online versions)
 - o course coordinator for 10-12 sections each year
- SCN 308 Urban Environmental Education (online)
- SCN 301 Ecology and Natural History of the Sonoran Desert
- EDP 311 Educational Psychology for Teachers (online)
- SOS 596 Capstone Scientific Paper
- DCI 590 Reading and Conference
- DCI 792 Research

Assistant Professor, Curry School of Education, 2013 - 2016

• Program coordinator for Master's Program in Educational Psychology/ Applied Developmental Science

Courses at UVA

- EDLF 5010 Child Development and Learning
- EDLF 8998 Masters Research Internship

- EDLF 7290 Seminar in Educational Psychology
- EDIS 5320 Mathematics in the Elementary School
- EDIS 5871 Teaching Internship Seminar
- EDIS 4881 Field Experience in Elementary Education
- PSED 5500 Teaching Scientific Inquiry and the Nature of Science

Postdoctoral Research Associate, Curry School of Education and CASTL, 2012-2013

Other Relevant Experience in Education

Outdoor Learning Coordinator at Red Hill Elementary, 2024

- Supporting teachers in planning and implementing outdoor learning
- Training volunteers for outdoor activities

Instructor for Virginia Association for Environmental Education, 2022 to present

• Environmental Literacy Course for VAEE Certificate Candidates

North American Association for Environmental Education, Guidelines for Excellence Trainer

- Professional Development Guidelines Course Instructor, 2022, 2023, 2024
- Environmental Education Programs Guidelines, 2022
- K-12 Guidelines for Excellence, 2023

Professional Learning Community Facilitator for semester-long initiative on nature journaling in school gardens, Spring 2019

- Provided materials and ideas to teachers throughout the semester
- Coached and modeled nature journaling activities
- Facilitated a reflection day where we mapped out a PD for other teachers in the coming year

Workshop Facilitator at Cultivating Student Success with School Gardens: A Leadership Summit for School Administrators, Desert Botanical Garden September, 2018

Presenter at K-12 School Garden Workshop for Educators, School of Sustainability, May, 2018

• Presentation and facilitated discussion on benefits of gardens for children

Presenter at Solar 101, Light the Way to a Brighter Future by Re-Energizing and Re-Engineering STEM Learning in Your Classroom workshop for educators, Arizona State University, February 2018.

• Led hands-on workshop, "Simple Circuits with Solar Panels"

Research Assistant, Project Parallax, Curry of Education, 2010 - 2011

• Wrote two problem-based environmental science curricular units in collaboration with Dr. Catherine Brighton, Dr. Carol Tomlinson and other graduate students

 Planned and conducted science PD for second and third grade teachers from Henry County

Fourth Grade Teacher, Albemarle County Virginia, 2000-2008 and 1987 – 1992

- Team leader and member of science vertical team
- Led writing for three successful environmental education grants at Stone-Robinson Elementary

Mentor Teacher, Chesapeake Bay Foundation (CBF), 2006

• Assisted CBF staff in teaching Rivanna watershed course for teachers

Sixth Grade Science and Math Teacher, Chesapeake Public Schools, 1997 - 2000

• Led ecology club and participated in NASA EarthKAM program

Educational Consultant, University of Virginia, Department of Environmental Science, 1995 - 1996

• Worked with Dr. Tanya Furman on an *NSF Career Grant* to write curricula and conduct professional development for teachers on African Geography and Resources

Education Coordinator, Virginia Museum of Natural History at the University of Virginia, 1993 – 1996

• Wrote successful grants to Virginia Foundation for the Humanities to fund curricular projects and conduct teacher professional development on Monacan Indians

Director, Piedmont Environmental Council Natural History Day Camp, 1990-92

Professional Licensure

Postgraduate Professional License, Middle Education Grades 4-8, Commonwealth of Virginia, July 1, 2019 to June 30, 2029.

Honors, Awards, & Fellowships

- Mary Lou Fulton Teachers College Faculty Achievement Award, Excellence in Research for Global Impact, 2019
 Linking Research and Practice Outstanding Publication Award, NCTM, 2017
 Golden Trowel Outstanding Partner Award, City Schoolyard Garden, 2016
 University of Virginia School of Architecture, Center for Design and Health Fellow, 2014 - 15
- Distinguished Paper Award, Virginia Educational Research Association, 2012
- Lead author for "Helping Local Gardeners" and recipients of National Association for Gifted Children (NAGC) Curriculum Award, 2012 and 2013
- Institute of Education Sciences Pre-doctoral Virginia Education Science Training Fellowship, University of Virginia, 2008 2012
- Linking Research and Practice Outstanding Publication Award, NCTM, 2011

- Curry Foundation A.L. Bennett Endowed Scholarship, 2011
- Golden Apple Award, Albemarle County Public Schools, 2007
- Conservation Teacher of the Year, Thomas Jefferson Soil and Water Conservation District, 1990

Research Articles and Book Chapters (* indicates student author)

- 1. Merritt, E.G., Weinberg, A., Lapan, C. & Rimm-Kaufman, S.E. (2024). <u>Igniting kid power: The impact of environmental service-learning on elementary students' awareness of energy problems and solutions</u>. *Energy Research & Social Science*, 116, 103670.
- Rimm-Kaufman, S.E., Merritt, E.G. & Youngs, P. (2024). Integration of social and emotional learning and academics: Opportunities for synergy in mathematics and science instruction. In J Durlak, C. Domitrovich & J. Mahoney (Eds). <u>Handbook of Social and Emotional Learning: Research and Practice (Second Edition)</u>. New York: The Guilford Press.
- 3. Merritt, E.G.; Stern, M.J., Powell, R. B. & Frensley, B.T. (2023). <u>Benefits of participation in a Community of Practice focused on evaluation and program improvement for environmental educators</u>. *Evaluation and Program Planning*, 99, 102317.
- 4. Merritt, E., Weinberg, A. & Archambault, L. (2023). <u>Exploring energy through the lens of equity: Funds of knowledge conveyed through video-based discussion</u>. *International Journal of Science and Mathematics Education*, 21, 2237-2260.
- 5. Lapan, C., Rimm-Kaufman, & S.E., Merritt, E.G. (2022). <u>Promoting fourth grade students' autonomy, competence, and relatedness through service-learning</u>. *Applied Developmental Science*, 28(1), 58-81.
- 6. Pfister, T.*, Rimm-Kaufman, S. Merritt, E., & Konold, T. (2022). Empowering community-changers: Developing civic efficacy in the classroom. Applied Developmental Science, 28(1), 33-45.
- 7. Merritt, E.G., Brousseau, J.J.*, Stern, M.J. & Hansen, L.J. (2022). Walking the walk toward increasing access and reducing emissions: The promise and challenges of virtual climate adaptation convenings. Sustainability, 14, 12586.
- 8. Wakefield, W.*, Weinberg, A., Pretti, E.L.*, Merritt, E. & Trott, C. (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, 28(11), 1672-1690.
- 9. Merritt, E., Stern, M.J., Powell, R. B. & Frensley, B.T. (2022). <u>A systematic literature review to identify evidence-based principles to improve online environmental education</u>. *Environmental Education Research*, 28(5), 674-694.

- 10. Brandt, J.O.,* Barth, M. Merritt, E. & Hale, A. (2022). <u>Developing ESD-specific professional action competence for teachers: Knowledge, skills and attitudes in implementing ESD at the school level. Environmental Education Research.</u>
- 11. Rimm-Kaufman, S., Merritt, E.G., Lapan, C., DeCoster, J., Hunt, A*. & Bowers, N*. (2021). Can service-learning boost science achievement, civic engagement and social skills? A randomized controlled trial of Connect Science. *Journal of Applied Developmental Psychology*, 74, 101236.
- 12. Brandt, J.O.*, Barth, M., Merritt, E., & Hale, A. (2021). <u>A matter of connection: The 4 Cs of learning in pre-service teacher education for sustainability.</u> *Journal of Cleaner Production*.
- 13. Weinberg, A., Trott, C., Wakefield, W.*, Merritt, E. & Archambault, L. (2020). <u>Looking inward, outward, and forward: Exploring the process of transformative learning in teacher education for a sustainable future.</u> *Sustainability Science*.
- 14. Sandilos, L.E., Baroody, A.E., Rimm-Kaufman, S.E., & Merritt, E.G. (2020). <u>English language learners' achievement in math and science: Examining the role of self-efficacy</u>. *Journal of Educational Psychology*, *79*, 1-15.
- 15. Merritt, E., & Bowers, N.* (2020). <u>Missed opportunities for observation-based ecology in the Next Generation Science Standards</u>. *Science Education*, 104(4), 619-640.
- 16. Hunt, A.*, Rimm-Kaufman, S. E., Merritt, E. & Bowers, N.* (2020). "Because the sun is really not that big": An exploration of fourth graders tasked with arguing from evidence. *Elementary School Journal*, 121(2), 256-282.
- 17. Merritt, E., Bowers, N.*, & Rimm-Kaufman, S. (2019). <u>Making connections: Elementary students' ideas about electricity and energy resources.</u> *Renewable Energy*, *138*, 1078-1086.
- 18. Papenfuss, J.* & Merritt, E. (2019). <u>Pedagogical laboratories: A case study of transformative sustainability education in an ecovillage context</u>. *Sustainability*, 11, 3880, 1-19.
- 19. Merritt, E., Hale, A & Archambault, L. (2019). <u>Changes in pre-service teachers' values, sense of agency, motivation and consumption practices: A case study of an Education for Sustainability Course</u>. *Sustainability*, 11, 155, 1-15.
- 20. Papenfuss, J.*, Merritt, E., Manuel-Navarrete, D., Cloutier, S. & Eckard, B. (2019). <u>Interacting pedagogies: A review and framework for sustainability education</u>. *Journal of Sustainability Education*, 20.

- 21. Bowers, N.*, Merritt, E., & Rimm-Kaufman, S. (2019). Exploring adaptive expertise in the context of elementary science. *Journal of Science Teacher Education*.
- 22. Merritt, E.G., Archambault, L. & Hale, A.E. (2018). <u>Sustainability education in elementary classrooms: Reported practices of alumni from a pre-service teacher course</u>. *Discourse and Communication for Sustainable Education*, *9*(1), 18-31.
- 23. Merritt, E.G., Chiu, J. L., Peters-Burton, E. E. & Bell, R. (2018). <u>Teachers' integration of scientific and engineering practices in primary classrooms</u>. *Research in Science Education*, 48(6), 1321-1337.
- 24. Merritt, E.G., Rates, C.*, Greiner, J.*, Baroody, A., & Rimm-Kaufman, S. (2017). "We need trees to line the river to save our little friends": Environmental literacy development through service-learning. *Children, Youth and Environments, 27(1), 67-90.*
- 25. Chiu, J. & Merritt, E. (2017). *Digital media and learning*. In K. Peppler (Ed.) *Encyclopedia of Out-of-School Learning*. Thousand Oaks, CA: Sage.
- 26. Pinter, H.H., Merritt, E.G., Berry, R.Q. & Rimm-Kaufman, S.E. (2017). The importance of structure, representation, and language in elementary mathematics instruction. *Investigations in Mathematics Learning*, 1-22.
- 27. Merritt, E.G., Palacios, N., Banse, H.*, Rimm-Kaufman, S.E. & Leis, M.* (2016). <u>Teaching practices in fifth grade mathematics classrooms with high-achieving English learner students</u>. *Journal of Educational Research*, 1-15.
- 28. Banse, H.W.*, Palacios, N.A., Merritt, E.G. & Rimm-Kaufman, S.E. (2016). Scaffolding English language learners' mathematical talk in the context of Calendar Math. *Journal of Educational Research*, 1-10.
- Rimm-Kaufman, S., Larsen, R., Curby, T., Baroody, A., Ko, M., Thomas, J., Merritt, E. & Abry, T. (2014). Efficacy of the Responsive Classroom approach: Results from a three-year, longitudinal randomized control trial. American Educational Research Journal.
- 30. Griggs, M.S., Rimm-Kaufman, S.E., Merritt, E.G., & Patton, C.L. (2013). The Responsive Classroom approach and fifth grade students' math and science anxiety and self-efficacy. *School Psychology Quarterly*, 1-14.
- 31. Merritt, E.G., Wanless, S.B., Rimm-Kaufman, S.E., Cameron, C., and Peugh, J.L. (2012). <u>The contribution of teachers' emotional support to children's social behaviors and self-regulatory skills in first grade</u>. *School Psychology Review*, *41*(2), 141-159.
- 32. Furman, T. and Merritt, E. (2000). A data-intensive approach to studying climate and climate change in Africa. *Journal of Geoscience Education*, 48, 464-468.

33. Klein, E. & Merritt, E. (1994). Environmental education as a model for constructivist teaching. *Journal of Environmental Education*, *25*, 14-21.

Articles for K-12 Educators

- 34. Merritt, E., Peterson, A., Evans, S. Marston, S. & Zuiker, S. (2021). Learning about culture and sustainable harvesting of native plants. *Science and Children*, 58(4) 69-73.
- 35. Merritt. E.G., Harkins, T., & Rimm-Kaufman, S. (Winter, 2021). Empowering elementary students through environmental service-learning. Clearing Magazine, 8-11.
- 36. Merritt, E.G., Stern, M.J., Powell, R.B. & Frensley, B.T. (2020). <u>Promising principles to enhance distance learning in environmental education</u>. *Directions: Journal of the Association of Nature Center Administrators*. Fall Issue.
- 37. Merritt, E.G. & Bowers, N.* (2019). <u>Cultivating community through a Chefs in the Garden program.</u> Green Schools Catalyst Quarterly, VI (3), 56-65.
- 38. Rimm-Kaufman, S & Merritt, E. (2019). <u>Fostering energy literacy through respectful discussions: Integrating social and emotional learning and science in your classroom</u>. *Science and Children*, *57(1)*, 48-56.
- 39. Archambault, L., Merritt, E. & Hale, A. (2018). <u>Breaking through barriers: Using the sustainability education framework for teachers to build sustainability literacy in K-12 classrooms</u>. *Green Schools Catalyst Quarterly*, Vol. 2, 62-71.
- 40. Merritt, E.G. (2017). Going outdoors: a natural antidote for attention fatigue? *Phi Delta Kappan.* 99(2).
- 41. Merritt, E. (2016). <u>Time for teacher learning</u>, <u>planning critical for school reform</u>. *Phi Delta Kappan*. 98(4), 31-36.
- 42. Banse, H.W.*, Palacios, N.A., Merritt, E.G. & Rimm-Kaufman, S.E. (2016). <u>5 strategies for scaffolding math discourse with ELLs</u>. *Teaching Children Mathematics*, 23(2), 1-10. (Received Linking Research and Practice Outstanding Publication Award, 2017).
- 43. Merritt, E.G., & Shifflett, E.S. (2012). Landing safely on Mars: An integrated unit highlights engineering. *Science and Children*, 49(5), 32-36.
- Merritt, E.G., Rimm-Kaufman, S.E., Berry, R., Walkowiak, T., and McCracken, E. (2010). <u>A reflection framework for teaching mathematics</u>. *Teaching Children Mathematics*, 16, 239-248.
 (Received Linking Research and Practice Outstanding Publication Award, 2011).

Interviews

<u>Interview</u> about Service-Learning and Education for Sustainability for the EfS Collective (2021).

NPR Interview about proposed state science standards (2018).

Other Writing Formats

Blogs:

ASCD blog about nature journaling in schools: https://www.ascd.org/blogs/get-students-writing-outdoors

Institute of Education Sciences blog about Environmental Service-Learning: https://ies.ed.gov/blogs/research/post/powering-our-future-how-service-learning-aligned-with-next-generation-science-standards-can-promote-science-learning-social-and-emotional-skills-and-civic-engagement

White papers:

Wakefield, W., Colbert, J., Marson, S.A. Merritt, E., Zuiker, S., Fisher-Maltese, C & Morrison, S. (2021). An ecoregional approach to garden-based science teaching. Arizona State University.

Schmitt, A., Marston, S.A., Zuiker, S & Merritt, E. (2021). <u>Advancing research on an ecoregional approach to garden-based science education</u>. Arizona State University.

Grant Contributions

- NSF AISL Grant. (2021-2023). Steering committee member. A systematic review of STEM learning and social-emotional development in out of school time.
- Mary Lou Fulton Teachers College Research Mini-grant. (2020). \$480. Multiple perspectives on energy sources: Student voices on Flipgrid.
- National Science Foundation. (2019-20). \$99,905
 - S. Zuiker, (P.I). S. Marston & E. Merritt, (Co-Principal Investigators). *DRK-12 Conference Grant. The school gardeners' almanac: A conference for supporting, sustaining, and spreading garden-based science teaching.*
- Institute of Education Sciences, Department of Education. (2015-2019). \$1,494,451 S. Rimm-Kaufman (P.I.), E. Merritt, T. Harkins & Jamie DeCoster, (Co-Principal Investigators). Improving teacher capacity to implement high quality service-learning in elementary science classrooms.
- Mary Lou Fulton Teachers College Research Mini-grant (2019). \$500. Exploring the benefits of nature journaling at Echo Canyon Elementary School.

- Mary Lou Fulton Teachers College. (2016-17). \$1000. E. Merritt, (P.I)., L. Archambault, M. Walters, A. Weinberg, K. Schedler, A. Hale & D. McKee, (Co-Investigators). Sustainability and environmental education learning community grant.
- Woodside Community Action Grant. (2018). \$1,200 K. Rafidi, Student Investigator. E. Merritt, Faculty Advisor. *Grow: Roosevelt Center for Sustainability garden club*.
- Community Based Undergraduate Research Grant (CBURG), 2015-16, \$2,700

 E. Merritt, Faculty Advisor. Student Researchers: C. Herre, V. Ehrenpreis, M. Curtin, G. Digiantonio & G. Sheridan. Continuing healthy habits: Developing a handbook for an outdoor curriculum
- Youth-Nex Seed Grant. (2012-2013). \$40,000. Sara Rimm-Kaufman, (P.I)., E Merritt, (Co-P.I.). *Engaging students in environmental science*.

Curriculum Development

- Harkins, T.*, Merritt, E.*, Rimm-Kaufman, S.E.*, Hunt, A. & Bowers, N. (2019). <u>Connect Science</u>. Unpublished Manual, University of Virginia, Arizona State University, & Harkins Consulting, LLC, Charlottesville, Virginia. (300 page manual for teachers with lessons that integrate service-learning, social and emotional learning and science. * indicates shared first authorship.)
- Harkins, T., Lubetkin, M., McGregor, R., Coolman, F., Vislosky, E., Merritt, E., & Rimm-Kaufman, S.E. (2019). *Connect Science Blueprint*. Unpublished Manual, University of Virginia, Arizona State University, & Harkins Consulting, LLC, Charlottesville, Virginia. (Web-based materials for teachers with lessons that integrate service-learning, social and emotional learning, and science.)
- Hunt, A., Harkins, T., Merritt, E., Rimm-Kaufman, S.E. (2019). Connect Science Professional Development Guide. Unpublished Manual, University of Virginia, Arizona State University, & Harkins Consulting, LLC, Charlottesville, Virginia. (Manual describing five days of professional development plus coaching for project-based learning that integrates service-learning, social and emotional learning, and science.)

Conference Presentations

- Merritt, E.G. (2024). Identifying outcomes that matter for program evaluation. Presented at the Virginia Association for Environmental Education Conference.
- Do Lago a Pretti, E., Weinberg, A., Wakefield, W. & Merritt, E. (2022). Future teachers' misunderstandings about sustainability science: From common sense to factual misconceptions. Presented at the Conference of the Comparative and International Education Society.

- Frensley, T., Powell, R.B., Stern, M.J. & Merritt, E.G. (2021). What leads to better online EE programs for youth? Learning from and with each other. Presented at Southeastern Environmental Education Alliance.
- Merritt, E.G., Stern, M.J. & Powell, R.B. (2020). *Evidence-based principles for designing online environmental education programs*. Interactive discussion presentation at the Association for Nature Center Administrators (ANCA) Virtual Summit.
- Merritt, E., McGehee, R., Wolfe, H., Evans, S., Peterson, A., Flores, A., Reynolds, M., Marston, S., Zuiker, S., Cashion, M & Thompson, M. (2020). Lessons from the School Gardeners' Southwest Desert Almanac. Hands-on presentation at NAAEE virtual conference.
- Wakefield, W.*, Merritt, E.G. & Weinberg, A. (2020). *Embracing complexity when teaching about pollution in marine ecosystems*. Poster presentation at NAAEE virtual conference.
- Zuiker, S., Marston, S. & Merritt, E.G. (2020). *The school gardeners' southwest desert almanac*. STEM for all video showcase. Online.
- Weinberg, A., Trott, C., Wakefield, W*., & Merritt, E. *It challenges my beliefs and comfortability: Transformative learning in a sustainability science course for preservice elementary teachers*. Paper accepted at AERA conference in San Francisco, CA in 2020 (cancelled).
- Merritt, E. *Increasing environmental literacy through nature journaling.* (2020). Presented at Virginia Association for Environmental Education in Amherst, VA.
- Merritt, E. (2019). Designing meaningful tasks to assess environmental literacy. Workshop at NAAEE conference in Lexington, KY.
- Colbert, J.* & Merritt, E. (2019). *Exploring literacy in school gardens*. Bright spot presentation at NAAEE conference in Lexington, KY.
- Brandt, J.O.*, Merritt, E., Hale, A., & Barth, M. (2019). *Professional action competence in Education for Sustainable Development: Developing pre-service teachers' knowledge, skills and attitudes.* Paper presented at the European Conference on Educational Research in Hamburg, Germany.
- Merritt, E., Bowers, N.*, Lapan, C., Harkins, T., & Rimm-Kaufman, S. (2019). Solving problems that matter: Elementary students applying NGSS concepts through environmental service-learning. Paper presented at the National Association of Research in Science Teaching (NARST) conference.
- Hunt, A., Bowers, N.*, Merritt, E. & Rimm-Kaufman, S. (2019). *In their own words: Exploring students' communicative and argumentative competency in fourth grade classrooms*. Paper presented at the National Association of Research in Science Teaching (NARST) conference.

- Rimm-Kaufman, S., Merritt, E., Lapan, C., DeCoster, J., & Hunt, A.* (2018). *The impact of Connect Science: A program integrating social and emotional learning, science, and service-learning.* Presented as part of a symposium at the Society for Research in Child Development Conference.
- Lapan, C., McGregor, R., Merritt, E., & Rimm-Kaufman, S. *Promoting fourth grade students'* autonomy, competence, and relatedness through service-learning. Presented as part of a symposium at the Society for Research in Child Development Conference.
- Rimm-Kaufman, S., Merritt, E., Lapan, C., DeCoster, J., Hunt, A.* & Bowers, N.* (2019). Results from an early efficacy study of Connect Science, a project-based learning program designed to integrate social and academic learning. Presented at the Society for Research in Educational Effectiveness conference.
- Merritt, E.G. & Bowers, N.* (2018). Observations of ecosystems and human impacts: Missed opportunities in NGSS? Poster presented at the North American Association for Environmental Education (NAAEE) Conference, Spokane, Washington.
- Haines, S., Merritt, E., Franzen, R., Yates, K., Born, P., Bhagwanji, Y., & Brown, F. (2018). Preparing future teachers to integrate environmental education across the curriculum. Presentation at the NAAEE Conference, Spokane, Washington.
- Bowers, N.*, Merritt, E & Rimm-Kaufman, S. (2018). Exploring adaptive expertise in the context of elementary science: Implications for NGSS. Paper presented at the American Educational Research Association (AERA) Conference, New York, NY.
- Rimm-Kaufman, S.E., Merritt, E.G., Hunt, A.* & Lapan, C. (2018). *Efficacy study of Connect Science: A program integrating social and emotional learning, science and service-learning*. Paper presented at the AERA Conference, New York, NY.
- Mulvey, B. K., Kulbago, L., Merritt, E. G., Chiu, J. L., & Bell, R. L. (2018). *Adapting and reflecting: Elementary teachers' and students' NOS explorations associated with a professional development program.* Paper presented at the NARST conference, Atlanta, GA.
- Colbert, J.* & Merritt, E. *Circles of sustainability that ripple out into your community*. (2018). Workshop presented at the Arizona Science Teachers Association Conference, Queen Creek, AZ.
- Merritt, E., Archambault, L., & Hale, A. (2017) *Teaching about sustainability: Describing early career teachers' classroom practices.* Paper presented at the World Environmental Education Conference, Vancouver, B.C.

- Merritt, E., Bowers, N.*, & Rimm-Kaufman, S. (2017). *Children's voices about energy conservation and production*. Paper presented at the World Environmental Education Conference, Vancouver, B.C.
- Merritt, E.G., Rates, C.*, Baroody, A. & Rimm-Kaufman, S. (2016). *Hoping for clean water: Emerging environmental literacy during a service-learning program.* Paper presented at the 2016 AERA Conference, Washington, D.C.
- Merritt, E., Cole, L.* & Mullen, M.* (2016). *Gardening as an elective: It gives me a boost to my happiness*. Paper presented at the Green Schools National Network Conference, Pittsburgh, PA.
- Merritt, E.G. and Rates, C.* (2014). *Connecting adolescents to nature through an environmental service-learning program*. Paper presented at the annual meeting of the NAAEE, Ottawa, Canada.
- Merritt, E.G., *Greiner, J., Baroody, A.E. & Rimm-Kaufman, S.E. (2014). *The contribution of an environmental service-learning program to eighth grade students' environmental literacy*. Paper presented at the AERA conference, Philadelphia, PA.
- Merritt, E. G., Chiu, J. L., Peters-Burton, E. E. & Bell, R.L. (2014). Young children doing science: The use of scientific practices in kindergarten and first grade classrooms. Paper presented the AERA conference, Philadelphia, PA.
- Baroody, A.E., Merritt, E.G. & Rimm-Kaufman, S.E. (2014). *Examining math and science self-efficacy and anxiety in fifth grade English learners*. Paper presented at the AERA conference, Philadelphia, PA.
- Merritt, E., Pinter, H., Rimm-Kaufman, S., & Berry, R. (2013). *Examining differences in mathematics teaching practices between Title I and non-Title I schools*. Paper presented at the AERA conference, San Francisco, CA.
- Merritt, E., Palacios, N. & Rimm-Kaufman, S. (2013). Examining effective teaching practices in mathematics for fifth grade English learners. Poster presented at the AERA conference, San Francisco, CA.
- Rimm-Kaufman, S., Larsen, R., Curby, T., Baroody, A., Merritt, E., Abry, T., Ko, M., & Thomas, J. (2012). *Efficacy of the Responsive Classroom approach: Results from a three-year, longitudinal randomized control trial.* Paper presentation at the Society for Research on Educational Effectiveness (SREE) conference, Washington, D.C.
- Merritt, E. (2012). The contribution of mathematical representations and tools to fourth grade achievement for low achieving students. Paper presentation at the Virginia Educational Research Association conference, Charlottesville, Virginia.

- Merritt, E.G., Brighton, C., Moon, T., Trinter, C., Whitlock, K., Wiley, K., & Malcolm, P. (2012). *Promoting detailed and accurate observations in elementary science classrooms*. National Association for Research in Science Teaching (NARST) sponsored presentation at National Science Teachers Association (NSTA) conference, Indianapolis, Indiana.
- Walkowiak, T.A., Berry, R.Q., & Merritt, E.G. *Mathematics instructional quality: Does socioeconomic status of students matter?* (2012). Interactive paper session. NCTM Research Pre-session.
- Merritt, E.G., Rimm-Kaufman, S.E., Berry, R., Walkowiak, T., & Larsen, R. (2011). *The* contribution of mathematics instructional quality and class size to student achievement for third grade students from low-income families. Poster session at SREE, Washington, D.C.
- Berry, R.Q., Rimm-Kaufman, S.E., Ottmar, E., & Merritt, E.G. (2011). *The M-Scan measure of mathematics instructional quality*. Interactive paper session presentation at the NCTM Conference, Indianapolis, Indiana.
- Merritt, E.G., Ponitz, C.C., Wanless, S.B., & Rimm-Kauffman, S.E. (2010). *The contribution of emotionally supportive classrooms to social outcomes in first grade*. Roundtable presentation at the AERA conference, Denver, Colorado.
- Walkowiak, T.A., Berry, R.Q., McCracken, E.R., Rimm-Kaufman, S.E. Merritt, E.G., & Meyer, J. P. (2010). *Introducing an observational measure of mathematics instructional quality*. Poster presented at the National Council of Teachers of Mathematics conference, San Diego, California.

Student Mentoring and Advising

Honors Thesis Advising

2018-19

Chair: Kaitlynn Rafidi, Grow: Roosevelt Center for Sustainability garden club.

2017-18

Chair: Karlee Noe, Got Local? Fourth Grade Students Unpack Local Food Choices!

Chair: Allison Hunt and Sara Belko, Implementing Kinetic Activities into a Children's Summer

Program to Encourage STEM Engagement in Children Ages 5-11

Second Reader, Julia Colbert Evaluating Whole-School Sustainability

Graduate Student Mentoring

Paige Crane, Virginia Tech (Committee Member)

Malia Pownall, Virginia Tech (Committee Member)

Jan-Ole Brandt, Leuphana University, (Committee Member) Graduated in 2021

Jason Papenfuss, ASU School of Sustainability (Co-Chair), Completed Ph.D. in Sustainability Graduated in 2018

Julia Colbert, ASU School of Sustainability (Co-Chair) Completed M.A. in Sustainability, 2019

Brian Grant, ASU School of Sustainability (Committee Member), Completed M.S. in Sustainability, 2019

Recent Service

Virginia Association of Environmental Education, Certification Advisory Board Member (2021-present)

NAAEE Conference proposal reviewer, 2014, 2015, 2017-present

NAAEE Guidelines Trainers' Bureau Member, 2019 - present

National Academy of Science, Gulf Research Program, Review Panel, K-8 Place-Based Education (2018, 2023)

Completed invited reviews, Action in Teacher Education, Language & Education,

Environmental Education Research, Teaching and Teacher Education, International Journal of Sustainability in Higher Education, Sustainability, Educational Researcher, Educational

Psychology, Cognition and Emotion, International Journal of Science Education, Learning and Instruction

Learning, Literacies and Technology Doctoral Program Committee 2017 – 2019

MLK March on West Campus Volunteer, 2018

Project WET Aqua Stem Volunteer, Spring 2018

Arizona Science Standards Committee Member, 2017

Discussant, AERA Problem-Based Learning SIG, 2016

AERA Conference proposal reviewer, 2013, 15, 16 and 18

Green Schools Conference proposal reviewer, 2016

Undergraduate Student Opportunities in Academic Research (USOAR) mentor, 2015-16

Green Dot faculty and staff training, January, 2015

Green Dot bystander training committee and facilitator, 2015-16

Review panel, Science and Children, 2010 to 2014

Stone-Robinson Elementary volunteer, 2008 to 2016