

# Steph N. Dean, Ph.D.

College of Education, Department of Teaching and Learning

Clemson University, Clemson, South Carolina

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## ACADEMIC EXPERIENCE

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### Current Position

*Clemson University*

Assistant Professor of Early Childhood & Elementary Science Education    August 2023 - Present  
Department of Teaching and Learning

### K-12 Teaching and Curriculum Development

STEM Resource Teacher

Aug 2022 – June 2023

*Fairfax County Public Schools – Alexandria, VA*

Upper Elementary Teacher

Jan. 2022 – June 2022

*Fairfax County Public Schools – Springfield, VA*

Watershed (6<sup>th</sup> grade) Teacher

June 2020 – Dec. 2021

*Lorien Wood School – Vienna, VA*

Form 3 Teacher

June 2017 – June 2020

*Lorien Wood School – Vienna, VA*

Curriculum Developer

Jan. 2016 – June 2017

*Shmoop, A Plus Education, and The New Ag School*

Upper Elementary Teacher

Jan. 2012 – June 2016

*Fairfax County Public Schools – Herndon, VA*

Virginia Teacher License

Jan. 2012 – June 2031

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## ACADEMIC DEGREES

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Doctor of Philosophy, Education August 2022

**George Mason University** – *Fairfax, VA*

- Specialization: Science Education Research
- Secondary: Research Methods in Teaching and Teacher Education
- Dissertation: *A phenomenological study of the lived experiences of teachers who implement outdoor/environmental education within a K-12 setting*

Masters of Arts, Elementary Math Education Oct. 2013

**Western Governors University** – *Salt Lake City, UT*

- Capstone Award of Excellence in Expressing Ingenuity

Bachelor of Arts, Interdisciplinary Studies K-8 Dec. 2011

**Western Governors University** – *Salt Lake City, UT*

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## SCHOLARLY PUBLICATIONS

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### Publications

#### *Peer-Reviewed Articles*

\*Graduate student, undergraduate student, or teacher

**Dean, S. N., & Jones, D. A.\*** (2024). An examination of educators' approaches and strategies when facilitating field study science observations. *Interdisciplinary Journal of Environmental and Science Education*, 20(1), e024xx.  
<https://doi.org/10.29333/ijese/xxxx>

**Dean, S. N., & Gallifa, J.** (2024). Outdoor environmental educators' views on learning in light of Integral Theory. *Journal of Experiential Education*, 0(0).  
<https://doi.org/10.1177/10538259241252814>

**Dean, S. N. & Gilbert, A.** (2024). 'Watching what they can do on their own is beautiful': A navigation of shared agency in school-based outdoor environmental education. *Journal of Adventure Education and Outdoor Learning*.  
<https://doi.org/10.1080/14729679.2024.2314605>

**Dean, S. N. & Elliot, S.** (2022). Urgency, equity, and agency: An assemblage of global concerns and interests in early childhood education for sustainability. *International Journal of*

*Early Childhood Environmental Education*, 9(2).  
[https://naturalstart.org/sites/default/files/journal/7.\\_final\\_dean\\_elliott.pdf](https://naturalstart.org/sites/default/files/journal/7._final_dean_elliott.pdf)

**Dean, S. & Gilbert, A.** (2022). Wonder-full thinking: Promoting inquiry through student-driven investigations. *Science & Children*.

**Dean, S. & Gilbert, A.** (2021). What scientists do: Engaging in science practices through a wonder-framed nature study. *Interdisciplinary Journal of Environmental and Science Education*, 17(4). <https://doi.org/10.21601/ijese/11136>

**Dean, S. N.** (2020). National Park interpretation and place-based education: An integrative literature review. *Journal of Experiential Learning*.  
<https://doi.org/10.1177/1053825920979626>

**Dean, S.** (2019). Seeing the forest and the trees: A historical and conceptual look at Danish forest schools. *International Journal of Early Childhood Environmental Education*, 6(3), 53-63. [https://naturalstart.org/sites/default/files/journal/7.\\_dean\\_formatted\\_draft\\_v2.pdf](https://naturalstart.org/sites/default/files/journal/7._dean_formatted_draft_v2.pdf)

### *Reports*

**Dean, S. N. & Wenner, J. A.** (2024). *College students need to play too! Understanding the issues and possibilities within college-aged play*. [White paper]. The American Association for the Child's Right to Play (IPA/USA).

The Virginia Association for Environmental Education. (2021). *Environmental literacy plan template for Virginia school divisions*.  
<https://vae.wildapricot.org/resources/Documents/Virginia-Environmental-Literacy-Plan-Template.pdf>

### *Book Chapters*

**Dean, S.** (in press). Wonder walks as a nature-based teaching practice. In L. Madden (Ed.) *Starting Small*. Rowman & Littlefield Publishing Group.

### **Funded Grants or Scholarships**

#### *External*

Striniste, N., Hodges, E., Moser, K., & **Dean, S.** (2021). *Dominion Energy* awarded to NoVA Outside. Funded \$20,000.

Wilson, S., Hodges, E., & **Dean, S.** (2020). *Dominion Energy* awarded to NoVA Outside. Funded \$5,000.

**Dean, S.** (2017). *100 Women Strong Grant* awarded to Piedmont Epicurean Agricultural Society. Funded \$9,000.

#### *Internal*

**Dean, S., PI** (2023). How do rural K-12 educators integrate the three dimensions of NGSS into outdoor learning? *Associate Dean of Research Grant*. (\$9,922).

**Dean, S.** (2021). Graduate Student Travel Fund through GMU.

**Dean, S.** (2021). GMU Graduate Scholarship, summer semester.

**Dean, S.** (2020). Professional Development Funds through GMU.

**Dean, S.** (2019). William B. Stapp Student Scholarship to attend NAAEE conference.

**Dean, S.** (2019). Graduate Student Travel Fund through GMU.

#### *Unfunded*

**Dean, S., PI** (2024). How do rural educators utilize place-based anchoring phenomena to teach the three-dimensions of NGSS? *OpenSciEd* (\$20,000).

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### SCHOLARLY PRESENTATIONS

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#### **Refereed National and International Conference Presentations**

Alston, D. M., **Dean, S.**, & Hawkins, J.\* (Submitted). *Rehumanizing science education: Exploring outdoor learning as an avenue towards holistic wellbeing*. Paper presentation at the Association for Science Teacher Education Annual Conference. Long Beach, CA.

**Dean, S.** (2024). *Nature's part of us: Exploring long-lasting impacts of Sit Spot*. Paper presentation at the North American Association for Environmental Education Annual Conference. Pittsburg, PA.

**Dean, S.** (2024). *Outdoor science learning in rural spaces: Examining educators' instructional approaches*. Poster presentation at the North American Association for Environmental Education Annual Conference. Pittsburg, PA.

**Dean, S., Gilbert, A., & Lane, J.** (2024). "Science doesn't have to be scary": *The accessibility of doing nature-based science*. Paper presentation at the National Association for Research in Science Teaching Annual Conference. Denver, CO.

- Dean, S. & Gallifa, J. (2024).** *Thinking integrally about environmental education: Examining science teachers' sensemaking.* Poster presentation at the Association for Science Teacher Education Annual Conference. New Orleans, LA.
- Gilbert, A., Byers, C., **Dean, S.**, Johnston, A., & Wood, N. (2023). *The potential of wonder in science teacher education: Conceptualizing the philosophical, pedagogical and research possibilities.* Themed paper set presentation at the Association for Science Teacher Education Annual Conference. Salt Lake City, UT.
- Gilbert, A. & **Dean, S.** (2022). *Using a wonder-based nature study to engage children in science practices.* Paper presentation at the Association for Science Teacher Education Annual Conference. Greenville, SC.
- Dean, S. & Gilbert, A. (2022).** *A collective joy and wonder: Pathways towards nature partnerships.* Roundtable at the North American Association for Environmental Education Annual Conference. Tucson, AZ.
- Dean, S. (2022).** *Windswept: The best kind of overwhelmed.* Virtual poster presentation at the International Congress of Qualitative Inquiry.
- Dean, S. (2021).** *Place-based teacher education: A self-study of my own experiential learning journey.* On-demand virtual poster presentation at the North American Association for Environmental Education Annual Conference.
- Gilbert, A. & **Dean, S. (2021).** *Wonder and emergent science practices: Connecting with and through nature.* On-demand virtual poster presentation at the North American Association for Environmental Education Annual Conference.
- Dean, S. & Gilbert, A. (2020).** *Using wonder to facilitate nature engagements: A research-grounded pedagogical approach.* Virtual presentation at the North American Association for Environmental Education Annual Conference.
- Dean, S. (2019).** *Cultural constructivism: Understanding the context for nature-knowing.* Panel discussion presentation at the North American Association for Environmental Education Annual Research Symposium. Lexington, KY.

### **State/Regional Conference Presentations**

- Dean, S. (2023).** *Pathways and possibilities within nature-based science: Teacher joy.* Paper presentation at the Mid-Atlantic Regional Annual Conference of the Association of Science Teacher Education. Kingsport, TN.

Gilbert, A. & Dean, S. (2022). *The impact of wonder-infused pedagogy on classroom community*. Paper presentation at the Mid-Atlantic Regional Annual Conference of the Association of Science Teacher Education. Black Mountain, NC.

### Invited Presentations

- Guest speaker for UNC Charlotte's Elementary Science Methods class on environmental justice (April 2024).
- Guest speaker for Teaching Fellows professional development (March 2024).
- Guest speaker for Qualitative Methods in Educational Research, *EDRS 812*, at George Mason University. Virtual (January 2024).
- Guest lecturer for Critical Theory course at Johns Hopkins University. Virtual (April 2024)
- Guest speaker for Advanced Studies in the Teaching of Secondary School Science, *EDSC 8430*. Virtual (March 2023).
- Guest speaker for Narrative Research Methods, *EDRS 836*, and Qualitative Methods in Educational Research, *EDRS 812* (Spring 2022).
- *The Basics of Outdoor Teaching and Learning*. Professional development for Arlington County Public Schools educators. Arlington, VA (August 2022).
- *NoVA Outside Educators Workshop Series*. Virtual presentation and facilitation of professional learning over two modules in a four-week series (Fall 2021).
- *A Literature Synthesis of Outdoor Play Patterns*. Virtual presentation at the Office of Student Scholarship, Creative Activities, and Research's (OSCAR's) Celebration of Student Scholarship. Fairfax, VA (Spring 2021).
- *Writing a first-rate conference proposal*. In-person workshop at Nuts and Bolts professional development conference hosted by George Mason University's PhD of Education Student Organization, Fairfax, VA (Spring 2019).

### Awards and Honors

- Nominated for Outstanding Dissertation Award – College of Education and Human Development, George Mason University (2023).

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## TEACHING AND ADVISING

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### University Teaching

Department of Teaching and Learning, Clemson University  
 EDEL 4510 *Elementary Methods in Science Teaching*  
 ED 8830 *The Reflective Practitioner*  
 IS 1020 *Global Perspectives*  
 EDEC 4200 *Early Childhood Science*

Fall 2023 – 2024  
 Summer 2024  
 Summer 2024  
 Spring 2024

College of Education and Human Development, George Mason University

ELED 553 *Science Methods for the Elementary Classroom*,

*Teacher Residency Program*

Spring 2023

ELED 453 *Science Methods for the Elementary Classroom*

Spring 2022

ELED 421 *STEM in the Elementary Classroom\**

Fall 2021

## **Advising**

### *Doctoral Committees*

Major Professor – In Progress

- Amanda Gladys, Teaching & Learning, Science Education
- Stephany Griffin, Teaching & Learning, Science Education

Committee Member – In Progress

- Ashley Hunter, Teaching & Learning, Science Education

## **Professional Development Programs**

- Attended day-long grant writing workshop hosted by Clemson University (Jan 2024).
- Attended multi-day South Carolina Teacher as Researcher workshop (Fall 2023).
- Designed, coordinated, and led professional development for Arlington County Public Schools on *The Basics of Outdoor Teaching and Learning* (2022).
- Developed and facilitated two separate four-part environmental educator workshop series for NoVA Outside (2021).

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## **SERVICE**

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### **Service to Field of Scholarship**

Manuscript Reviewer

- *School Science and Mathematics* (2024-present)
- *Early Childhood Education Today, 15<sup>th</sup> Edition* (2024)
- *Journal of Adventure Education and Outdoor Learning* (2024-present)
- *Journal of Experiential Education* (2021-present).
- *Ecology and Evolution* (2021).

Conference Proposal Reviewer

- North American Association for Environmental Education (2024).
- National Science Teaching Association (2023).
- National Association for Research in Science Teaching (2023).
- Association for Science Teacher Education (2023).
- Natural Start Alliance (2020).

## **Service to Profession**

### **Membership in Professional Organizations**

- Member of North American Association for Environmental Education (2019 – present)
- Member of Environmental Education Association of South Carolina (2023 – present)
- Member of National Science Teaching Association (2021 – present)
- Member of Association for Science Teacher Education, including Mid-Atlantic region chapter (2021 – present)
- Member of National Association for Research in Science Teaching (2023 – present)
- Member of Play-Based Coalition (2023 – present)
- Member of Virginia Association for Environmental Education (2019 – 2022)
- Member of Northern Virginia Outside (2019 – 2023)

### **Other International, National, and Regional Service**

- Co-designed watershed education and outreach curriculum with Greenville Water (Nov 2023-present)
- Member of Transnational Dialogue for Early Childhood Education for Sustainability (2020-present).
- Vice chair of Northern Virginia Outside (2020-2022).

## **Department Service**

### *Teaching and Learning, Clemson University*

- Science Ed Lab Group faculty leader (2023-present).
- Early Childhood Education and Special Education joint certification program development committee (Oct 2023-present).

## **College Service**

### *College of Education, Clemson University*

- Teaching Fellows Advisory Committee (2024-present)
- Clemson College of Education Graduate Student Conference roundtable faculty discussant (Feb. 2024)

## **University Service**

### *George Mason University*

- Contributor to *PhD in Education Student Organization* (2019-2022).