

# ALISON RILEY MILLER

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## EDUCATION

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### **Ph.D. Science Education (May 2015)**

Teachers College, Columbia University, New York, NY

- Doctoral Research Fellow, Teachers College (2010 – 2013)

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## Refereed Book Chapter

Boda P.A., & Miller A.R. (2021). Educational technologies for multicultural science learning. In: Atwater M.M. (Ed.). *International Handbook of Research on Multicultural Science Education*. Springer International Handbooks of Education. New York: Springer.

## Published Curricular Materials & Software

Miller, A.R., Saenz, L.P., & Xi, R.\*\* (April, 2023). SciEPOP: Science and Engineering Practices Observation Protocol (Version 23.1) [iPad app] <https://www.apple.com/app-store/>

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## Journal Articles in Progress

Saenz, L.P., Miller, A.R. (in preparation). Building a modeling orientation to science: A multiple case study. *International Journal of Science Education*. *SDHV*

Miller, A.R., Saenz, L.P., Harvey, M. & Voyer, C. (in preparation). Leveraging community science to foster epistemic empathy in teacher professional learning. *Teaching and Teacher Education*. *SDHV*

Miller, A.R. (in preparation). Reconceptualizing play as a community of practice: Implications for early learning environments. *Early Childhood Education Journal*. *SDJHV*

## Other Publications

Miller, A.R., & Graves, J.L. (2024, January 28). Opinion: Leave science curriculum as it is. *Portland Press Herald*.

## Invited Presentations

Miller, A.R. (2024, April 9). Exploring and supporting children's engagement with science and engineering through play: Implications for early elementary learning environments. Professional learning community on playful learning in early elementary grades, Maine Department of Education.

Miller, A.R. (2020, October 19). Leveraging scientific and engineering practices during COVID-era schooling. The Maine Science Teachers Association Speaker Series.

Miller, A.R. (2018, March 19). Theories of learning: Distributed cognition. University of Missouri graduate seminar: Learning Theories.

Miller, A.R. (2017, November 2). (Mis)alignments between preservice science teachers and mentor teachers during the student teaching practicum. Consortium for Excellence in Teacher Education (CETE) Annual Meeting. Brunswick, ME.

Miller, A.R. (2016, October 1). Practices in play: Fostering science learning in an early childhood play-based curriculum. National Association for the Education of Young Children (NAEYC), ME Regional Conference, Brunswick ME.

Miller, A.R. (2016, November). Investigating the impacts of targeted professional development around models and modeling on teachers' instructional practice. University of Wyoming Colloquium Series.

## Peer-reviewed Conference Presentations & Proceedings:

Miller, A.R., Whitt, K.C., Larimore, R., Saenz, L., Makori, H. (2024, March). Using the Science and Engineering Observation Protocol (SciEPOP) to identify children's engagement with science and



Kastens, K.A., & Miller, A.M. (2015, July). Using physical models to build Earth Science students'

- Institutional Review Board, Bowdoin College (2019 – 2022)
- Advisory Committee, Bowdoin College Children’s Center (2016 – 2022)
- Search Committee Chair, Education Department (2019 – 2020)
- Working Group for Faculty Mentoring, Bowdoin College (2017 – 18)
- Working Group for Classroom Visitation, Bowdoin College (2016 – 17)

## **PROFESSIONAL SERVICE AND AFFILIATIONS**

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### **Committees**

- Executive Board, Maine Science Teachers Association (2024 – present)
- Maine DOE Steering Committee for the Revision of the Maine State Science Standards (2023)
- Membership Committee, NARST: A Global Organization for Improving Science Teaching and Learning through Research. (2017 – 2021)
- Working Group for the Multilingual Mainers program (2019)
- Maine DOE Executive Committee for Revision of the Maine State Science Standards (2017)

### **Journal and Conference Reviews:**

- International Journal of Science Education (ad hoc)
- Science Education (ad hoc)
- Journal of Research in Science Teaching (ad hoc)
- NARST: A Global Organization for Improving Science Teaching and Learning through Research. Annual International Conference.

### **Professional Memberships:**

- NARST: A Global Organization for Improving Science Teaching and Learning through Research