

LYNNE M. ZUMMO

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PROFESSIONAL APPOINTMENTS

Assistant Professor of Learning Sciences Department of Educational Psychology College of Education University of Utah, Salt Lake City, Utah	2020 - present
Curator of Learning Sciences Museum of Natural History of Utah University of Utah, Salt Lake City, Utah	2020 - present

EDUCATION

PhD, Stanford University Graduate School of Education Curriculum Studies & Teacher Education (Science Education)	2020
MA, Stanford University Graduate School of Education Curriculum Studies & Teacher Education (Science Education)	2015
MS, Dartmouth College Earth Sciences	2010
BA, Middlebury College Geology & Environmental Science	2006

FELLOWSHIPS & GRANTS

Stanford Center for American Democracy Grant , Stanford University (\$2000)	2020
Dissertation Support Grant , Stanford University (\$6000)	2019
Technology for Equity in Learning Opportunities Grant , Stanford University (\$7600)	2018
Haas Center Graduate Public Service Fellowship , Stanford University (\$3000)	2016
Stanford Graduate Fellowship , Stanford University (\$120,000)	2015

PUBLICATIONS

- Zummo, L.M.** (revise & resubmit). Locating the scientific in the political: Investigating the role of ideology in disciplinary meaning making in a 9th grade science class.
- Zummo, L.M.** (in review). "You're ruining it": Positioning and power of 6th grade students across the boundaries of environmental and science education.

- Zummo, L.M.**, Gargroetzi, E.C., & Garcia, A. (in review). How youth use scientific argumentation in civic participation on climate change: Polar bears, the Great Barrier Reef, and “your job as president.”
- Zummo, L.M.**, Hauser, M., Carlson, J. (in review). STEM Teacher Noticing via Video Annotation: Identifying Links between Complexity and Knowledge-Based Reasoning.
- Zummo, L.M.** & Brown, B.A. (2020). The human limitations of flipped science instruction: Exploring students’ learning and perceptions of flipped teaching. *International Technology & Education Journal* 4(1), 9-22.
- Zummo, L.M.**, Donovan, B.M., Busch, K.C. (2020). Complex influences of mechanistic knowledge, worldview, and quantitative reasoning on climate change discourse: Evidence for ideologically motivated reasoning among youth. *Journal of Research in Science Teaching*.
- Zummo, L.M.**, Gargroetzi, E.C., Garcia, A. (2020). Youth voice on climate change: Using factor analysis to understand the intersection of science, politics, and emotion. *Environmental Education Research* (26)8, 1207-1226.
- Zummo, L.M.**, Friedland, A.J. (2011). Soil carbon release along a gradient of physical disturbance in a harvested northern hardwood forest. *Forest Ecology and Management* 261, 1016-1026.
<https://doi.org/10.1016/j.foreco.2010.12.022>
- Lemmi, C., Brown, B., Wild, A., **Zummo, L.**, & Sedlacek, Q. (2019) Language ideologies in science education. *Science Education* 103, 854-874. <https://doi.org/10.1002/sce.21508>
- Neurath, R.A., **Zummo, L.M.**, & Friedland, A. J. (2010). Long-Term Mineral Soil Carbon Response to Forest Harvesting in New England. *AGU Fall Meeting Abstracts* (Vol. 1, p. 0284).
<http://adsabs.harvard.edu/abs/2010AGUFM.B41A0284N>

Manuscripts in preparation

- Zummo, L.M.** (in prep). Ideological convergence and divergence in discussions about climate change in a 9th grade science class: Implications for science learning amidst a planetary crisis.
- Zummo, L.M.**, Dozier, S. (in prep). Using epistemic tools to scaffold interdisciplinary knowledge construction of climate change by in-service secondary science teachers.

Practitioner Publications

- Ardoin, N.M. (project lead), **Zummo, L.M.** (writer), et al. (2011-2020). ChangeScale. North American Association for Environmental Education & NatureBridge, Research Bulletins 5-11. Available online at <https://www.changescale.org/resources/environmental-education-research-bulletins/>.

SELECTED CONFERENCE PRESENTATIONS (14 of 34)

- Zummo, L.M.** (2021, accepted). Locating the Scientific in the Political and the Political in the Scientific: Examining Ideological Practice in Science Class, International Society of the Learning Sciences (ISLS) Annual Meeting, Virtual conference, June 7-11, 2021.
- Gargroetzi, E.C., **Zummo, L.M.** (2021, accepted). “Let’s Talk About Election 2020”: Quantitative Civic Literacies of Solidarity and Critique in an Online Digital Network, International Society of the Learning Sciences (ISLS) Annual Meeting, Virtual conference, June 7-11, 2021.
- Zummo, L.M.,** Gargroetzi, E.C. (2021, accepted). Youth civic participation: Using scientific argumentation to make one’s voice heard on climate change, American Educational Research Association (AERA), Virtual conference, April 9-12, 2021.
- Zummo, L.M.,** Hauser, M.D., Carlson, J. (2021, accepted). STEM Teacher Noticing via Video Annotation: Links between Complexity and Knowledge-Based Reasoning, American Educational Research Association (AERA), Virtual conference, April 9-12, 2021.
- Zummo, L.M.** (2021, accepted). Ideological Practice in Science Learning: Navigating Complex Terrain of Climate and Politics in US Classrooms, National Association for Research in Science Teaching (NARST), Virtual conference, April 7-11, 2021.
- Zummo, L.M.,** Dozier, S. (2021). Using epistemic tools to support teacher PCK of controversial socio-scientific issues. Association for Science Teacher Education (ASTE) Annual Conference, Virtual conference, January 14-15, 2021.
- Zummo, L.M.** (2020). Locating Science in Politics: New Approaches to Climate Change Education. North American Association for Environmental Education (NAAEE) Research Symposium, Virtual conference, October 10, 2020.
- Zummo, L.M.** (2020). Politics, Youth, and Climate Change: A Mixed-Methods Analysis of Youth Discourse in Social Media. American Educational Research Association (AERA), San Francisco, CA. April 2020 (conference canceled due to COVID-19).
- Zummo, L.M.,** Donovan, B.M., Busch, K.C. (2020). Influences of Worldview and Knowledge on Climate Change Discourse: Evidence for Ideologically-Motivated Reasoning among Youth, National Association for Research in Science Teaching (NARST), Portland, OR. March 18, 2020 (conference canceled due to COVID-19).
- Zummo, L.M.** (2019). “It won’t affect me.”: Using a novel argumentation approach to support high school science teachers in teaching about climate change, American Geophysical Union (AGU) Fall Meeting, San Francisco, California. December 13, 2020.
- Zummo, L.M.** (2019). “You’re ruining it”: Positioning and identity in a 6th grade place-based learning context, European Science Education Research Association (ESERA), Bologna, Italy. August 28, 2019.

Zummo, L.M., Gargroetzi, E.C. (2019). Youth voice in polarized America: The politics and science of climate change, European Science Education Research Association (ESERA), Bologna, Italy. August 30, 2019.

Zummo, L.M., Gargroetzi, E.C. (2019). Youth voices on climate change: Examining politicized climate discourse in a digital online network, American Educational Research Association (AERA), Toronto, Canada. April 8, 2019.

Zummo, L.M., Carlson, J., Hauser, M. (2018). Teacher noticing via video annotation in a virtual coaching program, National Association for Research in Science Teaching (NARST), Atlanta, GA. March 11, 2018.

TEACHING POSITIONS

Urban Institute for Teacher Education, Assistant Professor of Learning Sciences 2020-present
University of Utah | College of Education

Design and deliver elementary & secondary science teaching methods courses for pre-service teachers; leverage practice-based methods to support pre-service teacher growth of inquiry-based science teaching, pedagogical content knowledge, and equity-oriented instruction

Stanford Hollyhock Fellowship Program, Science Instructional Coach 2017-2020
Stanford University | Center to Support Excellence in Teaching (CSET)

Design and deliver two-year professional learning experience (including summer institutes and virtual coaching) for early-career high school science teachers serving historically marginalized populations; leverage practice-based methods to support teacher growth of pedagogical content knowledge and equity-oriented instruction aimed to further social justice

Center to Support Excellence in Teaching (CSET), Science Instructional Coach 2016-2020
Stanford University | Graduate School of Education

Design and deliver professional learning experiences for teachers around NGSS-aligned science teaching practices for local school districts, including the San José Unified and San Mateo School Districts; coach elementary, middle, and high school teachers in implementing NGSS-aligned science teaching

Earth Systems Science, Science Teacher 2010-2014
Edmund Burke School, Washington, DC

Taught and created curriculum in a social justice oriented school serving a diverse student population; taught 6th grade & 9th grade Earth Sciences; 12th grade Research Seminar; & advanced science elective

Teaching Assistant

Graduate School of Education | Stanford University, Stanford, CA

Curriculum Construction (MA & PhD)	2017-2019
Curriculum & Instruction in Science Elective (MA)	2018
Elementary Science Teaching Methods (MA)	2016

Department of Earth Sciences Dartmouth College, Hanover, NH	
Field Methods: Resource & Earth Hazards Assessment (undergraduate)	2009
How the Earth Works (undergraduate)	2009
Introduction to Environmental Science (undergraduate)	2008

SERVICE

PLOS One , Reviewer	2020-present
Journal of Research in Science Teaching (JRST) , Reviewer	2020-present
Sociological Perspectives , Reviewer	2020-present
National Science Foundation (NSF) , Reviewer	2019-present
Division of Research on Learning in Formal and Informal Settings (DRL) Education and Human Resources (EHR) Directorate	
NARST Annual Meeting , Reviewer	2019-present
Studies in Educational Evaluation , Reviewer	2018-present
Stanford Graduate School of Education Student Guild , Co-President	2017-2019
Stanford Graduate School of Education , Graduate Student Mentor	2016-2019
Dartmouth Women in Science Program , Graduate Student Mentor	2009-2010

RELEVANT PROFESSIONAL EXPERIENCE

NARST Sandra K. Abell Institute , Participant	2019
Selected for and participated in competitive summer institute to support promising emerging scholars in science education research	
Land Talk Website , Curriculum Developer	2018-2019
Stanford University Center for Spatial and Textual Analysis Created curriculum for a variety of subjects to support K-12 teachers in using <i>Land Talk</i> (www.landtalk.org), a website through which people document landscape changes, as a digital learning tool in their classrooms	
European Science Education Research Association (ESERA) Summer School , Participant	2018
Selected for and participated in an international competitive summer institute to support promising emerging scholars in science education research	
Children's Discovery Museum of San José , Independent Evaluator	2017-2019
Designed and validated a survey for long-term evaluation of a museum-based, field science program; analyzed quantitative and qualitative survey data to assess programmatic outcomes	

PROFESSIONAL MEMBERSHIPS

American Educational Research Association (AERA)
 American Geophysical Union (AGU)
 Association for Science Teacher Education (ASTE)
 European Science Education Research Association (ESERA)

International Society of the Learning Sciences (ISLS)
National Association for Research in Science Teaching (NARST)
National Science Teaching Association (NSTA)
Science Educators for Equity, Diversity, & Social Justice (SEEDS)