

## ALEXANDRA SCHINDEL

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Buffalo, NY 14260

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(716) 645-4067

### Education

Ph.D., 2011 University of Wisconsin-Madison Major: Curriculum Theory and Research  
Minor: Educational Policy Studies

M.A.T., 2001 Cornell University Major: Science Education

B.S., 1998 Brigham Young University Major: Molecular Biology

### Academic Appointments

2019 - current Associate Professor, Teacher Education, Dept. of Learning & Instruction,  
University at Buffalo

2013 - 2019 Assistant Professor, Teacher Education, Dept. of Learning & Instruction,  
University at Buffalo

2011 - 2013 Visiting Assistant Professor, University at Buffalo

2008 - 2009 Facilitator Development Support Specialist, Master of Education in Professional  
Development Learning Community (ME-PD LC) Program, University of  
Wisconsin-La Crosse

2005 - 2008 Teaching Assistant, University Student Teacher Supervisor, Secondary Science,  
Department of Curriculum and Instruction, University of Wisconsin-Madison

2006 - 2008 Graduate Faculty Facilitator, ME-PD LC Program, University of Wisconsin-La  
Crosse

### Awards

2014 National Academy of Education/Spencer Postdoctoral Fellowship (\$58,000)

## PUBLICATIONS

### Book Chapters

**Schindel, A.**, Grossman, B., & Tolbert, S. (2021). Mobilizing privileged youth and teachers for justice oriented work in science and education. In K. Swalwell & D. Spikes (Eds.), *Teaching for Social Justice in Elite Schools*.

Tolbert, S., **Schindel, A.**, Gray, S., Kenny, L., Rivera, M., Snook, N., Widmaier, C. (2019). Empowerment. In D. Ford (Ed.), *Keywords in Radical Philosophy and Education*, pp. 191-209. The Netherlands: Brill.

**Schindel, A.**, Tolbert, S., & Rodriguez, A. (2019). Engaging multiple identities and ethical commitments as science education researchers/scholar activists. *Critical Voices in Science Education Research: Narratives of Academic Journeys*, pp. 189-199. New York: Springer.

Tolbert, S., & **Schindel, A.** (2017). Altering the ideology of consumerism: Caring for land and people through school science. In G. Reis, M. Mueller, R. Lather, L. Silveres, & R. Oliveira, Eds., *Sociocultural perspectives on youth ethical consumerism*. Netherlands: Springer.

Patterson, A., **Schindel, A.**, & Morrison, D. (2017). What's science got to do with it?: Possibilities for social justice in science classroom teaching and learning. In S. Pennell, A. Boyd, H. Parkhouse, & A. LaGarry (Eds.), *Possibilities in Practice: Social Justice Teaching in the Disciplines*, pp. 145-158. New York: Peter Lang Publishing.

### **Refereed Journal Articles**

Tolbert, S., Gray, S., Rivera, M., & **Schindel, A.** (In press). Teaching Science to Transgress: Portraits of Feminist Praxis. *Journal of Research in Science Teaching*.

McLean, E., Bagchi-Sen, S., **Schindel, A.**, & Atkinson, J. (2019). Household Dependence on Solid Cooking Fuels in Peru: An Analysis of Environmental and Socioeconomic Conditions. *Global Environmental Change* 58 101961.

McLean, E., Ravenscroft, J., **Schindel, A.**, Hewner, S., Bagchi-Sen, S., & Atkinson, J. (2018). Country-level analysis of household fuel transitions. *World Development*.

Gilbert, J.\*, **Schindel, A.**, & Robert, S. (2018). Just transitions in a public school food system: The case of Buffalo, NY. *Journal of Agriculture, Food Systems, and Community Development*.

Tolbert, S., **Schindel, A.**, & Rodriguez, A. (2018). Relevance and relational responsibility in justice-oriented science education research. *Science Education*, 102(4), 796-819.  
<https://doi.org/10.1002/sce.21446>

Haq, K.\*, & **Schindel, A.** (Summer 2018). Pushing past hate: One community's collaborative action to remove a racist school board member. *Rethinking Schools*.

**Schindel, A.**, & Tolbert, S. (2017). Critical caring of people and place. *Journal of Environmental Education*, 48(1), 26-34. <http://dx.doi.org/10.1080/00958964.2016.1249326>

**Schindel, A.**, & Tolbert, S. (2016). Ebola: Teaching Science, Race, and the Media. *Rethinking Schools*, 50-56.

**Schindel Dimick, A.** (2016). Exploring the potential and complexity of critical pedagogy of place in formal science education settings. *Science Education*, 100(5), 814–836.

**Schindel Dimick, A.** (2015). Extending methods: using Bourdieu’s field analysis to further investigate taste. *Cultural Studies in Science Education*, 10(2), 369-376.

**Schindel Dimick, A.** (2015). Supporting youth to develop environmental citizenship within/against a neoliberal context. *Environmental Education Research*, 21(3), 390-402.  
<http://dx.doi.org/10.1080/13504622.2014.994164>

Reprinted in: (2017). J. Henderson, D. Hursh, & D. Greenwood. (Eds.). *Neoliberalism and environmental education*. New York: Routledge.

**Schindel Dimick, A.** (2015). Towards an understanding of human and ecological flourishing. *Journal for Activist Science and Technology Education*, 6(1), 1-5.

**Dimick, A. S.** (2012). Student empowerment in an environmental science classroom: Toward a framework for social justice science education. *Science Education*, 96(6), 990-1012.

**Dimick, A. S., & Apple, M. A.** (2005, May 2). Commentary: Texas and the politics of abstinence only textbooks. *Teachers College Record*, ID Number: 11855.

### **Works Under Review and In Progress**

**Schindel, A., Rish, R., & Ormerod, K.\*** (under review). Scientific placemaking: Learning science with/in place. *Journal of Research in Science Teaching*.

Meshulam, A. & **Schindel, A.** (revise & resubmit). Culturally relevant science education: Palestinian-Jewish bilingual education engaging in science for social justice. *Critical Studies in Education*.

**Schindel, A., Tolbert, S., Barbour, A.\*, & Bampton, T.\*** (in preparation). Youth’s civic roles towards environmental issues.

**Schindel, A., Henry, A.\*, Tripp, J.\*, Wang, C., & Christ, T.** (in preparation). Implementing Critical Place Based Pedagogy in Early Childhood Classrooms.

Wang, X. C., Cobanoglu, A., **Schindel, A., & Christ, T.** (in preparation). “I wear glasses and I am going to make a robot to protect people”: Exploring underserved kindergarteners’ emergent science identity. *Science Education*.

### **GRANTS**

2021 (Under Review) Co-PI, National Science Foundation INCLUDES Alliance  
Title: Redesigning for Inclusion, Success, and Equity among  
Underrepresented Populations (RISE-UP) in STEM  
Amount of Award: \$10,000,000

- 2020 Co-PI, National Science Foundation Noyce  
 Title: Citizen Science Teachers: University at Buffalo (UB) Noyce Residency Scholars  
 Amount of Award: \$989,780
- 2020 (Unfunded) PI, Spencer Foundation, Large Grant  
 Title: Youth placemaking through the lens of science  
 Amount of Award: \$247,024
- 2019 Co-PI, Spencer Foundation  
 Title: Reading and (Re)writing the World: Exploring Critical Pedagogy of Place in Early Science and Literacy Learning  
 Amount of Award: \$49,864
- 2019 PI, UB GSE MEGAS Seed Grant  
 Title: WNY Environmental Science Collaborative: Strengthening Science Pathways with Historically Underrepresented Youth  
 Amount of Award: \$9,996.25
- 2019 (Unfunded) Senior Research Personnel, National Science Foundation INCLUDES Alliance  
 Title: “Using EarthConnections Pathways to Develop Scientific and Workforce Capacity with Communities”  
 Amount of Award: Alliances: \$12,417,822; UB: \$435,184  
 Partnership: <https://serc.carleton.edu/earthconnections/index.html>
- 2018 (Unfunded) Consultant, National Science Foundation AISL  
 Title: “Developing Methods to Research the Engagement of Artists, Scientists and Educators with Learners for Environmental Decision Making”  
 Amounts of Award: \$300,000; UB: \$4,000  
 Partnership: University of New Hampshire and Tulane University
- 2018 Co-PI, UB GSE MEGAS Seed Grant  
 Title: MuMoExplore: Exploring Critical Pedagogy of Place and Multimodal Digital Technology to Engage Young Children’s Science and Literacy Learning  
 Amount of Award: \$10,000
- 2017 Co-PI, UB Seed Funding, Community for Global Health Equity  
 Title: Multi-Scalar Analysis of Household Fuel Transitions: Developing an Evidence-Based Framework  
 Amount of Award: \$50,000

## **PRESENTATIONS**

### **Invited Presentation**

**Schindel, A.** (2016). *Toward Equity and Justice: Many Different Voices, Cultures, and Languages in Science Education Research for Quality Science Learning and Teaching*. Preconference Workshop Panelist for the Equity and Ethics Committee of the National Association for Research in Science Teaching. Baltimore, MD.

### **Conference Presentations**

Ormerod, K., Rish, R., & **Schindel, A.** (2021). *Placemaking Through the Lens of Science*. Poster presented at the annual meeting of American Educational Research Association.

Wang, X. C., Cobanoglu, A., **Schindel, A.**, & Christ, T. (2021). “*I wear glasses and I am going to make a robot to protect people*”: *Exploring underserved kindergarteners’ emergent science identity*. Paper presented at the annual meeting of American Educational Research Association.

Ormerod, K., Rish, R., & **Schindel, A.** (2020). *Seeing the Places Around Us: Underrepresented and Transnational Youth Co-constructing Place-based Science Identities*. Paper presented to repository for the annual meeting of the American Educational Research Association.

Meshulam, A., & **Schindel, A.** (2018). *Culturally relevant science education in a conflict-ridden society: Palestinian and Jewish educators and students engaging in science for social change*. Paper presented at the annual meeting of the American Educational Research Association. New York, NY.

**Schindel, A.**, Tolbert, S., & Rodrigues, A. (2018). *Critical and participatory methods town hall*. Town hall meeting presented at the inaugural meeting of the Science Educators for Equity, Diversity, and Social Justice conference. San Jose, CA.

**Schindel, A.**, & Tolbert, S. (2017). *Environmental change-making: How youth situate their roles toward transformative action*. Paper presented at the annual meeting of the American Educational Research Association. San Antonio, TX.

Tolbert, S., **Schindel, A.**, & Rodrigues, A. (2017). *Engaging multiple identities and ethical commitments as a science education researcher/scholar-activist/school-university partner: A metalogue*. Paper presented at the annual meeting of the American Educational Research Association. San Antonio, TX.

**Schindel, A.** (2016). *A Case Study of Critical Pedagogy of Place in Urban Science Education*. Paper presented at the annual meeting of the American Educational Research Association. Washington, DC.

**Schindel, A.** (2016). *Critical Perspectives on Science Education: Examples from Practice*. Poster Symposium presented at the annual meeting of the National Association for Research in Science Teaching. Baltimore, MD.

Aguilar-Valdez, J., Tolbert, S., Suriel, R., Snook, N., Morales-Doyle, D., **Schindel Dimick, A.**, Bazzul, J. (2016). *The Sociopolitical Turn in Science Education: A Call to Action*. Poster presented at the annual meeting of the National Association for Research in Science Teaching. Baltimore, MD.

**Schindel Dimick, A.** (2015). *Urban Youth and Environmental Participation*. Paper presented at the NAEd/Spencer Postdoctoral Fellows Retreat. Washington, D.C.

Robert, S. A., **Schindel Dimick, A.**, and Raja, S. (2015). *Educating for Food Sovereignty: Growing Critical Food Systems Learning*. Symposium presented at the annual meeting of the American Anthropological Association. Denver, CO.

**Schindel Dimick, A.** (2015). *More Than Planting Trees: Transforming Youth and their Community's Environment Through Critical Caring*. Paper presented at the annual meeting of the American Educational Research Association. Chicago, IL.

**Schindel Dimick, A.** (2015). *Fostering youth's environmental participation: A comparative case study within urban high school environmental science classrooms*. Invited Poster Session for NAEd/Spencer Postdoctoral Fellows presented at the annual meeting of the American Educational Research Association. Chicago, IL.

**Schindel Dimick, A.** (2014). *Teaching and Learning Science in a Neoliberal Context*. Symposium presented at the annual meeting of the National Association for Research in Science Teaching. Pittsburgh, PA.

**Schindel Dimick, A.** (2014). *More than green consumption: Supporting youth to develop environmental citizenship within/against a neoliberal context*. Paper presented at the annual meeting of the American Educational Research Association. Philadelphia, PA.

**Schindel Dimick, A.** (2013). *Rethinking "Good" Citizenship for Environmental Education*. Paper presented at the annual meeting of the American Educational Research Association. San Francisco, CA.

**Schindel Dimick, A.** (2013). *Rethinking "Good" Citizenship for Environmental Education*. Paper presented at the annual meeting of the National Association for Research in Science Teaching. Rio Grande, Puerto Rico.

**Schindel Dimick, A.** (2011). *Teaching environmental science for social justice: Navigating tensions and possibilities in practice*. Paper presented at the annual meeting of the American Educational Research Association. New Orleans, LA.

**Schindel Dimick, A.** (2011). Square peg in round hole? A conceptual mapping of social justice science education. Paper presented as part of a symposium, *Off the beaten path: Social justice teaching in uncommon contexts*. Presentation at the annual meeting of the American Educational Research Association. New Orleans, LA.

**Schindel Dimick, A.** (2011). *Teaching environmental science for social justice: Navigating tensions and possibilities in practice*. Paper presented at the Ethnography in Education Research Forum. Philadelphia, PA.

**Schindel Dimick, A.** (2010). *Square peg in round hole? A conceptual mapping of social justice science education*. Paper presented at the 31st Annual Bergamo Conference on Curriculum Theory and Classroom Practice, The Bergamo Center, Dayton, OH.

**Schindel Dimick, A.** (2010). Student empowerment: Learning science for social justice. A paper presented as part of a symposium, *Case studies in democratic education: Analyses and descriptions of small multicultural and democratically-run schools and programs and the political contexts that support or hinder their growth*. Presentation at the annual meeting of the American Educational Research Association. Denver, CO.

**Schindel Dimick, A.** (2010). *Teaching and learning science for social justice: Co-constructing meaning in a science classroom*. Data share presentation at the Ethnography in Education Research Forum. Philadelphia, PA.

## SERVICE

### National Service

Founding Member, Conference Organizer: *Science Education for Equity, Diversity, and Social Justice* (SEEDS), 2015-present

Board of Directors, *Buffalo Commons Charter School*, 2016-present

Journal Reviewer

*Science Education*

*Cultural Studies in Science Education*

*Environmental Education Research*

*Equity & Excellence in Education*

*The Journal of Environmental Education*

### University Service

2015 to 2016 Alternate for Faculty Senate

2015 to 2016 Committee Member Sustainability Teaching Subcommittee

### Department Service

2017 ongoing Committee Member, LAI Department, Doctoral Studies Committee

2016 to 2017 Social Studies Education Program Chair, LAI Department

2016, Spring Science Education Program Chair, LAI Department

2014 to 2016 Committee Member, LAI Department, Doctoral Studies Committee

2013 to 2014 Director, Undergraduate Minor in Education, Graduate School of Education

2013 to 2014 Committee Member, LAI Department, PR-Retention-Website Committee

### **Dissertation Advisement**

#### ***Dissertation Committee Chair***

*PhD Conferred*

Marissa Pytlak

Patricia Ortega

#### *Dissertation Proposal Phase*

Amy Merica

Michelle Connolly

David Mindorff

#### *Qualifying Exam (RAE) Phase*

Alayla Henry

Kendra Ormerod

#### *Coursework in Progress*

Lauren Urban

#### ***Dissertation Committee Member***

##### *Defended*

PhD CISL – Kate Haq, defended May 2018

PhD CISL – Adam Huck, defended April 2018

PhD CISL – Tina Bampton, defended 2017

PhD English Education – Charles Gonzalez, defended May 2016

PhD Foreign and Second Language – Amanda Barbour, defended March 2016

PhD Mathematics Education – Ashley Martin, defended August 2015

PhD Science Education – Bhawna Chowdhary, defended August 2015

PhD Science Education – Erica Smith, defended August 2014

##### *Current Committee Member*

Yvonne Baptiste-Szymanski

Sara Solley

Di Yuan

### **PROFESSIONAL MEMBERSHIPS**



Science Education for Equity, Diversity, and Social Justice (SEEDS), 2017-present  
American Educational Research Association (AERA), 2010-present  
National Association for Research in Science Teaching (NARST), 2013-2016