



Martha Merson

2067 Massachusetts Avenue, Cambridge, MA 02140

(617) 873-9742

martha_merson @terc.edu

Professional Preparation

Bryn Mawr College

Massachusetts College of Art

University of Pennsylvania

German Literature

Sculpture

Education

B.A. 1986

B.A. 2007

M.Ed. 1990

Appointments

TERC, Cambridge, MA

- Principal Investigator, *Interpreters and Scientists Working on Our Parks (iSWOOP)* (2015-2019; NSF.) The Innovations project tests a model for interpreters at five National Parks of different sizes, resources, and staffing configurations to learn about site-based, current research. Scientists and designers create a library of visualizations for interpreters to use to jumpstart conversations about the relevance of research to park management and visitors' lives.
- Project Director, *EMPower* for California Department of Corrections and Rehabilitation. Designed and delivered workshops introducing prison-based adult basic math educators to the *EMPower* curriculum. *EMPower* classrooms offer engaging activities connecting situations, graphs, tables, and equations as a means to increase conceptual understanding, multiple solutions and the articulation of varied strategies.
- Principal Investigator, *Interpreters and Scientists Working on Our Parks (iSWOOP)* (2013-2015; NSF.) The two-year exploratory project demonstrated a model for interpreters at Carlsbad Caverns National Parks to learn about site-based, current research on Brazilian free-tailed bats, and to use high-tech visuals (such as thermal imaging) to build visitors' engagement with the research.
- Consultant to Dr. Angela Brega, University of Colorado Denver (2013-2015). Designed classroom-based activities to support numeracy development among American Indians and Alaska Natives. Increased numeracy has been linked to successful diabetes management. Funded by The National Institutes of Health.
- Project Director, *Learning Pathways Project with EMPower* (2012-2013), a collaboration of the Adult Numeracy Center at TERC, District 79 and the Office of Adult and Continuing Education for the NYC DoEd. Responsible for deliverables including professional development for 30 pilot teachers of Common Core-aligned math lessons for adults and under-credited youth 16-21.
- Principal Investigator, *Statistics for Action* (2008-2014; NSF.) The project built the capacity of environmental organizations to teach quantitative literacy skills to citizens. <http://sfa.terc.edu>.
- Project Director, *Math off the Shelf*. (2007-2010; NSF.) A multi-year collaboration among TERC and eight regional public library networks designed to infuse math into children's programming. Designed and delivered training to librarians incorporating math.
- Project Director, *Statistics for Action*. (2006-2007; NSF.) Conducted research, planning, and proof of concept. Strategized with partner groups on ways to understand public health and environmental data.
- Senior Research Associate, *EMPower (Extending Mathematical Power to Adults)*, (2001-2004; NSF) Co-authored mathematics curricular materials for out-of-school youth and adult learners; led research on classroom try-outs and pilots.

Boston Public Library, Boston, MA

Director of Literacy Services (2000.) Integrated marginalized literacy services into the core of BPL's services to increase service to African-American and immigrant residents.

Adult Literacy Resource Institute, Boston, MA

Adult Basic Education/Literacy Specialist (1992-1998.) Developed several curricula within a team structure, including *Everyday People, Everyday Law*, a curriculum based on students' experiences with the legal system.

Products

Related Products (i)

1. Merson, M., Allen, L., Cox, P., Hristov, N. Roving with a Digital Visual Library: Increased Learning Opportunities at Carlsbad Caverns National Park (2016). *Journal of Interpretation Research*. 21(1).
http://www.interpnet.com/NAI/interp/Resources/Publications/Journal_of_Interpretation_Research/Archive/nai_publications/JIR_Archive.aspx?hkey=7f4c07ef-bdd9-4bae-9858-0b73facf19
2. Merson, M., Char, C., Hristov, N. and Allen L. (2018) Seeking Park-based Science Information: Interpreters at the Gate. *George Wright Society Forum* 34(3).
3. Allen, L., Char, C., Wright, T., Merson, M. (2018). Beyond the Brown Bag: Designing effective professional development for informal educators. *Integrative and Comparative Biology* 58(1). <https://doi.org/10.1093/icb/icy026>
4. Hristov, N., Strohecker, C., Allen, L., Merson, M. Designing for Broad Understanding of Science: Insights from practice. *Integrative and Comparative Biology* (58)1.
<https://doi.org/10.1093/icb/icy026>
5. Merson, M., Everitt, B., Pfeiffenberger, J., Super, P., Teel, S., Watkins, T. (2018). Goldilocks Syndrome: : Weber, Samantha, ed. 2017. *Connections Across People, Place, and Time: Proceedings of the 2017 George Wright Society Conference on Parks, Protected Areas, and Cultural Sites*. Hancock, Michigan: George Wright Society

Other Products (ii)

1. Merson, M. (2012, October). *Getting in Synch: Environmental Organizers, Math Educators, and Evaluators Take On Contamination*. Paper presented at American Evaluation Association Annual Conference, Minneapolis, MN. Retrieved from
http://sfa.terc.edu/materials/pdfs/Merson_GettingInSynch_AEA2012.pdf
2. Merson, M., Gonzalez-Carrillo, S., Contini-Field, E., Small, M. (2016). Smart Moves: Making Sense of the Math in Environmental Data. Science Education and Civic Education, seceij.net.
3. Gonzalez, S. & Merson, M. (2013). Transparency of Water. In R. Gutstein & B. Peterson. (Eds.) *Rethinking Mathematics*. Portland, OR: Rethinking Schools.
4. Merson, M. (2017). 4 Principles to Guide Interactions—Assisting communities confronting environmental contamination. *Science Communication, An International Journal*. Vol 39, Issue 1, pp. 125 - 136).
5. Merson, M. (2017). 4 Principles to Guide Interactions—Assisting communities confronting environmental contamination. *Science Communication, An International Journal*. Vol 39, Issue 1, pp. 125 - 136).

Synergistic Activities

1. Contributions to the July 2017 *Legacy Magazine*, Communicating Science.
2. Peters, C., & Merson, M. (Eds.) (2011). *The Change Agent, Issue 32: Staying Safe in a Toxic World*. Boston: New England Literacy Resource Center.
3. Advisor to TV411 Cooking shows to increase adults' STEM knowledge. 2010.
4. Schmitt, M.J., Steinback, M., Donovan, T., & Merson, M. (2004-2006; 2nd edition 2015). *EMPower—Extending Mathematical Power* curriculum. Chicago: McGraw Hill.
5. Merson, M., & Contini-Field, E. (n.d). Statistics for Action Resources for environmental educators, sfa.terc.edu.