

Tara Robillard tara_robillard@terc.edu

PROFESSIONAL PREPARATION

Eckerd College Georgia State University Marine Science Science Education B.S. 1997 M.Ed. 1999

<u>APPOINTMENTS</u> TERC Inc., Cambridge, MA

2001-present

<u>Lead Researcher</u>. Identifying Factors Influencing Individuals Who Are Deaf or Hard of Hearing Becoming Interested in Pursuing a STEM Career. Conduct research to gain insight into the influences that contribute at the middle and high school levels to persons who are deaf or hard of hearing becoming interested in a STEM career.

<u>Senior Research Associate and Developer.</u> CodePlay: Personalized Computational Thinking for Grades 3-8. Member of the research to practice partnership team supporting the integration of computational thinking strategies into science and mathematics instruction in the Braintree Public Schools, grades 3-8.

<u>Lead Researcher</u>. Identifying and Testing Measures to Investigate Processes Deaf and Hard of Hearing Students Use When Engaging in Multimedia Learning. Develop expertise in the use of eye-tracking technology, conduct preliminary testing, and begin to develop a methodology that uses eye-tracking to investigate how deaf and hard of hearing students process multimedia animations.

<u>Lead Researcher</u>. **Preliminary Research into How Students Who Are Deaf or Hard of Hearing Derive Meaning Visually from Interactive Multimedia Animations.** Adapt animations for grade 6-8 students who are deaf or hard of hearing to include animated images, text, and sign.

Lead Researcher. Incorporating STEM into Undergraduate Sign Language Interpreter Programs. Contribute to the development and testing of a Signing BioScience Dictionary to increase the signing life science vocabulary of student interpreters in 4-year undergraduate interpreter training programs.

<u>Lead Researcher</u>. Signing Glossaries for Science Exhibits. Contribute to the development and testing of venue-specific signing glossaries to enhance access to STEM learning during visits to informal STEM learning environments.

<u>Lead Researcher and Developer</u>. Signing Math and Science. Contribute to the content development, lead all research and evaluation of web-based and mobile interactive 3D standards-based math and science sign language dictionaries for students in grades K-8 and 9-12 who are deaf and hard of hearing.

<u>Co-Principal Investigator</u>. **The Inclusive iBook Project.** Develop, and conduct design-based research of, an iBook Version of TERC's What's the Weather? Unit.



<u>Lead Researcher</u>. **Philips Color Kinetics LightAide**. Design and conduct usability testing and implementation evaluation studies to find out about the usability and potential effectiveness of the LightAide device and associated materials with students who are visually impaired.

<u>Lead Researcher</u>. The Handheld Signing Math and Science Dictionaries for Museum Visitors Research Project. Design and conduct a research study of how visitors (families and school groups) use the mobile Signing Math and Science dictionaries to access science content during visits to museum exhibits at two Boston science museums.

<u>Co-Principal Investigator</u>. **Multimedia Literacy Tool for Learners with Autism.** Design and conduct usability testing of a prototype Web-based eMapper tool designed to help learners with autism engage in standards-based learning.

<u>Lead Researcher and Developer</u>. **The Shared Signing Science Pictionary Project.** Conducted a research planning project to examine the potential effectiveness of the Signing Science Pictionary (SSP) in increasing the ability of parents and their deaf and hard of hearing children to engage in informal science learning in informal science settings.

PUBLICATIONS

Vesel, J. & Robillard, T. (2019). Glossary Apps for Science Exhibits. Hands On!

- Vesel, J. & Robillard. T. (2017). Accessing Science Museums with Interactive Signing Dictionaries. *Journal of Visual Literacy*.
- Vesel, J. & Robillard, T. (2017). Introducing the Inclusive What's the Weather? eBook. *Hands On,* TERC. Inc.
- Vesel, J. & Robillard, T. (2015). It's Elementary: What's the Weather? *The Earth Scientist*. XXXI (4), 8-10.
- Vesel, J. & Robillard, T. (2014). Increasing access to technical science vocabulary through use of universally designed signing dictionaries. In S. Burgstahler (Ed.), Universal design in higher education: Promising practices. Seattle: DO-IT, University of Washington.
- Vesel, J. & Robillard, T. (2013). Teaching mathematics vocabulary with an interactive signing math dictionary. *Journal of Research on Technology in Education*. 45:4, 361-389.

SYNERGISTIC ACTIVITIES

Current chair of TERC's Institutional Review Board; eCollege Certification in Developing and Instructing Online Courses