

Designing family-centered science and engineering education for culturally thriving communities

Carrie Tzou
University of Washington

Friday, April 16, 2021
2:00 - 3:15pm

Hosted by the College of Education

To receive Zoom connection information, register by 4/15:
<https://forms.gle/ZPQMCqgmPofFHEMC9>

In this talk, I will describe two efforts to design science and engineering education towards culturally thriving communities. The first is the Learning in Places project, which aims to co-design (with families, communities, and educators) equitable field-based science learning towards ethical socio-ecological decision making for children grades PreK-3 and their families. I will describe some emerging findings from this work, especially as related to supporting field-based science education through the lenses of power and historicity and nature-culture relations. The second is TechTales, which is a family engineering project that centers family storytelling about place. I will share findings around how family storytelling, engineering, and identity intersected in family workshops around robotics and making.



Dr. Carrie Tzou is a professor in science education in the School of Educational Studies and a PI in the Goodlad Institute. She holds a PhD in Learning Sciences from Northwestern University and an M.S. in Teaching and Learning with a concentration in science education from Vanderbilt University. Her research has three major components, all connected with an interest in addressing issues of culture, identity, and equity in science and environmental science learning:

- 1) ethnographic work to understand how youth and their communities are positioned and position themselves through place-based education,*
- 2) design-based research to design curricula to bring youths' out of school science and cultural practices into science and environmental science teaching and learning, and*
- 3) research and design of elementary and secondary preservice teacher education that explores how to orient preservice teachers to the sophisticated learning and identities that their students construct both in and out of school in order to make science more accessible to all of their students.*