About the Project

TechTales is a 3-year project funded by the National Science Foundation

Partnership between large urban library system, large science center, Native American-serving organizations, university

Bringing technology-based learning experiences to families from populations traditionally underrepresented in STEM

Centering family stories in learning etextiles, robotics, and computer programming: connecting to family histories, cultural practices

Developing a model of decentralized informal science education: taking informal science education out of the science centers and into community settings

What we do

Professional development workshops: librarians, community youth educators, informal science educators develop ways

to run family workshops

Family workshops: Multiple workshops/year: summer, fall, winter, spring with "booster days"

Backpacks: to check out from the library, Science Center, community settings

Research focused on:

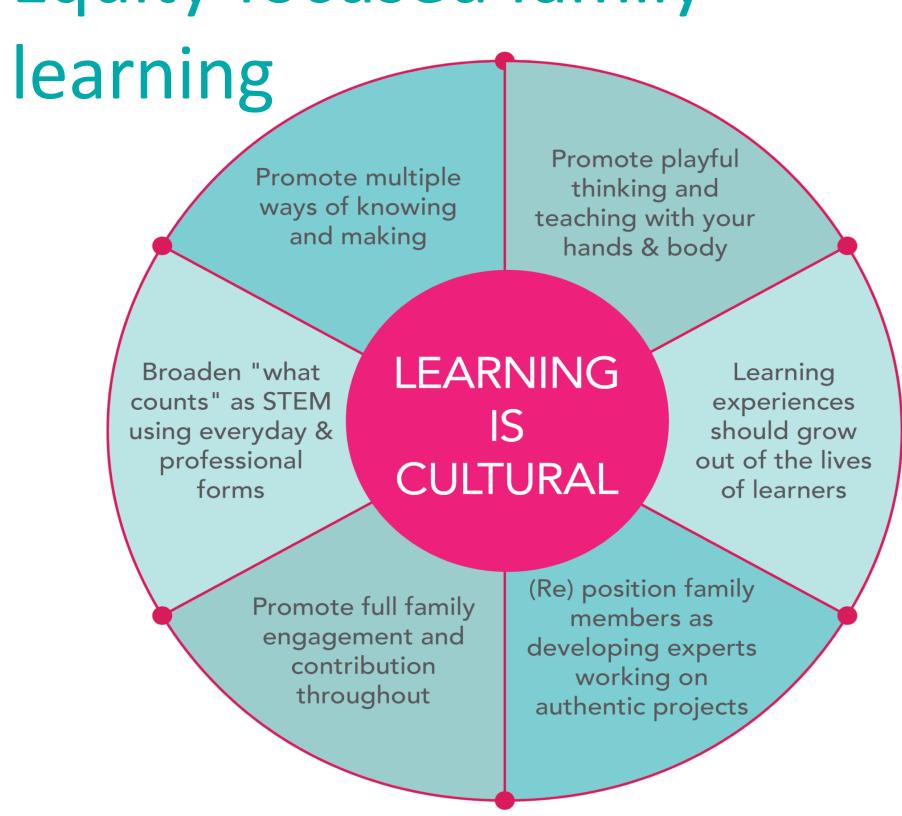
Facilitator and family learning How library systems & community organizations adapt this program into their settings



MAKE. LEARN. SHARE.

Carrie Tzou, University of Washington Bothell Megan Bang, Northwestern University Philip Bell, University of Washington Seattle **Amy Twito, Seattle Public Library** Daniel Rother, Pacific Science Center

Equity-focused family





Learning experiences should grow out of the lives of learners

- Families drive their work with technology
- Stories, memories, and shared visions for the future connect with STEM learning
- Families are innovators and creators with technology, not only consumers

Centering family stories Tell a story about... an important experience in

Why family learning?

Typically, we see makerspaces and STEAM learning

Research shows that families learn in rich and

When families learn together, different routines,

histories, identities, cultural practices enter the

settings that are youth-only or age-segregated

With a Family Learning program, all family

members are invited to learn together

varied ways

learning space:

- your family's past
- how your family and/or the world will change in 10 years
- a place that is important to your family.



University

researchers/

designers

Informal

educators/

designers

Promote multiple ways of knowing and making

Design

- Multiple interests and expertise intersect
- Brings together all ways of learning about and interacting with the world
- Design for heterogeneity

Decentralizing informal science education

Facilitators Designers Professional development Prototyping Pedagogy

Role remediation, porosity, shifting power relations

University researchers/ designers

HIGHLINE
PUBLIC SCHOOLS
A path to success for every student

Informal educators/ designers

Library and community partners





Library, community partners, and

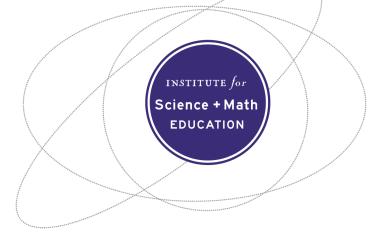
> Co-design of family events at science center

Research

Co-design

Co-presenting









This work is funded by the National Science Foundation, DRL 1516562