

Narrative 2: "I never know when I use those math I learnt or why I'm learning it. I was studying for exam and college"

Alternative narrative: Math helped me see the world differently. I can apply math to address things that I care about.

Narrative 1: Math is not my thing/I don't have competence for math/I am not a 'math person'

Alternative narrative: Math IS my thing, even better, it lies beneath things that either I enjoy doing, or things I'm willing to try out.

I HOPE MY WORK CAN SWITCH THESE TWO NARRATIVES TO THE ALTERNATIVE NARRATIVES.

STEM LEARNING & STEM IDENTITY

Community-based and place-based Learning

- Authentic learning context
- High relevancy & meaningful engagement
- Civic participation & impact on local

Art and Math

- Math in nature, architecture, and patterns in culture (fabric, china, ceramic tiles)
- Crochet, water-marbling, paper-cutting
- Creativity & aesthetic

Justice-oriented

- Math and science allow us to see the world through Justice lens.
- We can move toward a more just world with our STEM exp

Science and Math in Culture

- How is land, water, relationship between human and nature viewed differently in different culture?
- History of Math & Science in different Culture
- Manipulative, tool, techniques in math & science from different culture

Youth Advocacy and Activism

- Student agency, empowerment, take actions, and make changes
- Healing & hope, continuous participation

Technology and STEAM

- How can technology supports representation and visualization of science and math concepts in teaching?
- How can students utilize digital literacies to communicate their thinking and learning in STEM?
- Develop computational thinking and digital literacies

Collaborate with Teachers and Students

Merit in Design