

AMPED 4 MAKING | AWARD # 2215382

Afterschool Making Projects with Design Thinking and Mathematics with Latinx Communities



Community Partners: TERC, Cesar Chavez Foundation

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<https://www.terc.edu/amped4making/>

Project Description

Amped 4 Making engages middle-school Latinx youth in math and community-focused maker projects, thereby *broadening participation* in STEM.

Key Achievements: Y1 Accomplished

- Designed and implemented a year-long making program focused on math and Cesar Chavez's values
- Established infrastructure to run a multi-site program and trained facilitators
- Developed and tested a set of instruments to measure math learning and study math and maker identity and community belonging

Audience & Settings

Audience: Latinx youth

Disciplinary area: Math, making

Learning environment: Afterschool, middle school

Access and Inclusion

We empower middle school Latinx youth and facilitators to bring their full selves into a math-rich, engaging making program, sparking interest in STEM.

We encourage youth to connect with community members and address community concerns.

Key Achievements: We Learned—

- Measuring math learning in an afterschool environment is hard
- Children are motivated to make things that have a purpose
- Sewing and 3D printing were equally interesting to children

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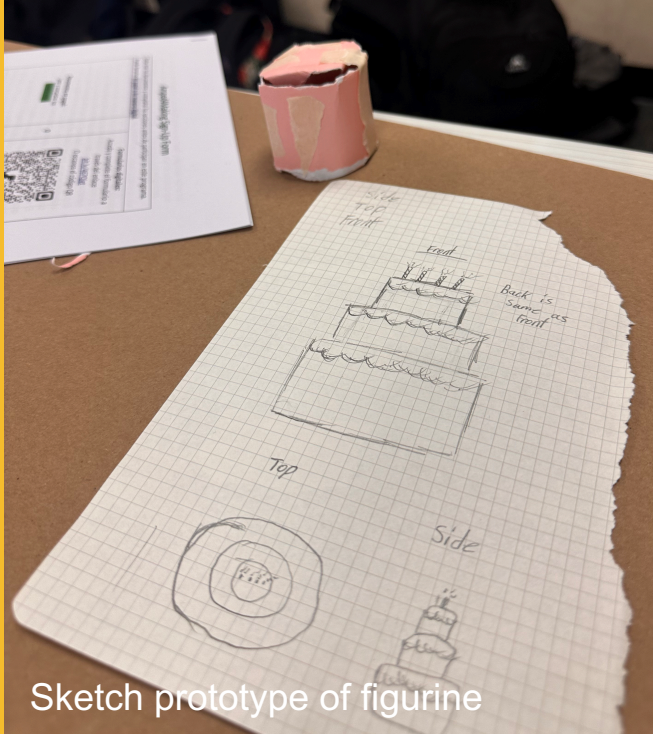
Maker task, math assessment



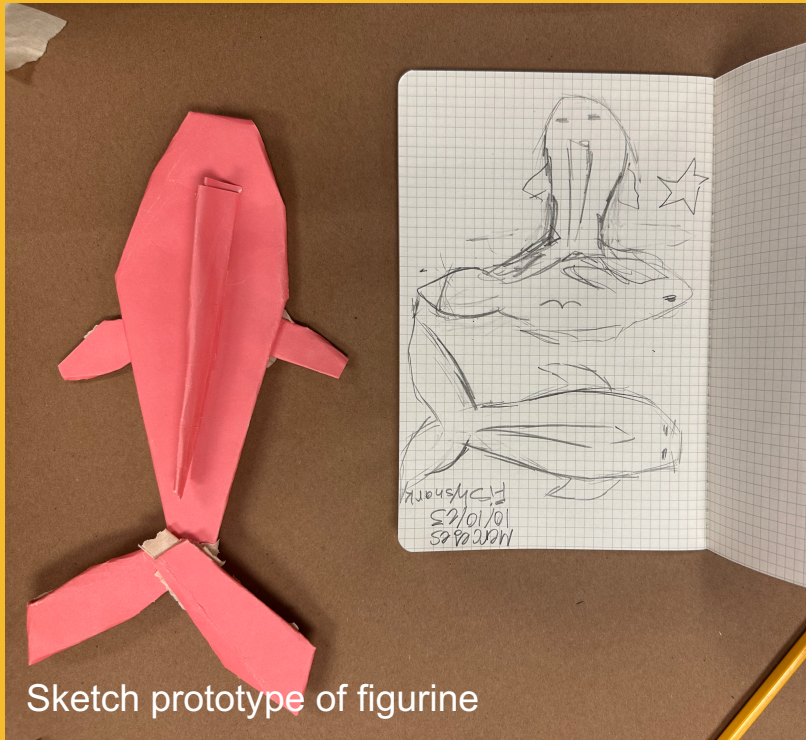
Measuring cardboard connectors



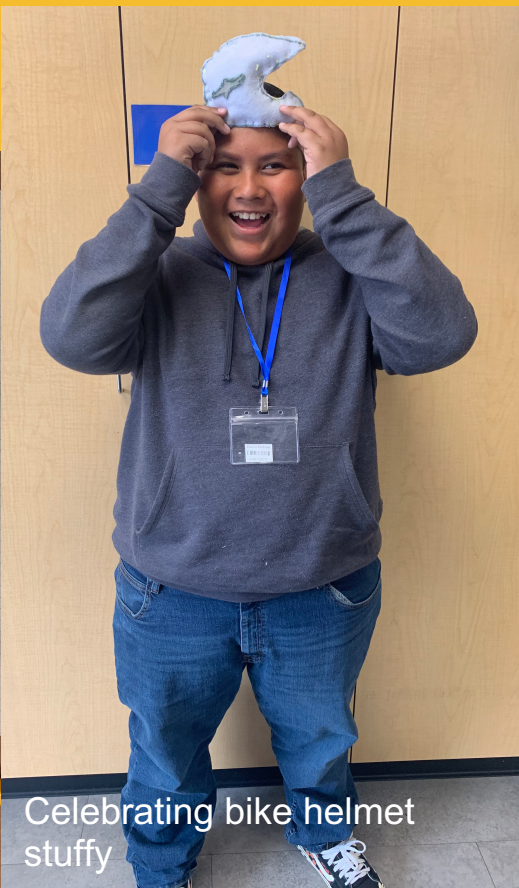
Celebrating making of cubbies



Sketch prototype of figurine



Sketch prototype of figurine



Celebrating bike helmet stuffy



Watching 3D printer in action