



1943208 Digital Mathematics Storytelling: Fraction Stories from Urban Emergent Communities

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OSU Digital Math
Storytelling

Using Digital Storytelling with children in urban emergent communities, this project aims to create protocols that children can use to document, share, and showcase the rich mathematical knowledge that exists in their own families and communities.

Project type: ITEST CAREER

Project start/end date: 2020 - 2025

Project URL: <https://u.osu.edu/digitalmathstorytelling/>

Strategies

- Focus: Equity/Inclusion/Access
- Using Community Participant Design Research, a **Culturally Responsive Methodology**, to develop protocols for engaging youth in Digital Mathematics Storytelling.
- Partnering with local community centers, like *Community Development for All People (CD4AP)* and *Central Community House (CCH)*, to support K through 8th-grade students and adult educators in mathematics storytelling centered on community knowledge.
- Impact how adult educators and community members, who work with youth at the community centers, change in their own mathematics identities through engaging in Digital Mathematics Storytelling

Insights & Achievements

- Developed a protocol and a pedagogical model for promoting Digital Mathematics Storytelling in an online environment.
- Worked with 9 students ranged from K grade to 6 grade and 16 adult educators in two local community centers
- Submitted 2 research proposals that have been accepted at the 2021 PMENA and 2021 AECT conference.

Reconsiderando:

What have you needed to reconsider?

- The ways children think about and position themselves to mathematics, particularly in the context of storytelling
- The impact of informal adult educators in the community

What have you been able to creatively overcome and how?

- Revising our protocols, particularly for working with adult educators, to exist online

What are you still grappling with?

- Limited access to working with schools and children in safe ways during the COVID-19 pandemic



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