

Seeing the World through a Mathematical Lens: A Place-Based Game for Creating Math Walks | DRL 2115393

Community Partners: Dallas Arboretum, Dallas Museum of Art, Dallas Zoo, Frontiers of Flight Museum, the GEMS Camp, the Girl Scouts STEM Center of Excellence, St. Phillips School and Community Center, Twelve Hills Nature Center and Voice of Hope Ministries

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Project Website Link: gomathfinder.org

Project Description

Our project is to develop and research a location-based mobile app, *MathFinder*, for informal mathematics learning. Iteratively designed across 9 partner sites, learners can view and contribute to user-generated math “walk” stops facilitated through AR overlays and gamification features.

Key Achievements

- 8 peer-reviewed articles published, 8 conference presentations, 4 book chapters and reports submitted 6 media features, over 500 learners and 100 educators impacted; content partnership with major U.S. textbook publisher, NSF Anniversary community event
- Improvements in learner attitudes towards math; deeper engagement with walk stops creation groups using AR tools; CHALLENGES: iPad developer limitations; educators’ range of math content and pedagogy; quality of learners’ posed questions

Audience & Settings

Audience: 4th-8th grade youth in out-of-school programming

Discipline type:
Mathematics, STEM

Learning environment:
informal learning, OST,
after-school



MathFinder
Where Is Your Question?

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MathFinder Website

- [Full searchable video library](#)
- [Free educator resources and dashboard](#)
- [News stories & publications](#)
- [Recorded podcasts](#)
- *And much more!*

Fox News Segment



Trailer for Educators



Podcast Episodes



Walkstop Videos



GOMATHFINDER.ORG

MathFinder App Trailer



Planting Flowers AR Overlay



MLK Center Overlay



Hippo AR Overlay



More AR Math Tools



A: Counting tool; B: Shape Finder Tool; C) Distance Tool; D) Angle Tool

Special Community Events

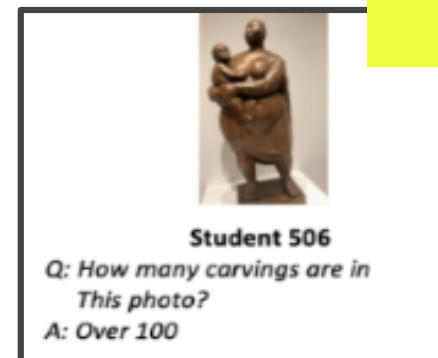


Join the MathFinder table at Twelve Hills! We'll make **place-based math connections** to what you see using your personalized math lens, and **ask your own thoughtful questions**. Our activities are great for children (ages 7-18), families, educators, and all interested. We will have...

- A scavenger hunt
- Spin-the-wheel
- Prizes

Plus, Twelve Hills did say something about cupcakes...

Learner Walk Stop Creation Example



What's Your Question? Social Media Campaign

