

# Breaking Stereotypes through Culturally Relevant Storytelling: Optimizing Out-of-school Time STEM Experiences for Elementary-Age Girls to Strengthen their STEM Interest Pathways | 2115579

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**Project websites:** [Children's Learning Institute](#), [UTHealth Houston](#), [Children's Museum Houston](#)

## Project Description

This ongoing project explores how a museum's afterschool STEAM program (A'STEAM) can combine storytelling approaches with female science and engineering role models to best spark elementary-age girls interest in STEM and foster their STEM identity. The project evaluates an inquiry-based, afterschool program that serves both elementary school girls and boys, comparing the A'STEAM Basic program to A'STEAM Stories, to understand how to optimize out-of-school time (OST) learning in ways may dispel STEM stereotypes for girls.

## Key Achievements

- During Cohort 1, assessed and delivered afterschool lessons to 265 students. We trained educators at 18 sites to implement and sustain the STEM curriculum as part of the randomly assigned treatment or waitlist control group the site was assigned to.
- During ongoing Cohort 2, we have assessed 358 students and trained educators across 18 sites.
- We created resources to support sustainment of afterschool STEM curriculum by site educators.
- We are investigating barriers of facilitators to sustainment of the A'STEAM program through follow-up surveys and interviews.

## Audience & Settings

**Audience:** Elementary School Children (ages 6-10 yr); Families; Museum/ISE Professionals

**Disciplinary area:** General STEM

**Learning environment:** Public Programs; Afterschool Programs; Museum and Science Center Programs

## Access and Inclusion

The project targets grades K-5 students and families from underrepresented groups (e.g., Latine and African American) with low socioeconomic status and from schools serving >95% of underrepresented groups experiencing poverty. We also address equity by providing resources that specifically exhibit women in STEM.





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