

# CARDBOARD ENGINEERING

Funded by NSF  
#1906884



## Designing for More Families

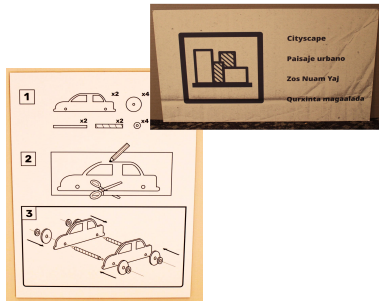
Our project focuses on iterative improvements to a cardboard-focused maker exhibition to engage more families in engineering practices. Initial activities and design choices focused on improving the design:



Iteration via Community Partner Events



Multiple Entry Points via assembly, creative construction, and tinkering prompts



Accessibility Improvements via icon-heavy and translated labels

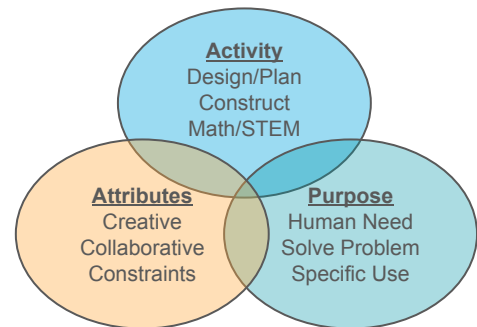
## Next Steps



Our project has just finished data collection, including surveys, family-generated making videos, video-cued reflection interviews, and interviews with practitioners. We will begin analyzing video data with particular attention to:

- How is the Engineering Framework - BIPOC family definitions of engineering - reflected in family behavior?
- What are productive changes to the maker exhibition design to engage more BIPOC families? (More events and exhibitions are planned)

## Engineering Framework



Developed from BIPOC families descriptions of engineering, collected via surveys and video-cued interviews

Asked for a) what the word “engineering” means to them, and b) if anything they did in the maker exhibition felt like engineering.