

Stimulating STEM in the City: Co-Designing with Latine Families to Promote Informal STEM Learning

Community Partners: Santa Ana Early Learning Initiative (SAELI)

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[[NSF link](#)] [[website link](#)]

Award

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Project Description

This project focuses on co-designing STEM-based learning initiatives alongside Latine families in public spaces in their local neighborhood.

We aim to (1) uncover local Latine families' cultural values and practices and then (2) co-create early STEM learning designs for community environments based in families' values and experiences.

Audience & Settings

Audience: Latine young children (0-5 years old) and their intergenerational families.

Disciplinary area: Early Childhood learning, informal STEM education, Co-design/Participatory design.

Learning environment: Everyday neighborhood places (walls, bus stops, parks, grocery stores) in Santa Ana, CA.

Key Achievements

What have you **achieved** so far?

- 18 participatory design sessions with Latine families
- 10 interviews with caregivers.
- 267 caregiver-made surveys exploring STEM perceptions in public spaces in their neighborhoods.
- 310 observations for family STEM discourse pre-installation.
- In the process of building 4 PLL installations

What have you **learned**?

- Equitable work takes time and effort including addressing situations “out of research” perspectives
- Families' practices and cultural practices already involve STEM
- Participants notice when they are *truly* being heard.

Access and Inclusion

- **Sustaining:** We infuse our designs with the values, linguistic practices, and dynamic cultural practices of the community in their own terms.
- **Participatory:** Strive to include partners in different stages of design (e.g. codesign sessions) and research (e.g. parents making surveys and leadership as co-authors)
- **Equitable:** We use our power as University representatives to advocate for the community's priorities (e.g. safer, cleaner spaces)



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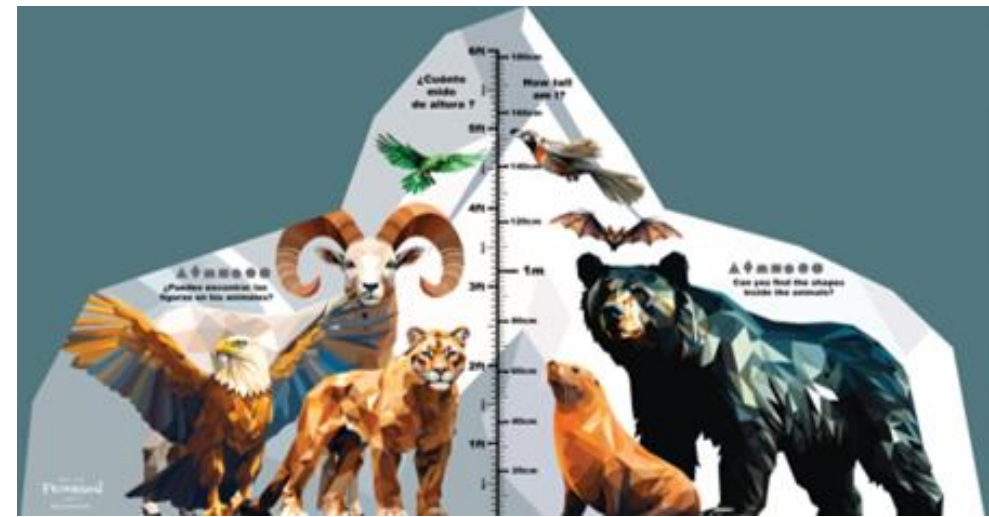
Co-design sessions



“Yo veo” mural



How tall am I?



STEM Installations

