



# Comunalidad in Action: Catalyzing Culturally Affirming STEM Practices

# Let's get to know who's in the room!

Please share your experience and comfort with:

- Community partnerships
- Co-creating with communities
- Working with Hispanic/Latinx communities

From “here to learn” (left) to “happy to share” (right)

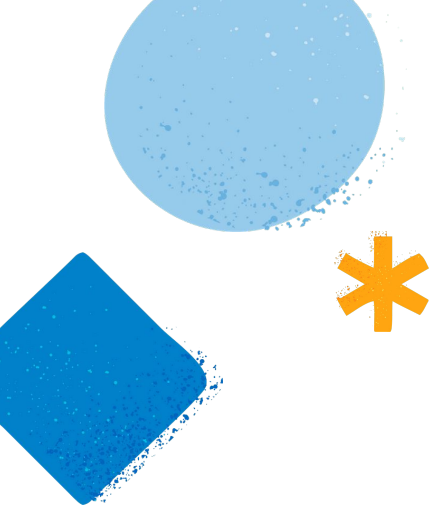
Understanding  
the community's  
histories and  
surroundings



Centering  
relationships  
and being  
responsible  
for each other

Affirming the  
wellbeing and  
strength of the  
community

Making  
decisions with  
the community,  
for the benefit  
of all



**Children's  
Museum  
Houston**



# Children's Museum Houston



**Location:** Houston, TX

**Onsite Attendance:**  
+650,000

**Outreach:** +185,000

**Target Audience:** Ages 0-12



# Community Family Centers aka Chicano Family Centers



## Adult Education

- ESL Classes
- GED Classes
- Digital Literacy



## Toddler, Infant, and Parent Services

Support Service for Parents of toddlers and younger



## Family Support Services

- Intake, information, and referrals
- Food Pantry
- Translation and assistance with forms



## Youth Services

- School-based Prevention Education and Intervention components
- After School/Out of School Time Program
- Summer Camp/Countdown to College



- 52 years of serving Houston's East End
- 24,000 clients served annually
- Client age range 0-90 yrs of age
- 85% of clients are Latinx



# Project overview

---

- **Focus groups held across 6 months:**
  - Hopes & dreams for children's futures?
  - Environmental issues affecting families & their communities?
  - Families' perspectives about STEM engagement?
  - Wants for STEM engagement?
  - Barriers experienced to STEM engagement?
- **Prototyping activities and engagements**
  - Pollution Modules
  - Camp Adventure – summer youth camp
  - Trainings for community volunteers
  - Sustainability Days
  - Día del Niño

# What part of the framework are we good at?



## Relationship to place

- CFC's relationship and knowledge of community
- Activities and events honored place and were grounded in connection

## Fiesta

- Curiosity, joy, and fun share a place with STEM
- Focus on multi-generational experiences

# What part of the framework do we still need growth towards?

---



## Reciprocity

- Building trust in partnerships
- Shifting the needle on control
- Sustainable ≠ Transactional



Children's Museum  
of Brownsville

# Comunalidad



of Brownsville

# Children's Museum of Brownsville



# Quick CMB Overview

Children's Museum serving a region of 3M+

75,000 annual visitors

Located in Brownsville (border community,  
rich cultural identity)

Focus: Early childhood (birth–10), families,  
bilingual/multigenerational engagement

Strong partnerships (UTRGV, City, Community Orgs)



# Titans of Space

## About program

Why Space - SpaceX and aerospace industry

Relationship - Connecting with the families & company

Connecting children with the vastness of space

Keeping people at the center of conversation regarding future space exploration

Fun way to connect Starbase & culture

## Data

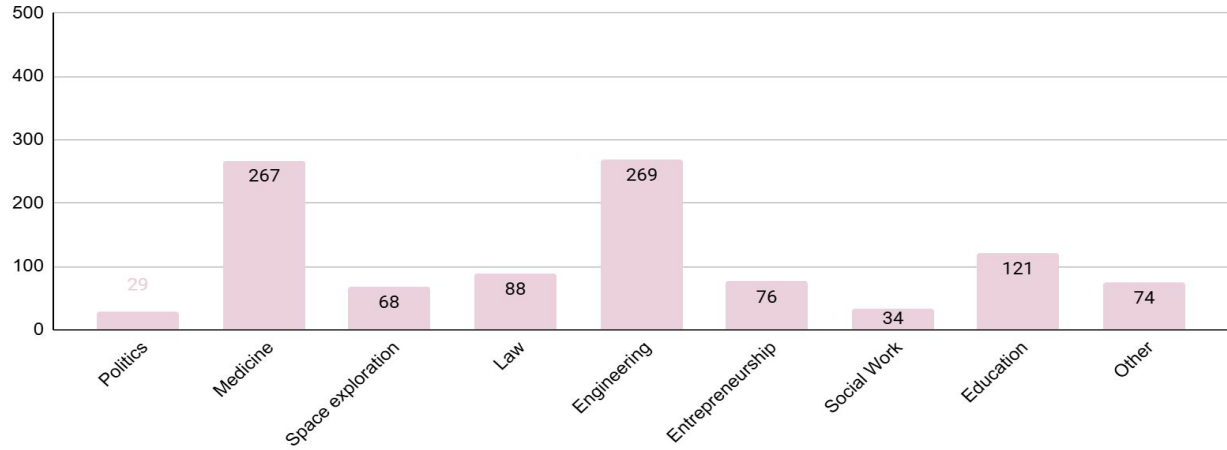
Engineering has overtaken parents career choice for their kids

Parents as they think about the future they want their kids to  
Have not only better educational opportunities but more jobs in a variety  
of fields.

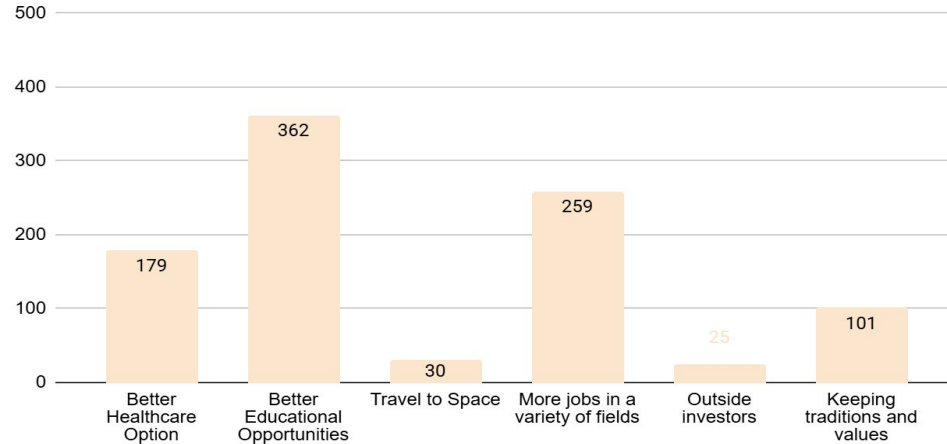


# Charts

What career you would like your child to pursue?



What do you think is the most important for the future of the RGV?



# What part of the framework are we good at?

## Relationship to Place

- Fall in Love with Brownsville  
“Bi-cultural, bi-lingual, on the border by the sea and beyond.”

## Reciprocity

- Beauty in Nature
- Kindness of People (hugging culture)

## Fiesta/Feast

- Party is at the Center  
Charro Days, Space Fest, Sombrero Festival, Lunada,  
First Fridays



# What part of the framework do we still need growth towards?

~ **Reciprocity** - Responsible for each other

~ **Community Determination** - making decisions with and for the benefit of the community

- Political unrest
- Self preservation driven motivation
- Continued growth on uplifting others
- Split on the future of the community growth  
(industry development vs. preservation of nature)  
(fear of change)  
We want the growth without the growing pains





**RAIL CDC & Creative  
Community  
Mesa, Arizona**

# STEAMbrando Futuros

RAIL CDC & Creative Community

## About the organizations:

- *Not* a museum
- Hyper-local efforts focused on community identified needs and desires over a decade
- Grant and contract funded

## About STEAMbrando:

- Co-creation approach
- Community led
- Applying Comunalidad Framework



# STEAMBRANDO

## **STEAMbrando Futuros:**

**A play off of the Spanish word “sembrando” meaning “planting, sowing, spreading seeds/ideas”;**

**“STEAMbrando Futuros ” refers to planting the seeds of the future using STEAM with our Hispanic community.**



What part of the framework are we good at?

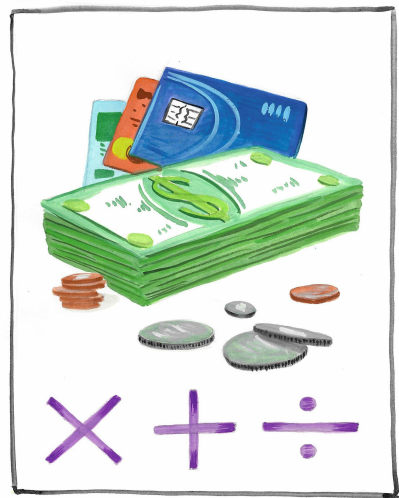
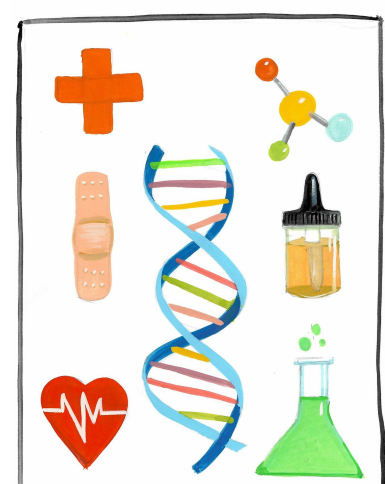
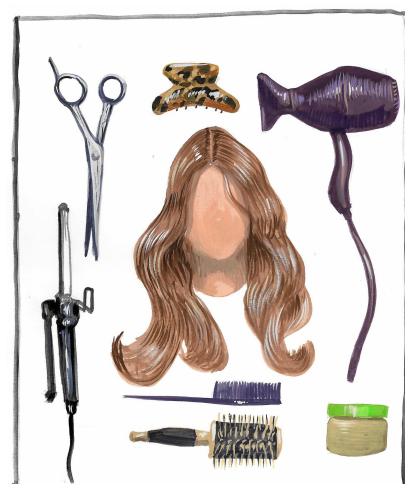
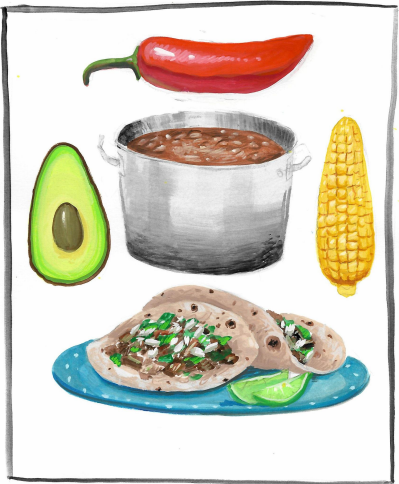
### Relationship to Place

- Our own history
- The community's shared experiences
- Living and working in the community
- Culture at the center



### Reciprocity

- Trust building is at the center
- Work centered on a shared goal
- Shared responsibility, current, future, and cross-generationally



# What part of the framework do we still need growth towards?

## Self-Determination

- The co-creation model is strong for supporting this
- Striking a balance of doing for, doing with, and supporting the community in doing for themselves





# Opportunities

## More Celebration

- Include fiesta every step of the way, small and large

## Community listening & training

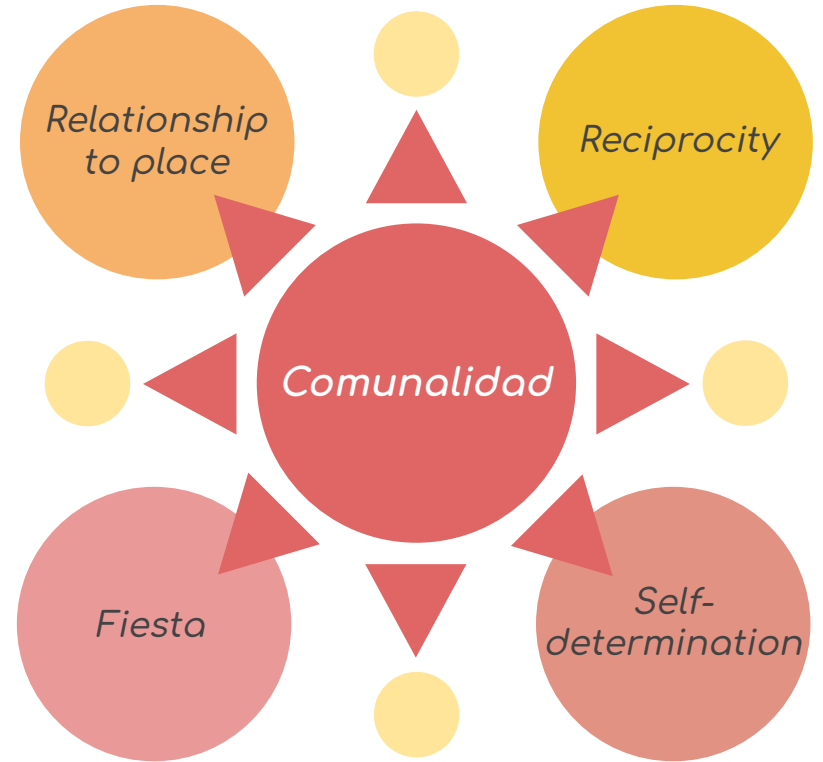
- Self-determination depends on ownership and empowerment
- Conscientious of how a community continues the work after a project ends



# Small group conversations

Now that you've heard more about *comunalidad*, talk with the others at your table about how you might use it:

- Which parts of the model resonate with you, and why?
- Which parts of the model would you like to explore further, and why?



# Resources

**Article on comunalidad** by Isabel Hawkins and María Ávila Vera

<https://par.nsf.gov/servlets/purl/10234863>



**Videos about project** on NISE Network website

<https://nisenet.org/catalog/co-creating-communities-project-videos>





¡Gracias!  
Thank you!

**Jennifer Gastelum**  
jennifer@creativecommunityaz.com

**Cecilia Garibay**  
cgaribay@garibaygroup.com

**Tiffany Espinosa**  
tespinosa@cmhouston.org

**Paul Martin**  
pjmart12@asu.edu

**Rae Ostman**  
rostman@asu.edu

**Felipe Peña**  
felipe@cmofbrownsville.com

**Anthony Williams**  
anthonymcwilliams@gmail.com



This material is based upon work supported by NASA under cooperative agreement award number 80NSSC22M0122. Any opinions, findings, and conclusions or recommendations expressed in this material are those of the author(s) and do not necessarily reflect the view of the National Aeronautics and Space Administration (NASA).