

Equitable Partnerships to Broaden and Deepen Participation of Latiné Communities in Earth and Space Science

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Presentation outline

- Project overview
- Culturally sustaining STEM engagement
- Co-creation process
- Example of Mesa, Arizona
- Evaluation

Project overview

Engaging Hispanic Communities

This project brings together educators, community members, and subject matter experts at six sites to **co-create** STEM engagement opportunities that are **culturally sustaining** for **Latiné** learners.

Our focus is on sharing **NASA Earth and space science** in ways that:

- are locally relevant
- support family and community priorities
- explore the connections between culture and STEM

We are part of NASA SMD's **Science Activation** (SciAct) program.



Six sites



The sites:

- include local partnerships among educational organizations and Latiné community organizations
- learn from each other as a community of practice

Culturally sustaining STEM engagement

Culturally sustaining STEM

Culturally sustaining pedagogy supports learners in sustaining their community's culture, language, and lives while they develop STEM competences and identities.

Approaches include:

- Affirming learners' cultural backgrounds, identities, and knowledge systems
- Connecting STEM to learners' lived experiences
- Including diverse voices and perspectives in STEM content
- Creating an inclusive environment where learners feel empowered to participate meaningfully
- Involving families and community members to provide authentic insights and support

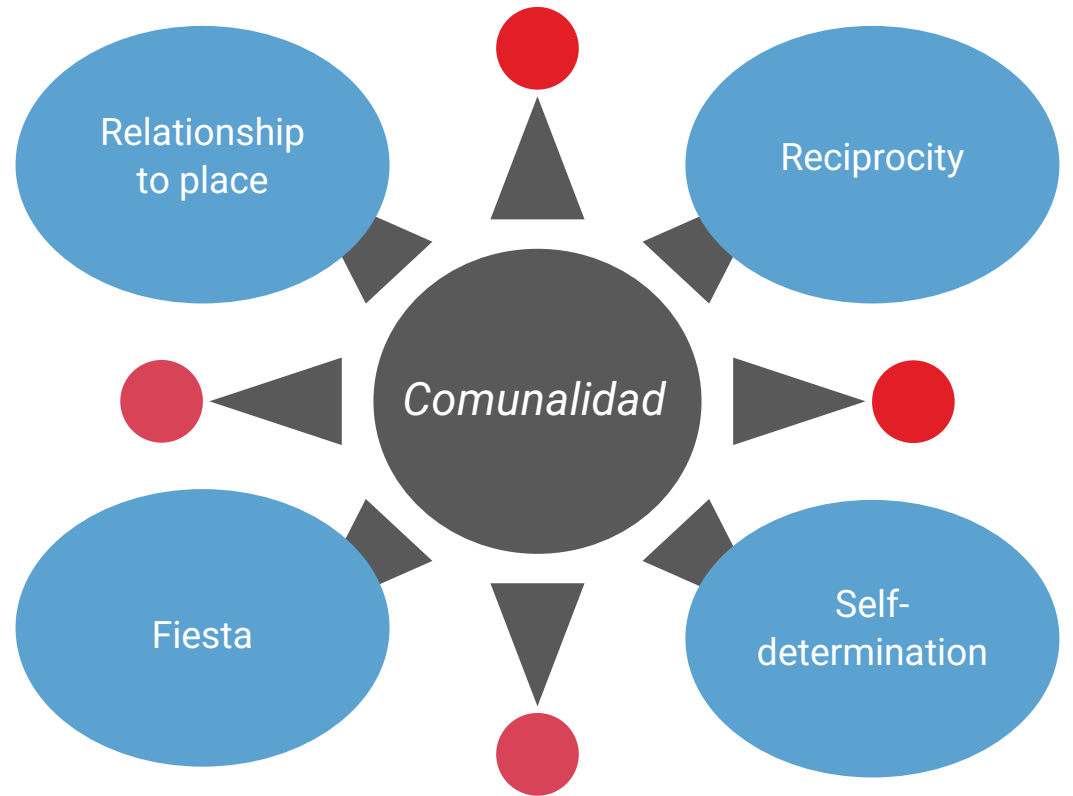


Comunalidad

A framework for actively sustaining your community with diverse forms of human expression, including STEM.

Components include:

- Relationship to place
- Reciprocity
- Self-determination
- Fiesta



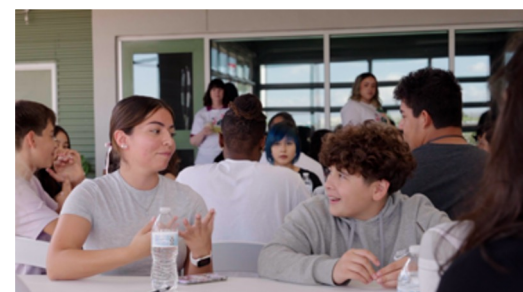
Co-creation process

Co-creation

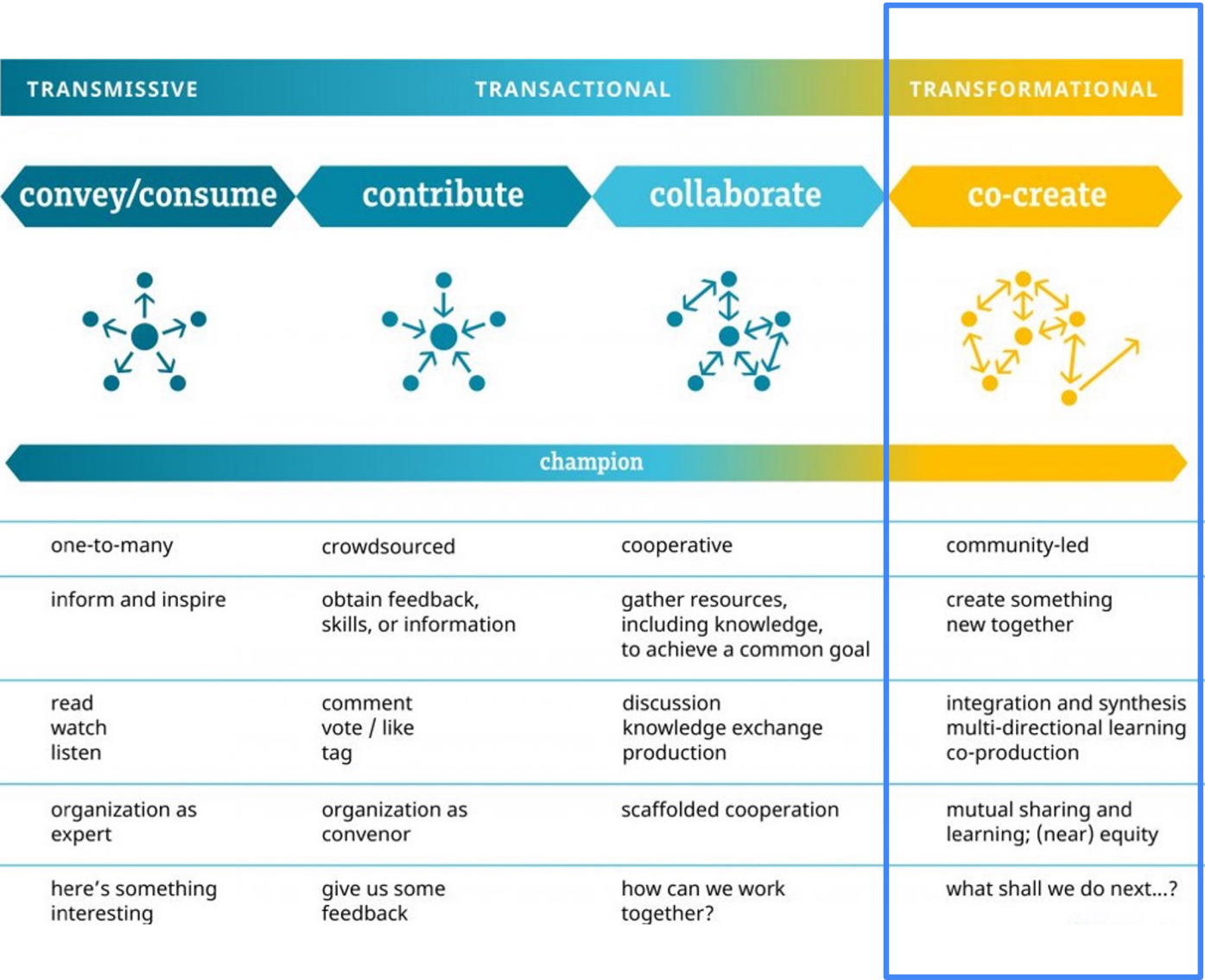
Co-creation is when people and groups share their resources and work together as equal partners to accomplish something of mutual interest and benefit. It is both a process and a mindset.

Characteristics include:

- Deciding on goals together
- Sharing power and making decisions together
- Building and maintaining trust through transparency
- Learning from each other
- Sharing skills, knowledge, experience, networks...
- Evaluating and improving the process



Community Participation Model



Mesa, Arizona

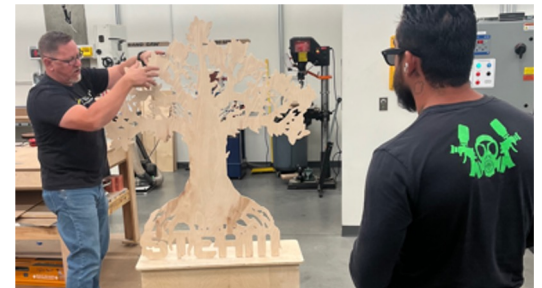
Co-creation in Mesa, Arizona

Co-creation with Latiné communities in Mesa (near Phoenix)

Partners: Arizona State University, Mesa Arts Center, RAIL CDC, and a community co-creation group.

Goals: Celebrate the ways that STEM shows up in the community; explore the connections of Earth and space science to art and culture; use STEM process skills such as imagination and ingenuity; and shape the future of the neighborhood.

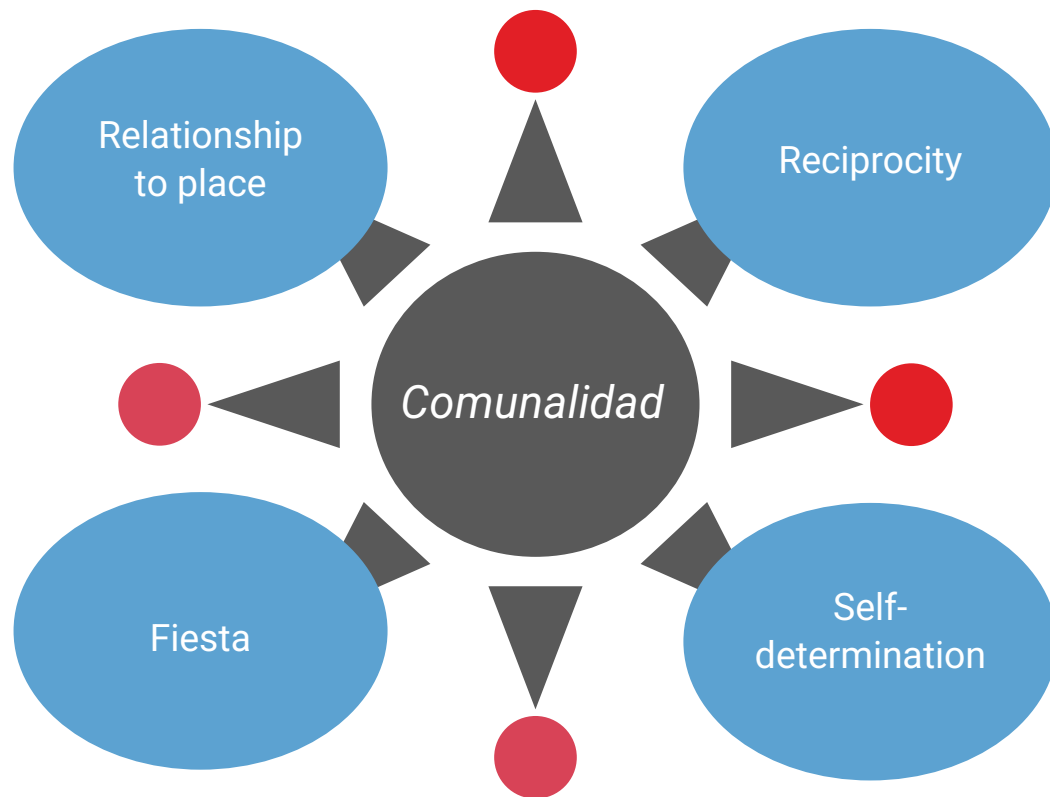
Activities: Offer ongoing programs in parks and community centers; planning a community festival.



Comunalidad

A framework for actively sustaining your community with diverse forms of human expression, including STEM.

- **Place:** Southside and Whitman neighborhoods
- **Reciprocity:** Addressing the community's long-term priorities
- **Self-determination:** Activities planned and implemented with the co-creation group
- **Fiesta:** Festival to celebrate and engage the community



Culturally sustaining STEM

The Mesa team is working on a **culturally sustaining** STEM activity called Ancestral Astronomy.

Learners are invited to:

- Celebrate a long tradition of observing the sky in Mesoamerican cultures
- Create an artwork reminiscent of Mexican tin art, *hojalata*
- Connect their own experiences observing the sky with NASA missions and science



Evaluation

Evaluation

Project evaluation focuses on learning about the partnership process and on empowering the six sites to evaluate progress toward their goals.

- Project evaluators are focusing on the development of local partnerships and their **co-creation** process.
- With evaluator support, the six sites are using a process called *team-based inquiry* to investigate how their engagement activities meet their goals, including **culturally sustaining** learning.



¡Gracias! Thank you!



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