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Scaling STEM Equitably

Practitioner-driven Reflections and Emerging Guidelines



NGCP Vision

The vision of the National Girls Collaborative Project is to **support and create STEM experiences** that are as diverse as the world we live in.



Our Goals

Connect + Create + Collaborate

1

Build and sustain a network
of advocates to provide equitable
and inclusive STEM
opportunities.

2

Catalyze equity in STEM
from research to practice by
providing actionable knowledge
that transforms the STEM
experience.

3

Increase our collective impact
by strengthening organizational
effectiveness and enhancing our
fiscal sustainability.

NGCP Resources

- **National Webinars**

- Monthly on relevant topics, speakers include educators, researchers, authors, and diverse STEM professionals

- **Monthly Newsletter**

- National events, STEM resources for girls and youth, professional development opportunities for educators, and research and reports

- **NGCP Website**

- Exemplary Practices pages on Engaging Girls in STEM and Access and Equity, blog posts, and statistics and research related to girls and women in STEM



NGCP Podcast: Inspiring Curiosity from Early Childhood to Break Gender Stereotypes

In our first episode, we explore the crucial role of early childhood experiences in shaping girls' interest and engagement in STEM



5 Ways to Be an Ally to Girls and Women in STEM

If you think of gender equity in STEM as a "women's issue" we encourage you to think again!



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Speakers



Emily Early
National Girls
Collaborative Project



Erin Stafford
Education
Development Center



Sheila James
Ohio Afterschool
Network (OAN)



April Caldwell
Girls Inc., New York
City



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on Scaling National Informal STEM Programs



Informal STEM Learning

STEM learning outside the formal classroom in settings like libraries, afterschool programs, museums, and other community-based spaces.

Scaling

The process of taking a curriculum or program that has shown positive impacts in one context and spreading, replicating, or reproducing it in other informal learning contexts to reach more people and maximize impact.



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NASA'S UNIVERSE OF LEARNING



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Project Goal: To collectively challenge and redefine the conversation related to how we scale informal STEM education programs through the lens of equity and inclusion and grounded in the perspective of program implementers.

Objectives:

- Interrogate current conceptions of scaling, especially those designed for research/evaluation in formal (K-12) settings.
- Identify approaches and principles for equitable scaling.
- Develop products to support the field in considering future actions.



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Equity

A process of consistently reflecting on, evaluating, and disrupting broader systemic barriers and biases that implicitly and explicitly exclude people from participating in order to ensure that everyone has what they need to thrive.



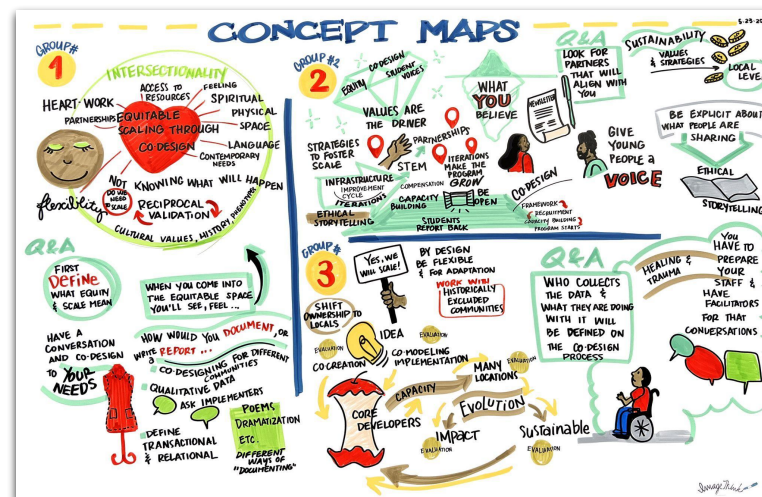
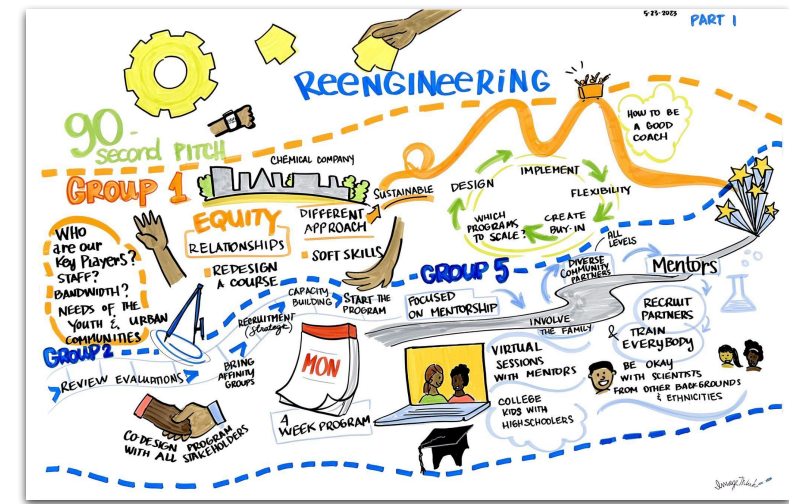
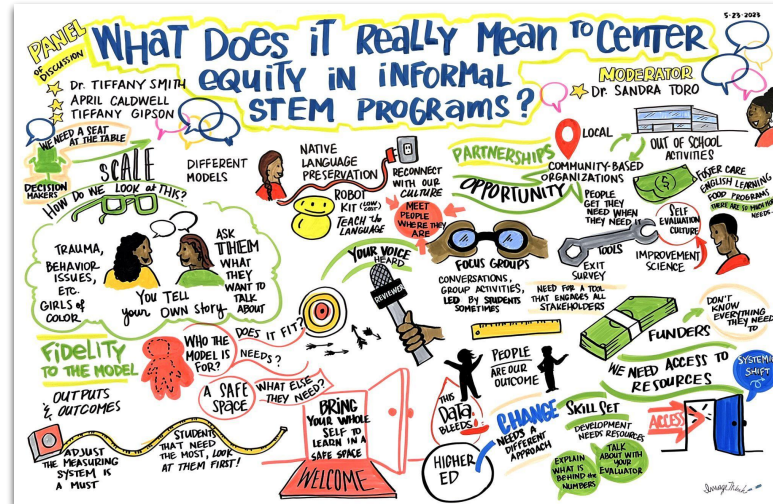
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Key Learnings

Equitably scaling informal STEM programs...

- Requires establishing an equal balance of power between those funding, developing, and implementing the program.
- Involves authentic collaboration and relationship-building.
- Prioritizes flexibility and local culturally relevant adaptation.
- Considers the values, needs, and interests of each community in defining success.





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Co-Developed Resources

- Developed and reviewed by conference collaborators
- Developed by drawing from the key conference learnings
- Designed for anyone interested in equitably scaling informal STEM learning programs and curricula



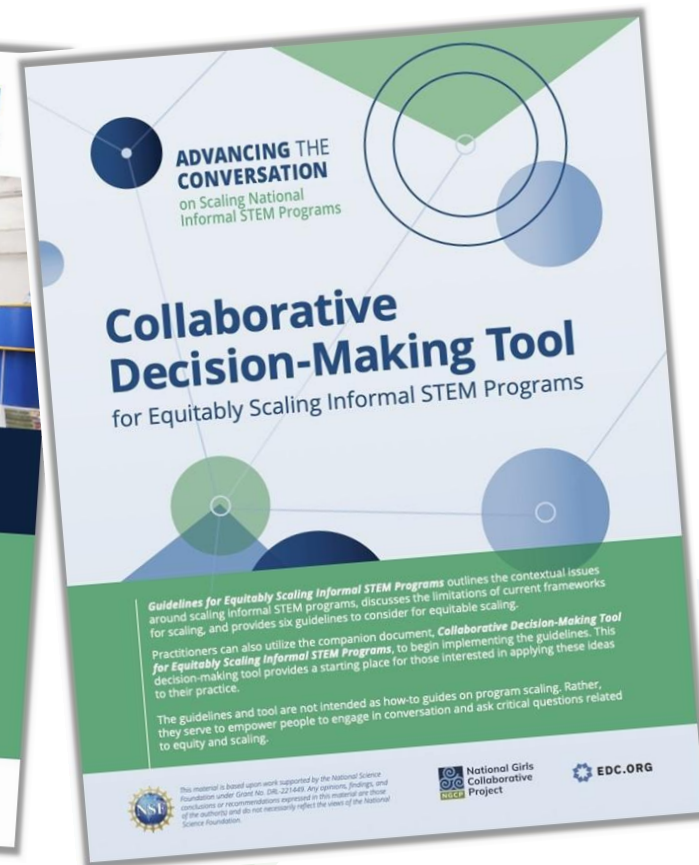
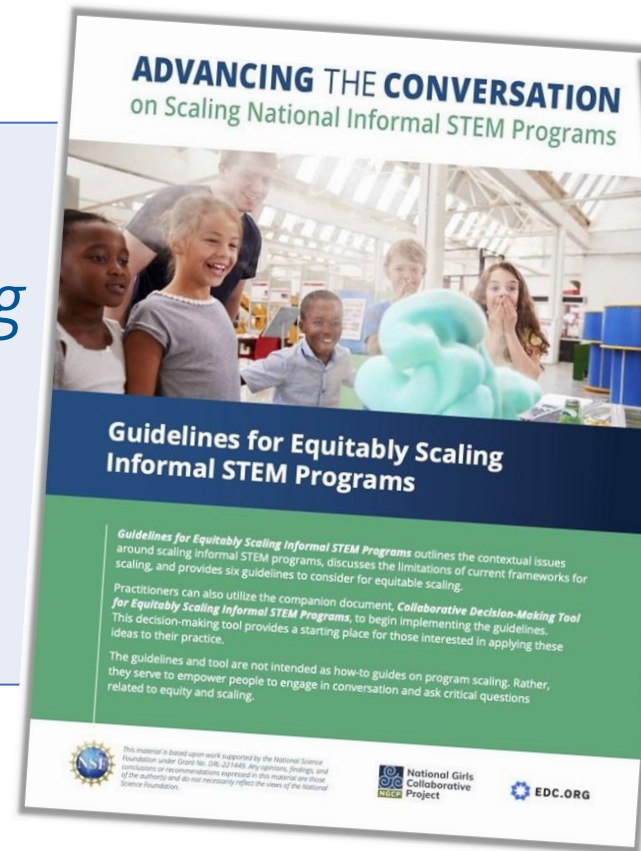
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New Resources!

- ❖ *Guidelines for Equitably Scaling Informal STEM Programs*
- ❖ *Collaborative Decision-Making Tool for Equitably Scaling Informal STEM Programs*



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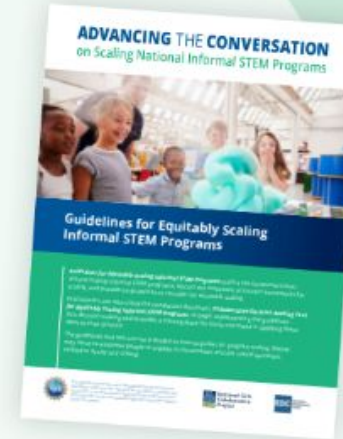
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Guidelines for Equitably Scaling Informal STEM Programs

- 1 Proactively build authentic relationships with the educators, youth, and families you aspire to reach.
- 2 Collaboratively determine whether to scale alongside these educators, youth, and families.
- 3 Determine together what will be scaled, how, and with whom.
- 4 Redefine program success by co-defining or refining goals and outcomes.
- 5 Prioritize flexibility over fidelity by collaboratively deciding what is essential to the program model and what can be adapted.
- 6 Empower participants through capacity building and iteration.



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Collaborative Decision-Making Tool for Equitably Scaling Informal STEM Programs

STEP 1

Identify Your Collaborators and
Build Authentic Relationships.

STEP 2

Collaboratively Determine
Whether to Scale.

STEP 3

Collaboratively Determine
How You Will Scale.

STEP 4

Reconvene Collaborators
Regularly.



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Wrap Up & Thank You!

Learn more:

<https://ngcproject.org/ScalingInformalSTEMPrograms>

