

How Can We Re-Think Assumptions About Parent Engagement?

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What Is the Issue?

Parents, broadly defined as the significant adults in children's lives, have the potential to greatly impact children's participation in STEM. They have insights into their children's interests, activities, and dispositions that can help science communicators/educators make STEM more relevant to children's lives. However, environments that promote collaborative learning experiences for children and adults are rare. Organizations, institutions, or initiatives often do not engage these influential adults as effectively as they might, nor are they always sensitive to the perspectives, needs, and expertise that caregivers bring to the activities in which their children participate.

Things to Consider

Active parent engagement and support of children's learning manifests in different ways, not all of which require parental presence. There are many known challenges with regard to parental engagement in informal STEM learning and science communication opportunities. While some parents eagerly dive in, many may be less comfortable for a range of reasons, such as their own prior negative experiences with STEM; literacy or language challenges; unfamiliarity with the setting; or worldviews or religious orientations that cause hesitation. It is critical that STEM educators and science communicators consider how varied perspectives, values, belief systems, and power dynamics play out in science communication/learning experiences.

It is crucial to consider whether parents are part of the intended audience and if so, how they can participate. Parents are often delegated to the role of bystander, chauffeur, or coat holder; they may come to the experience assuming that it is meant for the child only.

Why It Matters to You

- **STEM educators** and **science communicators** can better support youth when they effectively engage parents in relevant aspects of the work.
- **Professional development leaders** and **science communication trainers** can help their audiences recognize the need to work in partnership with organizations that cultivate parent engagement and support.
- **Funders** can encourage programs to identify if and how their impacts could be strengthened through parent engagement.

To better engage parents, explicit invitations and strategic activity designs are critical. For example, adults could be invited to partner with their children or author their own roles, depending on their and their children's interests and needs (e.g., being a facilitator or active observer as their children learn to code).

Tools You Can Use

- [Libraries for the 21st Century: It's A Family Thing](#) from the Global Family Research Project includes a research-based framework to guide new initiatives.
- The STEM Next Opportunity Fund's [Family Engagement Initiative](#) produces evidence-based practices and case studies.
- [Family Creative Learning](#) is a practical guide for hosting a series of workshops that build on families' relationships and cultural backgrounds to strengthen their social support and competence in using computers.
- [Harnessing the Power of Explanation: Talking to Schools and Families About Afterschool STEM](#) can help staff who work directly with families on how to communicate the benefits of STEM learning.
- [Engaging Parents, Developing Leaders: A Self-Assessment and Planning Tool for Nonprofits and Schools](#) from the Annie E. Casey Foundation can help to assess organizational success.

Reflection Questions

- **What roles do parents have in your programs? How might those roles be expanded? How might parents author their own roles?**
- **How are you engaging parents in multiple and culturally relevant ways? How might your approach exclude certain parents?**
- **How does your organization get to know parents better, including: their goals for their children; the challenges they face with respect to engagement in STEM; and their cultural assets?**
- **Does your organization partner with community-based organizations that have already established parents' trust?**

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ELEMENTARY SCHOOL STUDENTS AND THEIR PARENTS LEARN TOGETHER,
USING CREATIVE TECHNOLOGIES IN A SERIES OF EVENING WORKSHOPS.

Recommended Actions You Can Take

Cultivate parent engagement:

- Identify a trusted community liaison that will help provide community insights, access, and validation leading to parent participation and contribution.
- Go to where parents and caregivers are (children's performances, community events, faith-based programs, back to school night, etc.).
- Seek to understand parents' goals for their children, and the roles they already play.
- Seek and validate input in ways that build trust, recognize expertise and assets, and create mutually beneficial relationships.
- Provide clarity on, and support for, roles and expectations for parents.

Design learning experiences that:

- Draw on parent input from the beginning.
- Bring families and children together (e.g., sharing meals, working on projects together, and sharing projects with other families).
- Communicate the value of engaging in non-STEM enrichment opportunities together, such as supporting family bonds and connectedness.
- Recognize and address possible parent inhibitions or constraints (logistics, fear of failure, lack of knowledge, unclear roles).
- Develop activities that draw upon everyday knowledge and the cultural practices of the intended audience.
- Provide tools to build confidence and support learning—posit questions parents might ask, list expectations and roles, translate materials, etc.
- Embed strategies that move parents from the periphery, to managing supportive tasks and engaging collaboratively in the learning process.
- Include supportive materials as part of the learning experience—post questions parents can use, definitions, and reminders of the exploration process you are promoting.



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