

BUILDING COMMUNITY STEM EDUCATION PARTNERSHIPS



PRACTICE BRIEF 3



Action Steps:

- » Make an effort to develop mutually beneficial relationships with each partner.
- » Establish communication routines and tools right away.
- » Leverage existing partnerships to provide access to new potential partners.

STEM professionals have a wealth of experiences that they are often happy to share with young people. Through community STEM education partnerships (CSEPs)¹ with STEM organizations in your community, you can unleash this expertise and provide opportunities for youth to learn about STEM careers. Building meaningful relationships in any context takes time and acknowledgement of the dynamic needs of each organization.



Strategies to Make it Happen:

Invest Time and Effort to Build Real Relationships

At the heart of any strong relationship is commitment. Therefore, we have found that it is best to start small - it's worthwhile to invest time in getting to know your new partner. In building new relationships, you should take on the role of a learner. In doing so, you will likely learn about each organization's unique context, such as specific words, phrases, and acronyms used; work environment; and authority structures ranging from hierarchical structures with specific leadership roles to a single owner who can make all of the decisions.

Be mindful of how much time the partnership is requiring and acknowledge that availability can change throughout the year. Consider offering different ways for the partner to be involved that represent a range of commitment levels. For example, a quick win activity with a short-term commitment could be for STEM professionals to participate in a career fair or share about their careers in a STEM class. Another activity with longer-term commitment could be for them to be STEM mentors that meet regularly with youth over several weeks.

Work Towards Mutual Benefit

As CSEPs develop, mutual benefit to both your project and your partners will hopefully become obvious. It is important that you work to understand their needs and priorities so that you might identify ways to address those needs that are mutually beneficial. Keep in mind that partners have priorities based on their mission and goals, which may or may not align with your project objectives. Look for opportunities to adapt your STEM programming to incorporate contributions partners are willing to make (learn more about adapting your project in Practice Brief 5a), and highlight how this will help all parties achieve their goals.

Establish Communication Routines

It is a good idea to establish communication routines early on in your interactions with partners.

¹Community STEM education partnerships (CSEPs) are long-term collaborations between organizations and project participants that coordinate and leverage expertise and resources to improve STEM learning opportunities for youth.

Specifically:

- » Determine the best mode of communication (i.e., phone, email, video conferences, or in-person meetings).
- » Identify one point of contact between your project and the partner.
- » Establish expectations about the regularity and frequency of communications.

Depending on the nature of your partnership, consider using shared communication tools (such as shared cloud drives, documents, or calendars) for keeping track of conversations and co-developing youth activities. Shared tools are important for building efficient partnership processes and institutional memory within successful research-practice partnerships (Frumin, 2019²).

Use a Snowball Strategy to Gain Introductions to New Potential Partners

Enlist others to help grow your CSEP network and plan for a broad initial reach. Ask your initial partners to suggest where you should go next. Perhaps they have had positive experiences with organizations or businesses that offer guest speakers or internships, or that participate in school field trips, STEM festivals, or job fairs. Ask about sponsors, businesses, and local government organizations in the school community. Each time you gain an audience with a new potential partner, ask who else they suggest you contact. Thus the snowball begins to form.

Don't be afraid to ask your new partner to make the first introductions between your project team and contacts they have worked with successfully before. Keep track of these connections by building a network map to identify which partners are "hubs" for connection with the community.



Tool: Network Map Creation Guide

A Network Map is an internal tool to track how your relationships are developing and how they are connected. This guide provides step-by-step instructions and examples for creating a map that identifies different partners and networks you have developed and partners that are yet to be contacted.

Note: The Network Map differs from the STEM Asset Map (Practice Brief #1) in that a Network Map shows relationships and connections between partners rather than simply identifying them.



STEM Career Connections Spotlight:

Partnering with a well-connected organization resulted in our first round of STEM mentor connections.

During the first year of our STEM Career Connections (STEMCC) project, we found one of our initial partners, the local school district, to be invaluable in helping us make connections throughout the community. The assistant superintendent, our first point of contact, introduced us to the STEM teachers who first agreed to implement our curriculum, STEM mentoring, and career connections activities. One was an experienced teacher working in the district for over ten years. While trying to identify local STEM

²Frumin, Kim. (2019) Researchers and Practitioners in Partnership: Co-Design of a High School Biology Curriculum. Paper 1: Nurturing a Niche: Research-Practice Partnerships and School Reform. (Unpublished Doctoral Dissertation). Harvard, Cambridge, MA.

mentors in the community during our first year, this teacher introduced us to a local sustainability and education organization. We scheduled meetings with this sustainability and education organization and continued discovering mutual benefits that evolved into a new partnership. This new partner made direct introductions to their network of STEM professionals and shared our introductory flier, helping to jumpstart even more new connections and leading to a pool of STEM professionals to serve as youth mentors. After the first year of partnership building, we were able to use the relationships we had built to continue supplying us with enough mentors to support the project. Through this process, we developed a well-connected network of partners that we continued expanding each year. The snowball strategy we adopted began with relationships from within the local school district that expanded into a more exhaustive network-building process.



Reflection Questions

- » Why is it important to create awareness about your project with STEM organizations from your community?
- » What steps can you take to build or rebuild relationships with organizations in your community that could benefit your project?
- » In what ways will joining your project mutually benefit both your partners and the project?
- » What type of communication structures (i.e., mode, frequency, tools) should you set up for each partnership?



Next Steps

[Practice Brief #4 - Putting Your Partnerships to Work](#)