

Coordinating between in school and out-of-school settings to cultivate youths' STEM interests

What is the strategy?

Strategy 2 is concerned with the coordination work schools and out-of-school (OST) programs do to identify and extend STEM interests.

Why would you use this strategy?

Supporting transitions to STEM academic and career opportunities requires coordination between school and OST providers to match student interests with available STEM opportunities.

Who would use this strategy?

This is for networks/programs that need to build on and extend youth interests between spaces and improve communication alignment between school and OST programs.

This brief is a product of research conducted in 2021-2022 within the <u>Making Connections</u> project, a collaboration between the <u>Connected Learning Lab</u> at UCI and <u>STEM Next</u> and their regional partners. This is one of <u>eight strategies</u>, which are still evolving, for coordinating and brokering connections across settings in STEM ecosystems.



Connected Learning Lab "We have an award ceremony and ask the schools to nominate a girl who's interested in STEM . She doesn't have to be straight-A student, but maybe she's part of the math club. The idea is that we're holding them up to be recognized for their interest in STEM , and we want the girls to know it's cool to be in STEM."

-Lena, Girls Inc. of Lynn

Design Considerations

Network Level

Connect school and OST providers through PD training in Communities of Practice (CoP), which include in depth discussions, field reports, and hands-on activities across disciplines, to build teachers' and OST educators' networks and encourage the sharing of resources and ideas.

Send regular STEM-focused newsletters to schools and OST providers that highlight stories of successful women of color in STEM, potential grant opportunities, and other locally relevant resources.

Program Level >>>

Provide programming that positions STEM as something that opens a range of career and life opportunities and connects to youths' existing interests (e.g., positioning STEM as a "helping profession").

Actively enlist teachers as partners to recognize girls who show an interest or enthusiasm for STEM and recruit them for an OST program; find "champions" in the school system who want to help with the coordination work (e.g., a math teacher, superintendent).

Continuously communicate with schools to build the reputation of the OST provider as an organization committed to providing high-quality STEM programming and opportunities.

Actively seek professional connections to create programming that connects girls to women in STEM professions and provides internship and other career opportunities.

Target Outcomes

Youth understand there are an array of STEM opportunities available to them and connected to their interests; youth feel like their STEM interests are connected across settings where they learn and that they have multiple people (e.g., teachers, OST providers) supporting their interest development.

School teachers and OST educators build their networks, feel more connected to one another, and have more access to resources for supporting STEM learning in their settings.

Important Considerations

- Even if youth show STEM interest, it might be challenging to cultivate those interests through OST progams because of real-life challenges such as transportation to STEM programming or access to equipment.
- Post-COVID times might make the communications required more challenging (e.g., changes in staffing at schools and OST providers).
- Organizations need to clearly communicate the types of STEM programming and opportunities they offer.

- OST providers may find it difficult to recruit and retain staff to lead high-quality STEM activities (note: providing competitive pay can be helpful).
- Critical to consider how timing impacts this strategy for instance, how do you find time to align communication between educators working at schools and OST programs? When should key events occur?
- May be challenging to find STEM professionals to connect with locally depending on the kinds of businesses/professionals in the community.