

Translating youth interests into STEM career and entrepreneurship opportunities

What is the strategy?

Strategy 5 is about translating youth interests into STEM-based career and entrepreneurship opportunities.

Why would you use this strategy?

This strategy connects youths' interests with potential STEM career opportunities they may not otherwise encounter or know about.

Who would use this strategy?

This is for networks/programs in states and communities with a need to cultivate and sustain a strong STEM workforce.

This brief is a product of research conducted in 2021-2022 within the <u>Making Connections</u> project, a collaboration between the <u>Connected</u> <u>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.





"I think it's great to support youth in translating their interests into STEMrelated careers, and in the process of doing so, I think it's even more important to support them in fostering strong relationships with their peers, OST staff, school community, and STEM professionals. These relationships will ensure they are most successful and happy in their careers."

-Brianna, Sunrise of Philadelphia

Design Considerations

Network Level >>>

Connect programs to local STEM professionals with particular areas of expertise who are interested in speaking with youth about their career experiences; the network may develop a bank of names/resources that notes a person's STEM area, whether they have clearance to speak with youth and the grade levels with which they are best suited to work.

Develop a community of practice (CoP) around ways programs can support youths' STEM interests by making connections to future careers so that program leaders can expand their networks, share practices, and learn from one another.

Provide clarity around funding streams and ways in which funds can be used for specific STEM programming and tools (e.g., 3-D printers, robotics materials).

Program Level >>>

Program leaders intentionally plan for flexibility within their programming model to make room for interest development, youth choice, and many points of entry.

Consider how to creatively use funding streams for STEM activities such as acquiring the tools youth need to create and spark/further their STEM interests (e.g., 3-D printers, embroidery machines, heat press, robotics materials) or bringing in industry partnerships.

Actively seek to make connections for youth to community stakeholders, local STEM professionals, and local universities; these program leaders are attuned to youths' interests and constantly think about how to connect these interests to opportunities.

Facilitate youth interest development by using interest surveys and facilitating discussions around youths' interests so program leaders can support youth in making connections between what they like to do and STEM.

Important Considerations

- Consider reaching out to school teachers (especially those in STEM subjects) to see how the OST program can provide space for extending practice of what is taught in courses.
- Write out a scope of work so this strategy can be baked into the program's plan for the year.
- Be explicit with youth about what your program is aiming to do, why, and how so they know what to expect.

- Friendships within the OST program can keep youth engaged and motivated to attend sessions.
- The location of the OST program matters for getting youth to come (e.g., an OST program located in a traditional public high school can help with recruitment).

Target Outcomes

Youth build their professional STEM networks and pursue STEM careers, which leads to a larger and more skilled STEM workforce in the state/network/community; youth find STEM careers that align with their interests and excite them for their futures.

Program leaders build their networks, develop professionally in STEM and otherwise, and make connections to other professionals via communities of practice.