

STEM repository building through the curation of an online tool to link young people to STEM opportunities.

What is the strategy?

Strategy 7 is about supporting youth in finding new STEM learning opportunities beyond isolated programs (e.g., internships, summer camps, STEM programs).

Why would you use this strategy?

Supporting young people in finding STEM opportunities requires curated information - gathering to find locally-relevant opportunities.

Who would use this strategy?

This is for networks/programs that need more effective processes for information curation and dissemination to youth and families.

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.





"Maybe you're really drawn to neuroscience, and so we want you to do a deeper dive about neuroscience. We're going to show you this website that has all the opportunities related to everything from neuroscience to biomedical and marine science. (Youth might ask) 'where do I go from here? Is there an internship? A camp? Somebody I could talk to?' and then it's up to (the girls) to make that next step. We found it was almost like information overload. They didn't know where to start so these are some things that you can do, here's a tool for you. We hope that you continue."

-Noelle, Palm Beach County 4-H

Design Considerations

Network Level >>>

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Leverage connections with existing STEM networks and ecosystems to surface existing libraries and lists of STEM opportunities that may already be in circulation across the state.

Networks can help find opportunities for cross-network collaboration and provide support for coordination across multiple organizations (e.g., libraries, 4-H, schools) that are united toward similar and central goals (e.g., sparking STEM interest through a STEM program and providing opportunities for youth to further those interests through a specific STEM-related internship)

Networks can work directly with program leaders to surface STEM opportunities and share across the state; both local and statewide opportunities can be included in the repository.

Networks can help create a STEM repository and if possible, develop a search code so users can filter relevant opportunities by location, cost, STEM discipline, and details of opportunity.

Program Level

Program leaders should enlist youth to help create the repository by asking youth to recommend programs or opportunities with which they have experience (such as through a Youth Advisory Council).

Design and development of the STEM repository should be user-centered, tailored around youth and families' perspectives and points-of-view, as well as include a deep understanding of the forms of communication that work well to dissminate information to the local community.

Educators and program leaders need to have a good sense of how they can inspire participation in families and students so that the openly networked infrastructure is taken up by the intended users and sustained over time.

Program leaders should create systems for finding relevant opportunities for youth, as well as consider ways to support youth as they navigate those opportunities (e.g., finding scholarships, transportation concerns).

Program leaders should seek to build local partnerships so that opportunities and programs are sent directly to programs as they arise.

The repository should be set up in a way that is easy to navigate on both a computer and mobile device since many youth and families with limited internet access mainly use their mobile devices; other locally relevant accessibility needs should be considered as well.

Target Outcomes

Youth more easily find STEM opportunities that allow them to continue pursuing a specific STEM interest; youth gain awareness in terms of local opportunities, jobs, and careers as they explore their STEM interests.

Network and program leaders and educators become more knowledgeable of local STEM opportunities; they also become more intouch with effective ways to communicate with youth and families in their states/local communities.

www.stemnext.org

Important Considerations

- Barriers to entry such as transportation needs and associated costs should be surfaced for users of the repository.
- Challenges arise in terms of who knows the opportunities that should be included, as well as maintenance of the site over time (we want the information to be up-to-date and usable; if youth encounter dead links or outdated opportunities, they are less likely to use the repository); someone needs the responsibility of regularly updating the site.
- It's a good idea to have a set of criteria for deciding which opportunities ought to be included, as well as for how to organize the information (e.g., local, cost considerations)

- Program leaders are often strapped for time, and there are often high turnover rates in these positions; finding ways to make the work of managing the repository easier can help speak to these challenges.
- Youth and families need to be reminded that a STEM repository
 resource exists and networks/programs should find places that
 youth and families go to introduce it to different groups (e.g.,
 afterschool sites, libraries, schools, and community centers); the site
 has little purpose if no one uses it.
- May want to consider a language shift from "STEM opportunities" to "career opportunities."