

Open portfolios to track STEM learning and progress across settings

What is the strategy?

Strategy 8 is about supporting youth in using an open portfolio to track progress of their creative and STEM-focused work (e.g., like a multimedia resume or arts portfolio).

Why would you use this strategy?

This strategy is for youth to keep track of and demonstrate their successes and progress and allow for further exploration of what interests them. Portfolios can be used for college admissions, job searches, and other enrichment opportunities.

Who would use this strategy?

This is for networks/programs that need to find ways to track and show robust evidence of youths' STEM learning.

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





"These kids had a number of opportunities and experiences that they had been participating in, and this was a place that they coiuld keep all of this and look back and say 'oh wow look at everything I've done."

-Deanna, Propel Afterschool

Design Considerations

Network Level



Host communities of practice (CoP) to support programs implementing portfolios strategies.

Program Level



Find ways to build portfolio tracking work into existing practices (i.e., it shouldn't feel like homework, shouldn't feel like a burden).

Start from the interest of youth and teachers in the portfolio-building process (what kinds of things do they think are important to track?).

Tapping students to track their own progress and achievement across sites.

Incentivize youth in the here-and-now to support tracking progress (e.g., finding ways to pay them to input their work).

Make time for regularly tracking information in the portfolio (e.g., set aside 15 minutes each week, build time into lesson plans).

Target Outcomes

A resume/portfolio curated and developed by youth that helps them to track their successes and progress.

The resume/portfolio serves to build youths' confidence in STEM-related interests and creative pursuits and can unlock potential opportunities (e.g., to an internship).

Important Considerations

- Consider how to coordinate across settings to understand what youth do in each and how those activites might be tracked.
- Tailor the tracking process to learners and context; setting aside time once a month may be sufficient, while in other cases, 15 minutes a week might provide a better cadence.

• Designate an educator to lead the portfolio building process for students and decide on tool(s) to use whether low or high-tech (e.g., Tallo).