Connected learning scholarship has shown that supportive relationships (e.g., caring adult mentors, family members, or friends) can meaningfully impact learning trajectories for youth by connecting them to new opportunities, knowledge, and experiences (Peppler et al., 2020). These supportive relationships facilitate “brokering” to connect youth to resources, mentoring, materials, and new communities that “transcend a specific program” (Ito et al., 2020, p. 42). This brokering work helps to facilitate connections across settings for youth as they nurture and refine the interests they are in the process of refining and developing toward a range of academic, civic, and career-related opportunities.

With a strong reputation across Philadelphia, Sunrise of Philadelphia (or, Sunrise) has provided a range of K-12 after school and OST programs for youth across Philadelphia for over 20 years. Its high school program at South Philadelphia High School emphasizes the role of “caring adults and academic supports that help youth stay on the path to graduate, while also planning for the future and building the skill needed to succeed” (Sunrise, 2022). For the high school program, students finish their school day and then come to the room in which Sunrise operates or they stop in intermittently throughout the day. Most often, Sunrise high school youth are asking for career or college-related advice such as trade school options or for support with college essays. In our interview, Brianna, the Site Director, reported that because of the nature of the school and neighborhood in which they are located, they serve “Black and Brown” and “primarily low-income families” who “all receive free lunch.” Caring adults we spoke with like Brianna and Najla (Program Coordinator at South Philadelphia High School) who run the Sunrise programs effectively “broker” new opportunities for youth that attend the Sunrise after school and OST programs. We learned from Brianna and Najla that there are different levels of participation amongst youth in their program. There are about “96 students enrolled” and “about 75 [they] see at least once a month” and “about 15 [they] see multiple times a week.” Brianna said that they admit everyone to the program who applies, but some youth may have difficulty attending on a regular basis because they may be involved in sports and other activities or have home or work-related responsibilities after school. Strategically, the physical Sunrise of Philadelphia spaces are all located within K-12.
schools from which they recruit students so it is easy for students to get to their spaces, as they generally just need to walk down a hallway or up/down a flight of stairs. For example, the students who attend South Philadelphia High School and are part of the Sunrise program come “up or down to the third floor” to Sunrise. Though the program is an after school program offered from 2:30-5:30pm, Brianna and the Program Coordinator, Najla, welcome youth throughout the day.

Brianna and Najla explained the importance of relationships and relationship-building for their programming model. Brianna explained that to recruit students, “most find out through word-of-mouth” by others who participate in the program. Sunrise “posts fliers” around the school but mostly, “it was a solid group of students” when Brianna started and they just kept coming. She explained, “they’d invite their friends and their friends and their friends, and now, at this point it’s like, you come in and you’ll see all the different friend groups, and they all do engage with each other, but you can see who’s known each other the longest and who’s the closest.” When asked why students keep coming back to Sunrise, in addition to seeing their friends, Brianna explained:

“We have very close relationships with a lot of the kids. They feel comfortable during the day if they have any issues like Najla mentioned…there’s been times where there’s kids waiting outside of our office because they’re having a bad morning, and they want to talk to someone, but they only want to talk to us. Even on weekends and evenings sometimes after we leave we will have kids text our Google voice number like checking in and asking questions or letting us know they need to talk to us when they come back to school.”

The cultivation of these supportive relationships—as evidenced by students contacting Brianna and Najla at all hours and coming to them for a wide range of reasons—comes through in how Brianna described their programming model and the values around which they design the work they do with youth. Brianna explained:

“I think youth voice is important so we give the students a choice as to what they do. So, of course we come up with plans, but if we notice that they're not engaged, we’ll ask them, ‘Alright, y'all don’t want to do this so what can we do different?’ You know we have to cover certain things so I maybe explain ‘we know you guys don’t want to do too much math and reading and science-type stuff but unfortunately we have to do that so if we have to do it, how can we do it in ways that you are actually going to participate?’ And I think giving them that choice made it easier for us to plan on our end.”

This concerted attention to youth voice and choice is part of what sets the Sunrise OST space apart from the school space, even though they are physically in the same location.

**Background on Adult Brokers from Sunrise of Philadelphia**

Brianna works as the Site Director for Sunrise of Philadelphia and has been with the organization for two and a half years (Note: An exceptional leader and advocate for youth, Brianna was also recently named a 2021 PA Afterschool Champion (Lattanzi, 2022)). Her academic background is in human development and community engagement and she has been working with youth in community-based organizations for about seven years, beginning with tutoring in high school and eventually getting into leadership development and community organizing. She explained that youth have work release early in the day and drop by during their work release hours for support. Brianna thinks that being an effective leader and mentor for the youth at Sunrise requires being patient and open-minded, and she explains that she is constantly in communication and conversation with students. Najla, the Program Coordinator, had only been with Sunrise of Philadelphia for a few months at the time of our interview, explaining that she was currently pursuing her degree in child and adolescent development and was “trying to learn just as much as she can from Brianna.” Najla describes working with older youth as “rewarding” and often focused on helping them make decisions about post-secondary planning such as going to trade school and supporting their entrepreneurial interests.

**Brokering Interest-Driven STEM Entrepreneurship through Cultural Connections to Create Opportunities**

Building on the trusting relationships established with youth, Brianna and Najla described their approach to
integrating youth voice and choice in their STEM programming and entrepreneurship program. Though Brianna
does not have a background in science (“I actually used to hate it”), she helps to broker STEM opportunities for
the youth with whom she works by matching their interests with specific resources and opportunities. For
example, she explained that this past year, she used funding to start a small makerspace within the Sunrise
location at South Philadelphia High School, getting a 3-D printer, robotics equipment, screen printing materials,
an embroidery and sewing machine, and a heat press (notably, students did not really pick up any of the books
they bought for the space). The move to curate a makerspace was motivated by Brianna noticing their interest in
entrepreneurial pursuits but finding “that a lot of kids don’t know how to talk about the kind of work they want to
do.” They may express an interest in “clothing brands” or the “music industry” but aren’t quite sure how to
cultivate or channel those interests. These facilitation moves are about meeting youth interests where they are at
(e.g., an expressed interest in fashion or music) and connecting those interests to a STEM-related activity (e.g.,
using high and low-tech tools to create something in a maker space. By building on and connecting to youth
culture and what youth care about, as well as brokering potential new opportunities, this portrait shows how
youth interests and culture can be translated and leveraged within STEM.

Brianna and Najla also helped to facilitate connections between school with the high school’s graphic design
teacher and the after school space so they could do the design work in his class and then use their embroidery
machine to complete a project, for example. Brianna explained that the entrepreneurship program brought a lot
of kids into the program this year because they wanted access to the resources they provided.

As part of their long-term goals for the entrepreneurship program, they have been discussing the hope to market
and sell the items students create such as “selling t-shirts, buttons, or setting up a pop-up shop…we talked to
partners about creating an exhibition in our room.” Brianna explained that an indicator of success in their
STEM-focused entrepreneurship work would be to see students produce physical products of their ideas.
Brianna described the larger plan for this longer term vision:

“This year I feel like a few students may get one physical piece that has their own logo or design,
whereas in five years my hope would be to actually help students start their own business, maybe to
actually produce a song, their own beat that they can sell, something along those lines, like giving
them a tangible piece of something that they can actually make an income off of.”

Brianna and Najla emphasized the value of making things tangible and real, something their students could
make with their hands and show to other people, and potentially even market as part of developing a small
business. For Brianna and Najla, these experiences creating artifacts could be the thing that makes the
difference for youth exploring their interests.

Interest development is at the heart of this approach. Brianna’s passion is in “helping youth tap into their
interests and break barriers” and giving them “choice” and “voice” to work through their interests. She also
described an interest survey they give youth (which comes from the Philadelphia Youth Network), noting that
they “try to take those seriously” and then use their responses to make purposeful connections with partners,
and “bring them in.” The survey includes items such as the following:

- List two goals for the year
- How do you learn best? (List at least 3 items)
  - ex.) visual/kinesthetic/auditory learner, taking handwritten notes vs. typing notes, in small
groups vs. individual work vs. large group work
- List some things you don’t learn in school but wish you could
- What are some careers/jobs you are super interested in?
- What are some of your personal pet peeves?
- What social issues are you most concerned about?

Brianna further explained that the Philadelphia Youth Network provides Sunrise with funding for an incentive
system – each youth participant in their program can earn up to $595/year for completing different benchmarks
such as filling out interest and career surveys and other ways to incentivize engagement in the program.

Despite a financial incentive system, they do acknowledge how difficult it can be for one of their students to find and commit to developing an interest. Brianna said, “We hear it everyday, ‘I don’t want to do this, this isn’t me, I don’t like this.’” They talked about meeting this expected resistance with helping students find multiple points of entry for participation. For example, they did a project with local mural artists and found ways for all students (even those who felt less artistically-inclined) to find an interest-driven pathway into the activity. Najla commented that over time:

“The resistance is subsiding, and they’re becoming more interested and approaching each project from their own little vibe. For example, one student is very interested in graphic design so instead of painting he did this whole Photoshop portrait, and it was really cool, and it’s exciting to see them break the barriers they have with these things that make them uncomfortable with these things.”

In addition to creating opportunities to nurture their developing interests within the physical Sunrise location, Brianna explained that they also help youth make connections to stakeholders such as to State Representative Elizabeth Fielder and State Senator Nikil through the Sunrise Youth Advisory Council, a project she led to give young people a seat at the table to discuss social and policy issues relevant to their community and school. Each of the opportunities and connections they try to create through the programming at Sunrise comes back to the focus on giving youth voice and choice within their programming.

Room to Connect and Grow

Brianna and Najla explained that they do not talk much to families beyond the initial application process, but they would like to make more of an effort to foster those connections. They also explained that they are connected to other OST providers through the Office of Children and Families and they share resources with other OST providers, but would like to make stronger connections and build community with new partners who are also advocates for youth.

How Sunrise of Philadelphia Prepared for Translating Youth Interests into STEM Career and Entrepreneurship Opportunities

- Supportive relationships from caring adults (and friendships within the program help, too) that help match youth interests and facilitate access to materials to create
- Supportive adults who plan for flexibility and adaptability within their programming model to make room for interest development, choice, and many points of entry
- Funding streams that can be directed toward building out the space and providing the technologies and tools youth need to create and spark/further their STEM interests (e.g., 3-D printers, embroidery machines, heat press, robotics materials)
- Strong ties and relationships between programs (e.g., in school and out-of-school programs; teachers and OST providers) to support youth interests across settings
- Coordination across settings to share space with schools from where students are recruited (i.e., an OST provider located in a traditional public high school)
- Supportive adults who make connections for youth to community stakeholders to open opportunities for their voices to be heard and counted
About the Making Connections Project: 
Fostering Connections and Pathways for Youth across STEM Learning Ecosystems

STEM Next and the Connected Learning Lab at UCI have partnered to support state and regional out of school networks as they develop and strengthen an ecological and connected approach to STEM learning. The case studies series represent real world examples that are part of a larger effort to develop and improve connection strategies that strengthen STEM learning ecosystems, centering the experiences, mobility, and futures of individual learners and their families across state and regional networks.

Each case study in this series takes a close look at a partner organization’s approach to one of the eight strategies for connecting: 1) A wraparound approach; 2) Coordinating between in school and out of school; 3) Giving back to one’s community; 4) Near peer or industry mentorship; 5) Translating youth interests in to STEM career opportunities; 6) Building relationships with families; 7) Curating online tools; or 8) Creating open portfolios. These case studies are not exhaustive; they are examples of coordinating and brokering that can be used to spark ideas and inspire growth.

For more information on the project and the strategies, visit https://stemnext.org/stem-pathways and connectedlearning.uci.edu/projects/making-connections/

References