



# BROKERING YOUTH PATHWAYS

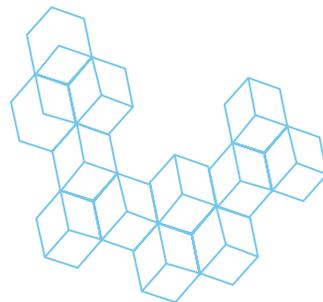
A TOOLKIT FOR CONNECTING YOUTH TO FUTURE OPPORTUNITY



## INTRODUCTION

The resources and research in this toolkit emerged from a practical question faced by many informal educators: How do we effectively connect youth to new learning experiences? Hive Research Lab explored this problem of practice within the Hive NYC Learning Network, a community of informal educational organizations dedicated to supporting digital learning. In the network, we came to call this the ‘brokering problem,’ one that was oriented towards supporting long-term and interest-driven youth pathways that spanned multiple contexts.

Included in this document are a set of ‘practice briefs’ developed through our collaborative work - they capture practical approaches identified through research that support the process of connecting youth to opportunity through brokering.



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# HOW CAN OUT-OF-SCHOOL ORGANIZATIONS USE BROKERING TO SUPPORT YOUTH INTEREST-DRIVEN LEARNING PATHWAYS?

Dixie Ching, Rafi Santo, Chris Hoadley & Kylie Pepler

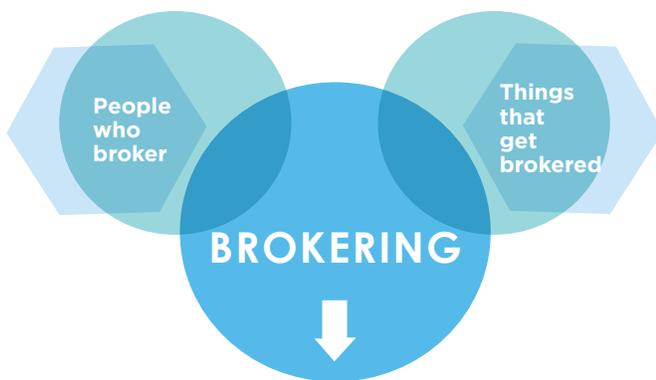
To download a copy of the Hive community-developed white paper, visit <http://bit.ly/brokering>

## BEING A LEARNING BROKER SUPPORTS YOUTH PATHWAYS BECAUSE IT:

**Connects youth to meaningful future learning opportunities** including events, programs, internships individuals, and institutions that will support youth in continuing their interest-driven learning. **Enriches their social networks** with adults, peers, and institutions that are connected to/have knowledge of future learning opportunities.

## BASICS OF BROKERING: PEOPLE, PRACTICES, AND LEARNING OPPORTUNITIES

Brokering is about helping a young person make that crucial connection to a next learning opportunity.

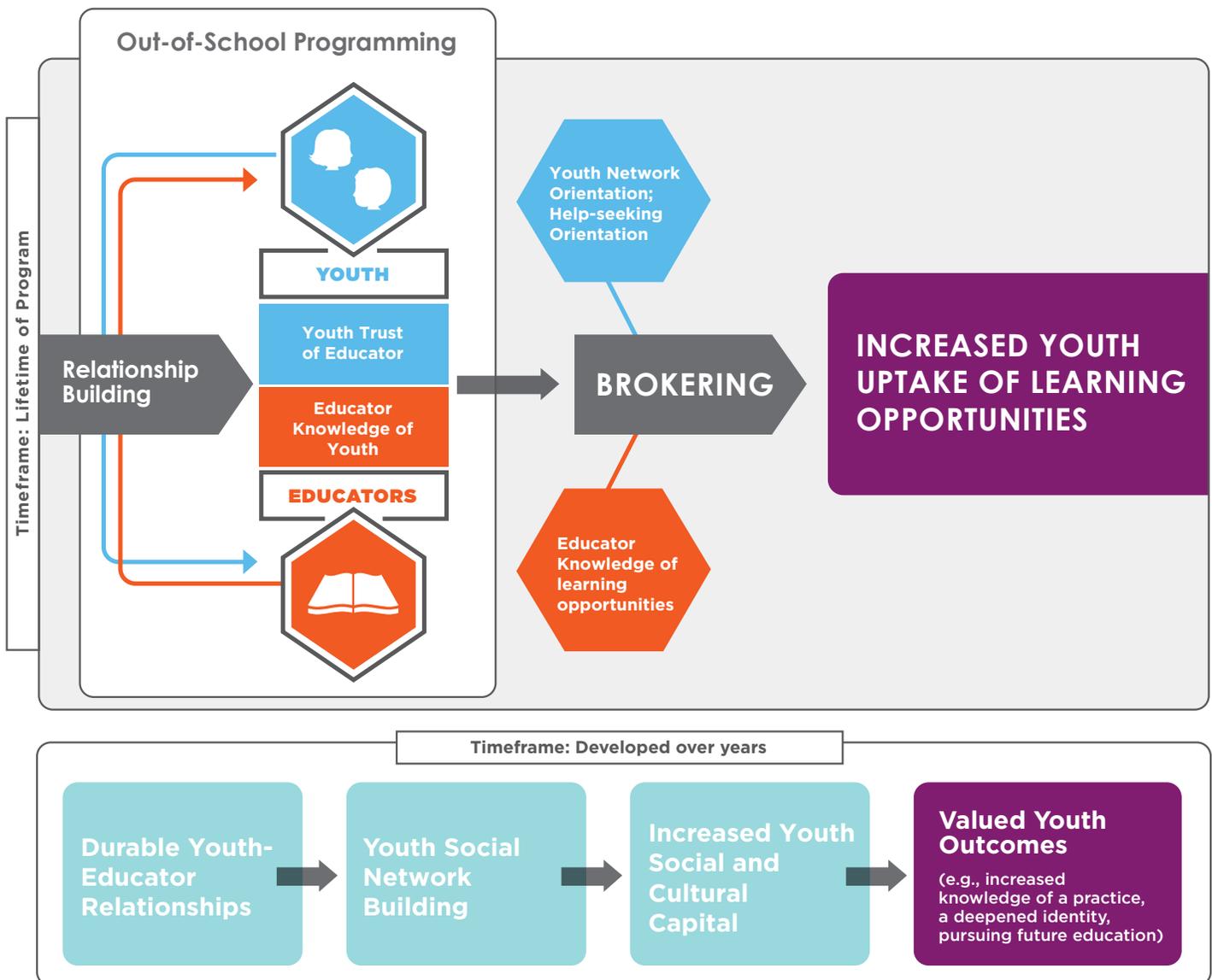


### Common Practices

- **People who broker:** Brokers are everywhere in a young person's life. They include family members (parents, grandparents, aunts, uncles); non-family adults (educators, teaching artists, mentors); and peers (friends, significant others, students at school)
- **Things that get brokered:** Learning opportunities are the building blocks of pathways. They might include experiences (programs, one-day events, classes, internships, fellowships); social connections (mentors, institutional gatekeepers, collaborative peers); institutions (colleges, companies, organizations); and information sources (websites, books, how-to guides)
- **Common practices:** Hive NYC community members have surfaced a range of brokering practices that can happen across the life cycle of program (see page 3).

## CONCEPTUAL MODEL OF SOCIAL CAPITAL DEVELOPMENT THROUGH BROKERING

We propose a conceptual model for how brokering relates to social capital development leading to valued youth personal, academic, professional, and civic outcome. This model highlights an important route to supporting **increased youth uptake of learning opportunities**. Key to this process is the **relationship building** that occurs between educators and youth typically in the context of informal learning after school programs. We postulate that the environment afforded by these programs provides a promising context for two important outcomes necessary for effective brokering: the development of trusting, caring relationships between youth and educators (i.e. **youth trust of educator**) and a better understanding by educators of youths' interests, needs, etc. (i.e., **educator knowledge of youth**).



As mentioned earlier, when educators know their youth and have close relationships with them, it is more likely that youth will take up future learning opportunities that these educators recommend. This allows for successful enactment of various **brokering** practices leading to increased youth engagement in learning opportunities. There are two important supporting components that play critical roles in the brokering process. The first is how a young person’s **network orientation** or **help-seeking orientation** may positively or negatively affect their ability to take up and navigate the opportunities brokered by high resource individuals. Secondly, educators’ ability to effectively broker relevant opportunities for youth is contingent on their **knowledge of learning opportunities**.

## BROKERING PRACTICES ACROSS THE LIFE CYCLE OF A PROGRAM

This table represents key strategies—and when they might be implemented—that may enhance the “brokering potential” of a program. These practices work through narrowing the gap—of knowledge, of accessibility, of experience—for young people. For example, field trips might open doors for youth to meet new people, be exposed to new ways of thinking, and increase their understanding of the resources in a particular neighborhood.

BEFORE	DURING	AFTER
<p><i>During the planning process...</i></p> <ul style="list-style-type: none"> <li>• Discuss resources to <b>plan field trips</b> to various related sites</li> <li>• Discuss any formal or informal <b>“ladders of opportunities”</b> that can be articulated within your organization.</li> <li>• Think about ways to set up ways to <b>update other supporters at home and school</b> (i.e., family members, teachers, guidance counselors).</li> <li>• <b>Identify future learning opportunities</b> related to youths’ interests. Discuss how to share this information.</li> <li>• Have a conversation about what would be <b>appropriate next steps</b> for youth.</li> </ul>	<p><i>At any time...</i></p> <ul style="list-style-type: none"> <li>• <b>Organize field trips</b> to new settings to meet new people and institutions.</li> <li>• <b>Share information about program topic-related events</b> (conferences, lectures, etc.).</li> <li>• <b>Discuss how engagement in the program’s activity</b> can be connected to school activities, or career or school goals.</li> <li>• <b>Provide speaking opportunities</b> for youth to present/share their projects. Help youth find an engaging way to describe their projects that also employs the use of technical language.</li> <li>• If you still have space early in the program, <b>consider engaging in another round of recruitment</b>. your contacts at school and the program peers know.</li> <li>• Help youth develop <b>tools for mentoring</b> (e.g., see initiatives around “youth-initiated mentoring”).</li> </ul>	<p><i>Towards the end...</i></p> <ul style="list-style-type: none"> <li>• <b>Develop an “exit plan”</b> to help youth identify what they’d like to do next.</li> <li>• <b>Help youth apply or register</b> for an opportunity.</li> <li>• Ensure youth know how to <b>stay in contact with your organization</b>.</li> <li>• <b>Offer “leveling-up” opportunities</b> to youth (e.g., co-teach the program, become a “student resident,” etc.). Possibly base this on passion in addition to (or instead of) skill level.</li> <li>• Be specific about the <b>likelihood that your program will be offered again</b>.</li> <li>• <b>Write a short “parting words” blurb</b> to share with youth and other supporters that highlights youth’s accomplishments, strengths, and any recommendations for future growth.</li> <li>• Ask youth if they would like to <b>recommend any peers to this program</b>.</li> </ul> <p><i>At any time...</i></p> <ul style="list-style-type: none"> <li>• <b>Check in with former youth</b> participants periodically. Let them know you’re interested in their activities.</li> <li>• <b>Keep youth in mind</b> for speaking opportunities to present, apply for scholarships, etc.</li> <li>• <b>Schedule “reunions”</b> with all youth who participated at a particular program.</li> <li>• <b>Share ‘program stuff’</b> (i.e., photos, videos, program code, instructional handouts, etc.) with participants.</li> <li>• <b>Post photos and videos of student work/program activity</b> to an ‘online gallery.’</li> </ul>

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# BROKERING IN THE CLASSROOM: OST PARTNERSHIPS WITH SCHOOLS TO CONNECT YOUTH TO FUTURE LEARNING OPPORTUNITIES

Dixie Ching, Rafi Santo, Chris Hoadley, & Kylie Pepler (Hive Research Lab)  
Brian Cohen, Grace Freedman, Allen Riley (Beam Center)

*We work in many Title I schools throughout the city, which adds urgency to the idea of how we can make a connection and be inspiring to a young person in such a short amount of time. This is how we reach the most kids in the most high-need areas, so we want to make it matter.*

**Grace Freedman,**  
Director Development Beam Center

## AUDIENCE

Informal / OST Educators  
Education Directors  
School-Partnership Directors  
School Administrators or Ost-Point Person

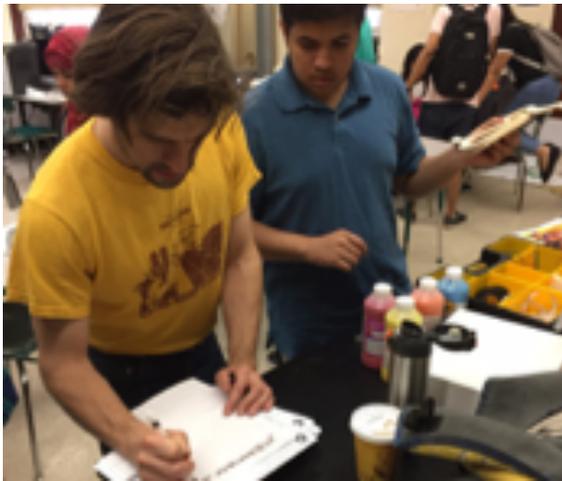
## WHAT'S THE ISSUE?

What's the issue? When OST organizations bring projects into the classroom, they have an opportunity to act as learning brokers that can support the futures of a great number of young people. Informal educators represent a link to individuals and institutions that students would otherwise not know about or be wary of visiting or meeting. By making introductions or naming these places, OST educators can help students build their social networks and knowledge of opportunities.<sup>1</sup> Also, the projects that educators introduce into classrooms can be a way for students to realize new interests and pathways they would like to explore. But brokering into the classroom can present its own set of challenges—a key one being the sheer increase in number of students that an educator may potentially be a broker to. Given that brokering well is ideally a personal and high-touch act, how can educators equitably and impactfully broker in the school setting? This brief discusses some key strategies to consider regarding how OST educators may act as learning brokers to students they meet at school.

<sup>1</sup>Social capital might be thought of as any highly valued resources and forms of support necessary for achieving immediate and long-term goals.

## SPOTLIGHT: BEAM CENTER

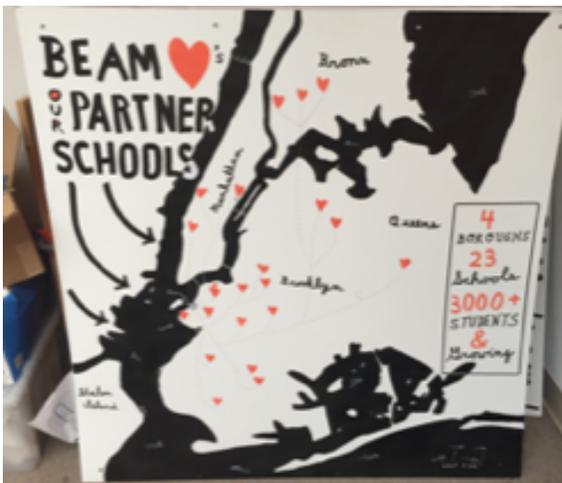
Our insights draw largely from a months-long design research collaboration with Beam Center, a non-profit organization based in Brooklyn, NY, that offers making and learning experiences to “enliven student curiosity, bridge the opportunity gap, and prepare youth for the way the world works.” In addition to offering several youth and teacher professional development opportunities at their organization, Beam partners with over two dozen schools in New York City, offering project-based learning programs during the school day that integrate curriculum goals and digital media making. Here, we share some of Beam’s brokering practices in and outside the school context, as well as approaches that other OST organizations and educators may want to consider.



### Every Beam instructor is already a natural broker.

Beam instructors often provide young people with information about upcoming programs, make introductions to other people or organizations that might relate to their interests, or engage in discussions around how students might leverage other resources in their lives to continue pursuing an interest. Here are some concrete examples of things Beam instructors do that can either support brokering or directly broker future opportunities:

- Instructors identify themselves as artists/makers/engineers with a diverse set of interests and skills—this encourages students to approach them for brokering support.
- Beam projects may lead to a ‘sparking’ of an interest that an Instructor can help to support by sharing ways to continue engaging in that interest.
- Beam staff have arranged to have high school students come to volunteer or visit the annual Inventgenuity Festival or some other public Beam Center event.





*Beam instructor Jeff Wood helped organize a “publishing party” outside school for students who did the -Book of Unknown Students” project at Urban Assembly School of Design and Construction.*

**We also know that offering brokering support in these ways contributes to the long-term support of “Beam youth.”** Here are short vignettes based on past and current Beam youth that illustrate how brokering support has helped shape a young person’s life in big and small ways. In these examples, note that “brokering” can include providing a program experience, a work opportunity (at Beam Center or through an instructor’s professional network) access to tools, ways to build one’s portfolio, housing, or other direct support. Note that while brokering may take varied forms, it is an essential component of helping young people thrive.

- A Beam staffer offered a Beam Camp youth (who worked as a dishwasher at the camp for multiple years) a place to stay so he could attend CUNY.
- A Beam Camp youth stayed in contact with the organization over the years and eventually Beam was able to offer the young person an assistant director position at the camp.
- A Beam staffer offered a young person from one of their programs a work-trade opportunity that allowed him to use Beam’s workshop for free to build bicycles.
- A former Beam instructor offered a graduate of Beam’s apprenticeship program a position at his composting startup venture.

These are stories that illustrate how successful brokering can contribute to an expanded array of opportunities for young people to pursue that align with their interests and goals. The next question is how we might broker successfully in the context of a classroom.



## CHALLENGES WITH BROKERING IN THE CLASSROOM

In speaking with OST educators who have experience enacting projects in classrooms, we have learned many reasons why it is hard to broker effectively in the school context. Beyond the ever-present challenge of always being time-strapped and feeling overwhelmed with a multitude of tasks, educators have to contend with:

- The sheer **number of students**, which makes it difficult to get to know everyone, develop a rapport, and recommend opportunities tailored to their interests and needs. A Beam instructor might be in multiple schools, engaging in 100+ students. How is it possible to build trust, learn of their interests, and be able to respond with appropriate opportunities?
- The difficulty of describing **what an informal organization does and the kinds of opportunities and experiences students can have here** in a clear and effective way for a young person.
- **The difficulty of keeping track of currently available and open learning opportunities for young people.** It is a constant struggle for any committed learning broker to know about current, available, and appropriate opportunities for young people at any given time.

## ATTENDING TO EQUITY

OST educators naturally broker as part of their commitment to support young people and their ongoing development. Nevertheless, it's important to move this practice beyond one's natural impulses alone. Brokering is best viewed as a practice that is enhanced with careful study, regular practice, and ongoing refinement. For example, in attending to issues of equity when it comes to brokering, we need to focus on providing every student an opportunity to continue their learning and development. Such an approach will ensure that we broker more equitably, and not inadvertently reward students that are the most vocal and who are able to express their interests most articulately. Without placing this high bar on ourselves, we risk favoring only those who come to us for help, or who proclaim their interests in ways we can detect and understand. As Beam instructor Jeff Wood recommends:

*Make sure students feel heard. Make sure that everyone kind of knows that you're gonna be responsive to them. Notice the kind of range of the loudness of people's voices in the room, and who has more trouble being heard, who disappears into the background a little bit more. You're gonna need to just pay more attention to them so that they don't get frustrated or feel unheard, like they might feel in other parts of their life.*



## APPROACHES TO CONSIDER

OST educators entering a school classroom should feel both equipped and empowered to make brokering connections and to inspire all youth as they learn new skills, discover new things about themselves, and experience learning about new pathways for learning. Following are some strategies to help make that happen.

- **Have an internal understanding of what pathway opportunities your organization can offer** and how that might align with the types of opportunities or potential pathways schools offer.
- **Keep in mind that each educator represents a source of contacts and opportunities.** This could be part of an organization’s onboarding or ongoing professional development.
- **Consider ways to build deep, long-term partnerships with your schools.** OST educators will be more successful at brokering learning opportunities to students if their organization has some sort of felt presence at the school. Multi-year engagements also afford the opportunity to interact with students over an extended period of time, to get to know them, and to develop the kind of deep, trusting relationships that promote brokering.
- The most successful brokering processes involve **building infrastructure and a robust set of strategies** that can support educators to broker to their fullest capacities. For example, organizations may want to build an internal database to make it easier for their educators to learn about and share learning opportunities with youth.
- **Prepare information about your organization, opportunities both at your organization or other organizations that you recommend.** Examples might include handouts, postcards, presentations.
- **Seek out the “natural brokers” at a school and consider partnering with them to help get the word out about your opportunities.** For example, this could include advisors, college and career counselors, a popular teacher that many students gravitate toward. While this is often the way you make the greatest and longest-lasting impact, it can be hard to identify these individuals. We recommend asking questions like, “Does someone here handle things like internships and after-school programs for students?” Also, notice whether there’s a school staffer that is often surrounded by happy students. This is a great person to get to know, too!
- **Learn more about any school activities or initiatives that your organization may align with.** This might include credit-bearing internships, career and technical education classes, “shadowships,” and so on.



## REFLECTION QUESTIONS

- What are opportunities we can offer students at our organization?
- Are there other organizations or opportunities we endorse that we should also recommend?
- Are there existing school activities or initiatives that our organization could align with?
- What are things we can do, now, in a year, and in five years, to increase our brokering capacity?

*There were youth in the rain harvesting shed program. I told them you should go to [Beam Camp] but I didn't know enough about the scholarship programs or when she would need to apply. I didn't have the materials on me. So I just said it and she didn't write it down.*

**Lizzie Hurst**  
Beam Center instructor

*We need to keep in mind that Beam instructors may be coming back to the school and spending time with the same students over a few years...It's about opening the door.*

**Brian Cohen**  
Executive Director of Beam



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# FINDING “FIT” WHEN CONNECTING YOUTH TO FUTURE LEARNING OPPORTUNITIES

Rafi Santo, Dixie Ching, Chris Hoadley, & Kylie Pepler (Hive Research Lab)

## AUDIENCE

Informal Educators  
Mentors, & Teaching Artists  
Internship Program Managers or  
College / Career Coordinators  
Guidance Counselors Teachers

## WHAT’S THE ISSUE?

A key aspect of brokering, or linking youth to future learning opportunities, is knowing whether an opportunity will be a “good fit.” Part of the assumption behind the notion of fit is that no opportunity is good in and of itself; it’s all about the interaction between the youth and the opportunity. Whether it’s a new program within your organization, a program in another informal organization, a fellowship, internship, or a job opportunity, we want to make sure young people will have a positive experience, one that’s challenging and interesting in a way that makes them more likely to actively learn and persist even if there are bumps in the road. This is especially important when youth come from communities that have been historically disinvested in and marginalized and where access to robust learning opportunities is more limited.

Being good at understanding potential fit is of course natural to being a good mentor and engaging in strong youth development practice. Good mentors always go through a process of thinking about who a young person is when recommending an opportunity.

For the purposes of this brief, we understand a “good fit” as an opportunity that:

- Involves activities that are relevant to and support growth in a youth’s interests, identities, and emerging areas of expertise;
- Provides an experience where a young person will be appropriately challenged;
- Represents a comfortable and safe environment for a young person.

## CHALLENGES

- It takes time to get to know a young person well enough to know if something is a good fit.
- Some young persons are more explicit and vocal about their interests or display their expertise more clearly than others; in order to be equitable we have to get to know those that don't "signal" interest as strongly.
- Young people are often unsure about what they want or change their minds about what's interesting to them.
- Young people, even when we connect them to opportunities, might not show up (e.g. to an interview), or might relate to the opportunity differently than expected (e.g. spending scholarship money on non-academic things). We need to figure out how to be supportive even when these sorts of things happen.
- Educators and other adults are often more enthusiastic about an opportunity they see as a potential fit than youth themselves. We need to be prepared to deal with these differences in interest, and not get discouraged in the process, but rather ask questions about whether our assumptions are right, or if we're effectively framing for youth why we see an opportunity as right for them.
- Opportunities that are a good fit for a young person might not be available or you might not know about them.
- If we don't reflect carefully, it's possible to recreate our own cultural biases when recommending future opportunities.

## ATTENDING TO EQUITY

Brokering new opportunities is a time-intensive process, so making sure an opportunity is a good fit means using limited time equitably in order to make sure that more youth have positive experiences. Non-dominant youth often have fewer institutional resources that might result in connections to robust learning opportunities. From an equity standpoint, a "bad fit," especially if it's to a substantive commitment like a semester-long program or a summer internship, can sometimes be high-stakes. A negative experience can turn off a young person to an emerging interest or be a hit to their confidence, and if that happens consistently, can result in a young person not finding a productive pathway that they go deep with and that leads to robust futures, and reproduce existing structural inequalities that come from under-representation of non-dominant groups in certain fields.

When considering fit for non-dominant youth, it's especially important to consider what kinds of barriers are distinctive to their lives. This might take the form of public transportation costs required for taking up an opportunity, conflicts with existing responsibilities like taking care of siblings, or parental concerns around where and when they're allowed to travel alone. Knowing about these can help a mentor to problem-solve in order to make an opportunity work.



## APPROACHES TO CONSIDER

- **Get to know both youth and the opportunities you're connecting them to.** Surface information about a youth's interest, expertise, and identity, and do the same for the opportunity itself in terms of what interests and expertise levels it speaks to.
- **Involve youth in the process of deciding whether an opportunity is a good fit for them.** Research on youth initiated mentoring suggests that when youth are more involved in deciding with whom and where they want to engage, resulting relationships with people and institutions end up being more robust and durable:
  - ◇ Create contexts in an internship program where youth can interact with professionals or do shadow visits to multiple organizations to get to know them before they're matched. For example, Big Picture Learning creates "shadow days" where groups of youth visit a handful of local companies before they apply to internships.
  - ◇ Involve youth in contexts where they interact with and learn about youth or educators from another program or organization. For example, at Emoti-con, an annual youth media and technology festival in New York City, youth from multiple informal learning organizations mingle, hang out, and see presentations of each other's work, giving them greater understanding of other programs and organizations in which they might eventually choose to participate.
- **Leverage and create moments in existing programs where youth can signal their interest and expertise** so that educators who broker opportunities can make more informed connections. For example, DreamYard and the Parsons School of Design support youth to create learning portfolios where they can share projects and reflections on their creative works, and that then supports educators to understand more about their young people.
- **Create opportunities for youth to reflect on and make sense of their interactions with a learning experience that takes place outside your organization.** Even if a given fit isn't perfect, external reflection contexts can help youth both address issues they may be having during that experience and understand the experience in terms of their interests. This can be an informal check-in with a young person, or a more formal reflection space in a summer internship program. Spaces like these are especially important when an opportunity ends up being less than an ideal fit. In that case, a reflection context can be a jumping-off point for helping youth self-advocate, receive support, and make sense of what isn't working well.
- **Have educators in your organization build collective awareness of where good "next step" pathway destinations are** (other out-of-school programs, summer activities, workplace organizations) for youth generally that come out of your organization's programs. What are the opportunities that are likely a good fit for your youth, based on the kind of expertise and identities they develop in your programs? Consider making this explicit, whether a list or a database that gets maintained and updated.



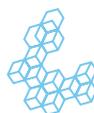
## REFLECTION QUESTIONS

**In terms of thinking about where a young person is at in order to consider if an opportunity is a good fit, we can ask ourselves questions like:**

- What is the nature of a youth's interest in a certain area?
- What are their emerging identities (e.g., designer, scientist, activist, coder)?
- What kind of expertise do they have in terms of both technical and “soft” skills like communication and collaboration?

**When we think about those things and how they relate to a potential opportunity we have in mind to connect a young person to, we can ask questions like:**

- Is the opportunity one that has a strong youth-development orientation, and, if not, can that be ok given how mature a young person is and how able they are to self-advocate and drive their own learning?
- Do the people associated with a new opportunity have experience working with non-dominant youth?
- What level or expertise is required or expected for youth that participate in the opportunity?



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# WHEN DOING GOOD IS GOOD FOR YOU: BROKERING FUTURE LEARNING OPPORTUNITIES TO YOUTH AS A BI-DIRECTIONAL CO-LEARNING PRACTICE

Angela Calabrese Barton (University of Michigan)  
Dixie Ching, Rafi Santo, Chris Hoadley, & Kylie Pepler (Hive Research Lab)

## AUDIENCE

Informal/Ost Educators, Informal/Ost Educatio Directors, School-Partnership, Directors At Ost Organizations, School Administrators And Educators.

## WHAT'S THE ISSUE?

Successful brokering can help young people deepen their interests and their identities connected to those interests, as well as build their social capital by enriching their social networks with other adults and peers that are connected to or have knowledge of future learning opportunities.

Brokering might be thought of as support or knowledge flowing from the broker — an informal educator, classroom teacher, adult or peer mentor — to a young person. In this way, the young person learns from the adult in terms of possible futures and the opportunities and practices which may make those futures possible. However, brokers should also be learning from the young person to whom they are connecting opportunities. When individuals broker, they are interacting in crucial relationship-building that allow brokers to get to know the young person.

For educators to become effective brokers in ways that support equity goals, it is important to consider how **brokering is a bi-directional, co-learning practice**. Brokering is not only about connecting future learning opportunities to young people, but also about refining and expanding our mental models of young people, what matters to them, how and why, and the implications this has for their futures.

This perspective on brokering is built upon an assets-driven and “desire-based” framework, in refusal of “damage-centered research” (Tuck, 2009), which has for too long positioned youth from non-dominant communities as “in need of repair,” a strong narrative in education. What this means for brokering is that the process involves not only recognizing the needs of the young people with whom brokers work, but also being willing to see and learn from the assets — the experiences, knowledge, feelings, and relationships — that young people bring to the relationship. For example, young people may have ideas for contexts they want to be brokered into, and as adults, we need to learn from youth about these places so that we can use our position/authority to help them gain access to these places. For the brokering relationship to support equity-oriented goals, both the broker and the young person need to be willing to share and learn from one another.

## CASE STUDY: QUENTIN AND THE POWER-SUCKING PIG

Quentin is a smart, funny African-American sixth-grader who was part of an afterschool STEM club<sup>1</sup>, where he loved engaging in science topics and activities and helping others. However, at school, Quentin was often in trouble for being silly and as a result often spent “time out” in the hallway while his peers learned in the classroom. This was frustrating for Quentin because he felt that his humor helped him and others learn, and he missed science class, his favorite class of the day.

Partway through the school year, Quentin asked his afterschool STEM club teacher to help him share a video he had made in the club with his science teacher at school. The 60-second “public service announcement”-style video<sup>2</sup>, which took about 12 afterschool hours to make, featured Quentin dressed up with his friend as a “power sucking pig” in order to teach others about energy consumption and its connection to climate change. He wished for his video to be easy to understand and salient to his community so they could save money on their electricity bills while also helping the environment [video link]. Quentin wanted to bring his video to school so that his teacher would know “that I could do it. That I got it done. And that I know a lot....I’m not really that C and D person.”

For his afterschool club teachers, this was an important request because we did not know the extent to which Quentin felt that his humor, a strongly valued asset in the afterschool space, had made him become marginalized in school science. One of Quentin’s STEM afterschool teachers brought the video to school, along with some of Quentin’s other work related to the video to share with the teacher. Quentin’s school teacher was surprised in seeing this work, and reflected upon how he might better leverage Quentin’s humor at school. He also opted to share this work with Quentin’s other teachers so that they could, together, help to create a more empowering space for him at school. His teacher also reflected on how the movie reminded the teacher of why he went into teaching, in terms of caring about young people and what they might accomplish. He ultimately showed it to other teachers at the school.

Of this event, Quentin said, “It’s the movie that changed how people thought of me ... We showed people how they can save electricity, which will help with CO2.”

This case provided examples of:

- **Brokering Relationships:** Quentin and his afterschool STEM club teacher worked together to create new opportunities to be recognized in his school, which could in turn create new opportunities for learning.
- **Brokering Practices:** STEM club teacher 1) responded to Quentin’s desire to share his movie, 2) created an opportunity to talk with his science teacher and share his movie and other artifacts, and 3) helped Quentin’s science teacher develop a plan for how to support Quentin in school.
- **Co-Learning:** Quentin had new school opportunities open up to him where he could use his humor. He also learned the power of sharing out-of-school work with those at school. Quentin’s afterschool club teachers also learned more about how his humor (a powerful asset outside school) was working against his success in school.

<sup>1</sup> This STEM club was provided by the first author.

<sup>2</sup> <http://getcity.org/blog/2012/10/06/power-sucking-pigs/>



## APPROACHES TO CONSIDER

- Think about brokering as a process of learning about youth assets as well as their needs. Reflect on what young people might be teaching you when they talk about the challenges they face or the future opportunities they desire.
- Consider designing brokering practices that allow for an exchange of ideas between broker and young person.
- Value the competencies that youth come in with; interrogate what you value and why.
- Introduce a culture in your program or setting where all young people are encouraged to share and experiment with new identities (e.g., as experts, activated members of their community, mentors, learning risk-takers, etc.).
- Have brainstorming discussions with young people in deciding what new contexts and audiences to engage with. This may help adult brokers learn more about individuals in the community that they should be connected to.

## REFLECTION QUESTIONS

- What are the current relevant identities and dispositions of youth in my program?
- What identities and dispositions do I value and want youth to explore?
- What identities and dispositions do youth themselves value and want to explore?
- When have I learned something new about what a youth values that changed the kinds of learning opportunities I considered for them?

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Ching, D., Santo, R., Hoadley, C., & Pepler, K. (2016). Not just a blip in someone's life: Integrating brokering practices into out-of-school programming as a means of supporting youth futures. *On the Horizon*, 24(3). pp. 296-312.

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# INTERNAL PATHWAYS: “LEVELING UP” YOUTH WITHIN AN INFORMAL LEARNING ORGANIZATION

Rafi Santo, Dixie Ching, Chris Hoadley, & Kylie Pepler (Hive Research Lab)

## AUDIENCE

Informal Educators and teaching Artists  
Program Managers and Leadership  
of Informal Learning Organisations.

## WHAT'S THE ISSUE?

We can think of brokering future learning opportunities as something that happens across institutions, but frequently in informal learning organizations we often “broker within.” That is, we try to connect youth that are already involved with our programs to new learning and leadership opportunities that we have on offer within our organizations. This could involve youth exploring new or different program offerings, engaging in special opportunities like speaking engagements, but can also involve more robust “leveling up” to new positions that promote deeper knowledge of, and commitment to, the organization’s pedagogies and mission. Through leveling up, we can take an approach to brokering that focuses on putting youth into positions of power, connecting to long-standing practices of youth leadership within positive youth development and out of school learning.

## CHALLENGES

Funding approaches rarely support the kind of alignment and consistency in program offerings that's necessary to create a program ecology where youth can level up across an organization's offerings. More often, funders focus on supporting one specific program, resulting in a set of independent programs that might be strong in their own right, but aren't coordinated, and maybe don't happen with regularity.

- Facilitating handoffs across programs is hard! It's not a small thing to get youth finishing one program to enroll in one that builds on it. This is heightened by the reality that the final weeks of a program, when it might be best to help youth think about how to build on their experience, often involves 'sprinting' to finish projects, leaving time for little else.
- How do we know which youth are right for another program? Without mechanisms to understand where youth interest and expertise are at, it's hard to identify a good next step within available programs.
- Educators running one program in an institution might not know about which other programs are good fits for the youth finishing their program.

## CASE EXAMPLE: A "LADDER PROGRAM" AT THE KNOWLEDGE HOUSE

At The Knowledge House, a non-profit technology education organization in the South Bronx with a focus on career development, programs are organized into tiers of introductory, intermediate and advanced. In their introductory programs that target high school students, youth learn digital fluency and computational thinking skills, and develop an initial portfolio of digital artifacts that they create over the course of the program. The intermediate programs, targeting youth ages 16-24, teach more fundamental skills around web design and user experience, combined with socio-emotional learning and career readiness. This feeds into a variety of advanced programs that each target robust, career-oriented skillsets — full stack web development, data science and user experience/user interface design. For each, the organization aims to feed a majority of youth that complete one level into the next. To do this, they utilize different strategies. First, they actively communicate the "program ladder" to youth, and help them understand where they are in the trajectory. Then, they actively reach out to youth to about upcoming opportunities, making recommendations based on learner data and educator knowledge of young people. Data about where and how students advance, or don't, is then used to help iterate programs to make them better aligned.

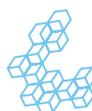
## ATTENDING TO EQUITY

When it comes to leveling up youth within informal learning organizations, it can be easy to rely on youth that are "superstars", and have the same youth ending up with leadership opportunities over and over again. This creates what's known as the Matthew Effect — opportunities going to those that already have opportunity, creating a reinforcing feedback loop that prevents youth that aren't natural "go-to's" from developing the skills and dispositions that might be needed for leadership. It can be helpful to examine how decisions are made within your organization about which youth should get to participate in special or more limited opportunities like public presentations, conference participation or advisory boards, and make explicit plans that prevent this reinforcing cycle from continuing. This might mean more explicitly tracking who has gotten what opportunity, creating more explicit criteria for "leveling up" youth so that it makes transparent how decisions are getting made, or even creating new opportunities that are not as high-stakes that can build more capacity among youth who aren't yet ready for more robust leadership opportunities.



## APPROACHES TO CONSIDER

- **Make explicit decisions about the what, where and when of programs that allow youth from one to level up to another.** This might mean:
  - ◊ Making extra effort to ensure that start and end points of different programs don't overlap.
  - ◊ Aiming for consistency in offerings so youth can rely on getting involved in a program down the line.
  - ◊ Designing "leveled" programming that creates tiers of participation based on expertise that allow youth to move up in terms of skill and level of challenge after participating in each program.
  - ◊ Creating explicit linkages at the end of one program that aim to create an "ladder of opportunity" across your programs.
- **Consider when a young person might be able to become an assistant facilitator or teaching artist within a program,** and create role descriptions and trainings that assist youth to engage well in this form of peer leadership.
- **Look for informal opportunities for peer to peer mentoring,** such as moments in a session when a more 'expert' youth finished what they're working on and might be able to help another youth with something.
- **Seek out and provide opportunities for youth to speak publicly** about work they've produced or projects they've been involved in in contexts like conferences, festivals, local meet-ups or community gatherings.
- **Create a Youth Advisory Board** that can provide opportunities for youth with deep relationships and understanding of your organization's mission and programs to help guide and shape future programming and engage in leadership around public facing events.
- If your organization is involved in more high-skilled media and technology production activities, **consider developing client-based programs** that involve youth working with an external client to develop real-world projects that fill a need the client has (e.g. a short film, a website, an app, screenprints, 3D prints, etc.) .
- As youth become more involved in leadership roles within your organization, **consider providing youth with an institutional e-mail address** associated with those roles, as appropriate.
- **Map the "opportunity ecosystem" within your organization** by using design thinking techniques like user-experience flows or persona maps that make clear what kinds of opportunities your organization has for what youth, and how youth might level up from one opportunity to another.



## REFLECTION QUESTIONS

- Are there natural “leveling up” opportunities that your organization can be engaging in that it isn’t yet? What would it take to make them possible?
- Are there places where programs could be shifted in small ways to make it more possible for youth to transition from one to another (e.g., shifts in content, timing, location, etc.)?
- Are there programs that already could easily “feed” from one to the other that don’t currently? What could it take to create more “connective tissue” between them?
- How are youth that are taking on more leadership positions in your organization (e.g. peer education and facilitation, representing the organization publicly, sitting on advisory boards) being supported as they take on those new roles?



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# BROKERING TO DISRUPT POWER: HOW TO LEVERAGE BROKERING PRACTICES TO SUPPORT EQUITY OUTCOMES

Angela Calabrese Barton (University of Michigan)

Dixie Ching, Rafi Santo, Chris Hoadley, & Kylie Peppler (Hive Research Center)

## AUDIENCE

Informal Educators and teaching Artists,  
Program Managers and Leadership of  
Informal Learning Organisations.

## WHAT'S THE ISSUE?

Brokering is an important equity-oriented practice that both informal and formal educators can take up in support of youth learning and development. We use the term brokering to describe the common youth-development practice that involves **connecting young people to meaningful future learning opportunities**. Successful brokering can help young people deepen their interests and their identities connected to those interests, as well as **build their social capital by enriching their social networks with other adults and peers who are connected to or have knowledge of future learning opportunities**.

In this way, brokers can play crucial roles in identifying, making visible, and breaking down power structures for youth. This is a particularly important equity concern. For youth of color, low-income youth, and girls, there are many different cultural and institutional structures that prevent empowered access and participation in STEM.

There are many ways in which brokers may directly contribute to breaking down or sustaining power inequalities in access and opportunity. Brokering as a practice does not necessarily value, either explicitly or directly, the competencies youth bring to their interest-driven work. However, brokers do make explicit and implicit judgments through their actions, whether intentional or not. For example, brokers can challenge dominant narratives around who can be an expert or what expertise looks like by valuing and leveraging the assets that youth bring to their work. Brokers have authority to decide what's valuable, when, and for whom. This increases the risk of reifying existent power structures that have historically left individuals on the outside of opportunities (Tan & Calabrese Barton, under review)

Brokering can act as a mechanism for counteracting — or perpetuating — inequity and so must be performed carefully and with intentionality<sup>1</sup>.

<sup>1</sup> In a [companion brief](#), we argue that brokering for equity must go beyond traditional notions of “unidirectional” support (e.g., more powerful others brokering less powerful others into opportunities or networks.) and instead be seen as bi-directional, resulting in not only different opportunities for youth, but also changes in the way brokers understand the young people they are seeking to support.

*When you are engineering, when you are making your invention, first of all, you have to talk to people. You have to interview people in your community. You might know what the problems are, but you might not know how it matters to other people. You have to figure out how other people care, and you have to get their ideas, and learn what they know ... When we made our library, we had to figure out that we needed to make it. We needed to know where it would go, what it could look like, and stuff we put in it. We had our ideas, but our ideas weren't enough...*

**Samuel**  
14-year-old maker



## CASE STUDY: SAMUEL AND FALL'S LITTLE FREE STEM LIBRARY

Samuel shared this quote when describing his efforts to build a “Little Free STEM Library” with his friend, Fall, while working in a makerspace at their local community center over a two-year period. They created this library so that youth at the club could have free and unfettered access to science books and mini-maker kits designed by them. The two friends also added blinking LED lights around the library, powered initially by a hand crank generator and later by a solar panel, to call more attention to the library and to get kids curious about how circuits worked. Providing access to STEM books and resources was important to both youth. Their research showed that they lived, as they put it, in a “library desert,” and also that many fellow students in their school had limited access to books or science materials. Samuel and Fall wanted to help the young people in their community to practice their reading while also having the chance to make things for their community — concerns they felt were not adequately addressed at school.

Makerspace educators played important brokering roles in working with Samuel and Fall to break down the many different power dynamics that exist when youth pursue STEM futures. Here we illustrate how informal educators engaged in brokering moves with the goal of disrupting epistemological hierarchies in particular settings.



- When Samuel and Fall were initially thinking about building a Little Free Library, brokers helped them design surveys and interviews and designed opportunities for them to talk with a wide range of people in their community to learn more about the community needs and to provide information to the community on their project. These experiences positioned Samuel and Fall as local community experts on STEM-rich making and community problem solving. These experiences also pushed both youth to consider revising their plan from a Little Free Library to a Little Free STEM Library. These interactions also helped adult brokers learn more about the spaces that mattered to young people and the problems that mattered in the community (see the brief [When Doing Good Is Good for You](#)).
- Brokers invited Samuel and Fall's school science teachers to the local community club where the library was housed to show off their work and describe how they made it, as well as its impact on club members. This was important because both youth seek futures in STEM beyond high school, and both youth have met with fractured success in formal schooling. School teachers spoke of the power of this work and asked if they might make one for their school.
- Brokers made it possible for Samuel and Fall to present their project at a local entrepreneurial competition where they demonstrated their project, including plans to expand their program to several locations in their community. This enabled them to build new professional maker relationships outside their local community, as well as to be viewed as local community experts on STEM-rich making and community problem solving. They also won funds to expand their work, allowing them to further refine their model and to build new libraries for their community.

As youth growing up in a low-income neighborhood, brokering supported Samuel and Fall's efforts to address the fact that they live in a library desert. By creating multiple opportunities for youth to interact with community members, including school teachers, brokers helped to challenge the ways in which many young people are positioned as civically inactive or disengaged with STEM-rich problem solving. Brokers helped to challenge the dominant narrative around who makes and what STEM-rich making can look like.



## APPROACHES TO CONSIDER

- What are the power dynamics that exist when youth pursue STEM futures and what can I do to address them?
- Reflect on ways in which your choices around brokering (what opportunities and for which students) may help to reshape current structures of power and authority.
- Value the competencies that youth come in with; interrogate what you value and why.
- Introduce a culture in your program or setting where all young people are encouraged to share and to experiment with new identities (e.g., as experts, activated members of their community, mentors, learning risk-takers, etc.).
- Consider how “power” resides in both young people and the broker. Brokers are not the only individuals with power!
- Think about brokering as not about putting youth on a pathway embedded in current structures, but about opening new pathways and disrupting structures.
- Create opportunities that are situated in different settings (e.g., school, churches, local community spaces) and involve a range of audiences (e.g., teachers, community leaders, family members).
- Have brainstorming discussions with young people in deciding what new contexts and audiences to engage with. This may help adult brokers learn more about individuals in the community that they should be connected to.

## REFLECTION QUESTIONS

- What are the power dynamics that exist when youth pursue STEM futures and what can I do to address them?
- Are there opportunities I can identify or create that can change a young person’s reputation in a certain context, among certain individuals?
- How do the young people in my program see themselves in relationship to STEM expertise?
- What identities and dispositions do I value and want youth to explore?
- What identities and dispositions do youth themselves value and want to explore?

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Ching, D., Santo, R., Hoadley, C., & Pepler, K. (2016). Not just a blip in someone’s life: Integrating brokering practices into out-of-school programming as a means of supporting youth futures. *On the Horizon*, 24(3). pp. 296-312.

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# LINKING YOUTH TO PROFESSIONAL WORLDS THROUGH INFORMAL DIGITAL LEARNING PROGRAMS

Rafi Santo, Dixie Ching, Chris Hoadley, & Kylie Pepler (Hive Research Lab)

## AUDIENCE

Informal Educators

Internship Coordinators

Program Managers and Organizational Leaders

## WHAT'S THE ISSUE?

Many digital production, tech, and computing-oriented informal learning organizations see part of their work as being bridges to professional worlds that youth otherwise wouldn't be able to access. For afterschool programs, community groups, museums, and libraries interested in preparing youth for futures that relate to tech, computing, and digital production, the work isn't just about changing *what youth know* by fostering skills, but also changing *whom youth know* by changing what their social networks look like.

In this brief, we talk about how informal learning organizations can build youth's professional social capital — helping them develop relationships to people and institutions that they can learn from and leverage down the line. In doing so, we can play a key role in opening up professional opportunity and developing youth knowledge about possible futures.

## CHALLENGES

For many high school and college-aged youth, the transition into professional life can be rocky. A bad work experience can turn youth off to an emerging interest. Many city-wide summer youth employment programs vary widely when it comes to connecting youth to something they're actually passionate about. Beyond that, many youth coming from marginalized communities have had negative experiences with institutions and might have what sociologist Ricardo Stanton-Salazar, calls a negative “network orientation,” or a disinclination to reach out to their networks to seek assistance or resources. Finally, many industries linked to digital media, tech, and computing have limited connections to non-dominant communities, which can sometimes mean that they don't have a good sense of how to support them or even know how to reach them in the first place. Informal learning organizations that have specialized capacity around both technology and youth development can play a critical role in addressing these challenges and in creating supportive settings where youth can explore a range of professional worlds.

## ATTENDING TO EQUITY

In order to support youth well, especially those from low-income African-American and Latinx communities that are underrepresented in technology and creative industries, it's especially important to attend explicitly to issues of equity. Internship and fellowship experiences should pay attention to what kind of pay or stipend youth receive, given that if it's too little or non-existent, the current inequitable system of unpaid internships will continue to favor those from higher-income backgrounds. Attend to whether and how the professional institutions you're connecting youth to — be they for-profit companies, non-profit organizations, or municipal agencies — are committed to and experienced with youth development approaches. Consider how diverse their staff are in terms of race, class, gender, ability, and other identities that are often under-represented in the creative, media, and technology sectors. Finally, a key role of informal educators in supporting professional connections is to attend to the experiences youth are having in new settings, helping them make sense of them, and, importantly, to navigate complicated dynamics linked to non-dominant identities and backgrounds. Ensuring that you're creating space for reflection and sense-making is critical to fostering productive learning and goal-setting around professional futures.

## APPROACHES TO CONSIDER

Informal learning organizations use many different approaches to fostering linkages to professional worlds. Some are more intensive and are full-fledged program models in and of themselves; others are more lightweight and are integrated into other programmatic offerings.

- **Guest speakers in out-of-school programs** — a common and “low touch” way to connect youth to professionals is to have a guest speaker come and visit existing programs to talk about their work and give feedback on youth projects. This can result not only in youth having increased knowledge about a given field but potentially a new relationship with someone in that field whom they can then reach out to down the line.
- **Site visits and Shadowing Events** — bringing youth that are part of informal learning programs to professional offices can give a concrete view into these settings and make them seem less distant and more possible to see themselves in. For example, The Knowledge House's ([theknowledgehouse.org](http://theknowledgehouse.org)) CITYSaturdays program brought youth participants to a new professional context each week for a tour and workshop, including diverse professional settings like a local educational media company, a university center focused on media and games, a major technology company, and a museum experimenting with emerging technologies in its exhibits.
- **Youth/Professional networking sessions** — this approach brings many youth together with groups of professionals from different industries to meet in one place where they can ask questions, learn about what professionals do, and better understand how people got into their chosen fields. At Emoti-con ([emoti-con.org](http://emoti-con.org)), an NYC-based youth technology showcase, a networking hour in the morning has youth rotating among tables where they connect with professionals from different technology- and design-related sectors.
- **Internship and Fellowship Programs** — more intensive models like these involve work-based placements that an informal learning organization facilitates. Scope of Work ([scopeofwork.org](http://scopeofwork.org)), an organization focused on creating equity in New York's creative industries, runs a fellowship model where youth do work placements in design, music, fashion, and other creative sectors for four days a week, and then come back together as a cohort for one day a week. Importantly, the program creates space outside the worksites for the fellows to reflect, get advice, and make sense of these early work experiences.



- **Client-based Work Models** — in these social enterprise models, informal digital learning organizations act as “agencies” that other organizations hire to create some kind of digital production, with teams of youth from the organization developing and producing client-facing deliverables. Free Spirit Media ([freespiritmedia.org](http://freespiritmedia.org)), a youth development and workforce preparation organization in Chicago that is focused on film and media, runs the Free Spirit PRO enterprise, which produces social impact storytelling, documentaries and PSAs for industry, non-profit, and government-based clients.

## REFLECTION QUESTIONS

- Which approaches and associated outcomes related to connecting to professional worlds are appropriate given the mission of my organization and our overall programmatic offerings?
- Which are appropriate given who our youth are and what their interests and expertise looks like?
- What kinds of networks and relationships does my organization need to develop to support these approaches?
- Are the organizations I'm connecting with supportive and attentive to the needs of youth from non-dominant groups?



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# NOT JUST A TEACHER, ALSO A CONNECTOR: INCREASING EDUCATOR BROKERING ORIENTATION AND CAPACITY

Rafi Santo, Dixie Ching, Chris Hoadley, & Kylie Pepler (Hive Research Lab)

## AUDIENCE

Informal Educators Mentors and Teaching Artists

Internship Program Managers or College/Career

Coordinators, Teachers

## WHAT'S THE ISSUE?

Informal educators who focus on artistic, media-based, or tech-oriented pedagogies might usually think of their roles as being about knowledge-building — they teach young people skills, create contexts for collaboration and creation, and share insights into different domains or professions. They might also think about themselves as generally supportive adults who provide emotional support, “life advice,” and help as youth navigate the complex years of early adolescence. But they have another important role, one especially critical if they want to more fully address issues related to equitable access to different futures — informal educators are “learning brokers” who actively connect youth to new opportunities, people, and institutions that can help them further their life-long learning pathways and identities.

In considering “learning broker” as one of the key roles of informal educators, questions come up about how we can support their ability to effectively play this role. This brief addresses some questions about how we might support informal educators to develop a “brokering orientation”, an important factor that needs to be in place for successful brokering to happen.

## CHALLENGES

- Educators in creative media informal organizations are often professional working artists, seeking professional development in education and pedagogical approaches.
- Depending on the kind of time informal educators spend with youth, it can be much easier to stay in familiar “knowledge-building” roles, since effective brokering can require a deeper relationship and knowledge of youth interests.

- Even when an educator has a brokering orientation, the staffing structures they work within can sometimes get in the way. This is especially true if they're part-time specialists and don't fully participate in the larger professional learning opportunities within an educational organization and its associated networks.
- Informal educators are sometimes so focused on the programs they run that they might not even know about additional opportunities for youth within their organization, let alone beyond it

## ATTENDING TO EQUITY

- **Explicitly introduce brokering as a key role and practice during educator on-boarding** after they're hired and **within internal professional development activities**.
- If your organizational model involves teaching artists or technology professionals that are part-time, **invest in having part-time educators participate in professional learning activities, partnerships and broader networks**, and, ideally, be reliably involved in facilitating programs over time, rather than having a "one-off" relationship with your organization.
- **Have informal educators consider what their distinctive expertise and associated networks are**. Often we take for granted not just what we know but who we know. Having educators reflect on this explicitly within the context of considering their roles as brokers helps us to keep in mind what we might bring to the table that's distinctive in terms of the social, cultural, and professional worlds we can connect young people to.
- **Collectively develop strategies among informal educators related to how they can signal and share their expertise and associated networks** in the context of their interactions with youth. For example, at Beam Center, a "maker" oriented education organization that works in New York City schools, staff worked to prototype a common format for introductions when they started working with a new group of youth, where they highlighted different aspects of their background that would support youth to know what kinds of supports and connections they could request from educators.
- **Highlight and share-out youth pathway successes that educators supported by being learning brokers**. Informal learning organizations are full of stories about how youth go on to their next steps after having been involved an organization. Highlight these stories among staff and especially focus on the brokering "moves" that your educators used to support these youth to find their next step instead of only the youth successes alone.
- **Bring informal educators together to reflect on and share the local institutions and organizations they're familiar with**. This both serves to orient front-line educators to be thinking about the practice of brokering, but also builds collective capacity and shared organizational knowledge around opportunities that might be a good fit for your organization's youth. Consider making this explicit as a routine with an associated list or database that gets maintained and updated.



## APPROACHES TO CONSIDER

- **Explicitly introduce brokering as a key role and practice during educator on-boarding** after they're hired and within internal professional development activities.
- If your organizational model involves teaching artists or technology professionals that are part-time, **invest in having part-time educators participate in professional learning activities, partnerships and broader networks**, and, ideally, be reliably involved in facilitating programs over time, rather than having a "one-off" relationship with your organization.
- **Explicitly introduce brokering as a key role and practice during educator on-boarding** after they're hired and within internal professional development activities.
- If your organizational model involves teaching artists or technology professionals that are part-time, **invest in having part-time educators participate in professional learning activities, partnerships and broader networks**, and, ideally, be reliably involved in facilitating programs over time, rather than having a "one-off" relationship with your organization.
- **Have informal educators consider what their distinctive expertise and associated networks are.** Often we take for granted not just what we know but who we know. Having educators reflect on this explicitly within the context of considering their roles as brokers helps us to keep in mind what we might bring to the table that's distinctive in terms of the social, cultural, and professional worlds we can connect young people to.
- **Collectively develop strategies among informal educators related to how they can signal and share their expertise and associated networks** in the context of their interactions with youth. For example, at Beam Center, a "maker" oriented education organization that works in New York City schools, staff worked to prototype a common format for introductions when they started working with a new group of youth, where they highlighted different aspects of their background that would support youth to know what kinds of supports and connections they could request from educators.
- **Highlight and share-out youth pathway successes that educators supported by being learning brokers.** Informal learning organizations are full of stories about how youth go on to their next steps after having been involved an organization. Highlight these stories among staff and especially focus on the brokering "moves" that your educators used to support these youth to find their next step instead of only the youth successes alone.
- **Bring informal educators together to reflect on and share the local institutions and organizations they're familiar with.** This both serves to orient front-line educators to be thinking about the practice of brokering, but also builds collective capacity and shared organizational knowledge around opportunities that might be a good fit for your organization's youth. Consider making this explicit as a routine with an associated list or database that gets maintained and updated.



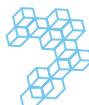
## REFLECTION QUESTIONS

### For organizational leaders:

- How do educators in my organization see their role? What can I do to orient them to the idea that they're not just there to share knowledge and be emotionally supportive, but also to connect youth to other learning opportunities within and beyond our organization?
- How can our internal professional development and onboarding be improved to support the capacity of our educators to be learning brokers?
- What networks are my front-line staff connected to that they should keep in mind to help them make connections for youth?
- What kind of infrastructure does my organization have in place to get knowledge about future opportunities into frontline educators' hands in a way that makes it easy to share with our youth?

### For front-line educators:

- What kinds of networks am I connected to that my youth might not have access to?
- Do youth find me approachable to ask about opportunities? What am I doing to explicitly invite that sort of help-seeking from the young people I work with?
- What do the youth I work with know about my skills, interests, and knowledge? What can I do to give them a better idea of the types of things they can come to me about?



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## CAPSTONE AS STEPPING STONE: LEVERAGING END-OF-PROGRAM EVENTS FOR PATHWAY-BUILDING

Dixie Ching, Rafi Santo, Chris Hoadley, & Kylie Peppler (Hive Research Lab)



### AUDIENCE

Informal / OST Educators  
Informal/Ost Education Directors  
School-Partnership Directors at Ost Organizations  
School Administrators and Educators

### WHAT'S THE ISSUE?

End-of-project “capstone” events are a common feature of out-of-school time (OST) and classroom-based programs, especially in creative media and technology programs. They afford young people a structured way to present their individual or group creations in a public or semi-public audience and are generally recognized as being settings for collective celebration and feelings of personal accomplishment. These settings may also provide an important context for brokering future learning opportunities to youth, acting as an important node within broader learning ecosystems (Penuel, Clark, & Bevan, 2017). They offer the potential for youth to gain new knowledge and new understandings through interactions with others, to feel a deeper connection to a community, and to gain valued forms of social capital.

This brief offers guidance on ways that educators may leverage end-of-project capstone events as not only ones of celebration and accomplishment, but also as important sites for brokering — and thus will further support youth pathways of learning and identity-building.

## ATTENDING TO EQUITY

Capstone events are important and underutilized contexts for supporting youth pathways. In this brief we offered some features that can help capstone events serve as sites for brokering. However, it's important to keep in mind that for youth to take advantage of these events, they may need practice with social capital building activities that often fall under the umbrella of networking — approaching experts, making conversation, “code-switching,” and asking for help. Preparing students for capstone events is an important ingredient in helping such events promote youth pathways of learning and identity-building.

## APPROACHES TO CONSIDER

Capstone events represent an opportunity for brokering — youth can learn about and be connected to future learning opportunities and develop relationships with other adults and peers who can support their ongoing learning and development. Here are some ways to help support those outcomes.

### Help youth learn about and be connected to future learning opportunities.

- Source future learning opportunities from event attendees and others to be shared during the event. Since events usually attract youth with similar interests, this is a good opportunity to reach out to registrants and offer to share information about other events, in- and out-of-school programs, and scholarship information.
- Help “close the loop” by encouraging interested students to provide contact information or sign up for other opportunities on the spot. At Emoti-Con! organizers provided a table where registration flyers advertising various youth opportunities would be displayed at cross-organizational events. Flyers included spaces for youth to add their name, phone number, and email addresses, and a “table broker” was present who could sign youth up and follow-up with youth after the event. Large text-based tags were included to make it easier for both youth and the table broker to spot the right flyer.



### Help youth develop relationships with other adults and peers who can support their ongoing learning and development.

- Invite individuals from communities that youth value or aspire to join and create opportunities for feedback and socializing. This will increase the likelihood that youth at the event will meet and perhaps develop relationships with individuals who have the technological expertise and knowledge of opportunities and other individuals that can help them continue to explore and deepen their interests within a particular domain.



- Create opportunities for youth to receive project feedback and advice. It is also important to provide a structured way for youth and experts to interact. This will help create opportunities for youth to learn and gain valuable information as well as build contacts and develop professional relationships. For example, at Emoti-Con!, working professionals in various digital media and creative arts fields who shared interests with the young people there were invited to participate in a Networking Hour as well as serve as guest judges
- Invite youth to contribute to the guest list. By offering youth the opportunity to introduce individuals from their existing network to an event, you allow them to share more about their interests and capabilities. Although from a young person's perspective, learning and identity building happens across multiple settings (home, school, afterschool programs), the individuals at those settings (parents, family members and siblings, teachers and school staff, OST educators, etc.) often witness only the learning and identity building at a single setting. By encouraging this sort of mixing of settings, other individuals in youth's social networks are better able to support them and offer their support, including brokering support.
- Help youth take full advantage of capstone events by offering networking support and practice opportunities to youth prior to the event. To help youth feel more comfortable in such situations, practitioners may consider offering support prior to the capstone event. For example, before attending Emoti-Con!, youth who were part of a program called CITYExpeditions designed by The Knowledge House and CITYPathways, engaged in a simple 15-minute role-playing activity in which students and peer mentors pretended that they were part of a science fair-style event. Students acted as youth presenters while OST educators and peer mentors assumed roles as guest judges. Afterward, youth and peer mentors shared their learnings and observations. For example, one educator pointed out an interaction in which a student mentioned wanting to keep in touch but then never initiated an exchange of contact information.



## REFLECTION QUESTIONS

- Does this event offer ways for young people to showcase their accomplishments and expertise?
- Does this event allow for interactions with individuals from the communities that youth value or aspire to join?
- Who do young people wish to invite to the event?

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## AN EQUITY-ORIENTATION TO VETTING EARLY WORK-PLACEMENT SITES IN CREATIVE & TECHNOLOGY INDUSTRIES

Rafi Santo, Dixie Ching, Chris Hoadley, & Kylie Pepler (Hive Research Lab)  
Eda Levenson, Geneva White, Mikey Cordero (Scope of Work)

### AUDIENCE

Informal Educators  
Internship Coordinators  
Program Managers and Organizational Leaders  
Internship Site Supervisors

### WHAT'S THE ISSUE?

Through facilitating internship placements, informal learning organizations can act as bridges to professional worlds often inaccessible to underrepresented youth. But many industries — especially in computing, media and creative sectors — aren't just lacking in representation of black and brown minorities, but in creating inclusive and safe environments for these groups. This makes the practice of “vetting,” or identifying appropriate and safe early work sites, especially important.

These sectors unfortunately have records of inequitable hiring and promotion of underrepresented groups (EEOC, 2016; Gee & Peck, 2017), of lack of investment in addressing issues of diversity and equity (Hunt, 2017), and of gender and race-based harassment (Scott, Kapor Klein & Onovakpuri, 2017). At the same time, we know that there are places where youth can go and learn important skills, gain exposure to careers they are curious about, and build professional connections, with a growing number of companies in the tech, media and creative sectors developing initiatives to address these issues. An additional consideration is that even the most progressive environments don't necessarily have cultures oriented towards youth development — a focus on socio-emotional support, meeting youth where they're at, and creating developmentally appropriate roles and responsibilities.

Given these realities, it's important for informal learning organizations that engage in internship placements to consider how these early work settings are identified and vetted so that underrepresented youth are more likely to have positive experiences.

## APPROACHES TO CONSIDER

In thinking about this issue, we draw on work developed by Scope of Work (SOW), whose mission focuses on both access to and transformation of the creative sector in terms of diversity and inclusion of black and brown youth based in New York City. SOW, with support from Hive Research Lab, developed a set of tools meant to help youth-focused organizations identify productive and safe workplaces for internship placements. We share here both what they paid attention to when selecting placement sites, and how they went about gathering information about the sites.

### What Organizational Characteristics Matter?

Through a process of ideation, research and direct feedback from youth, SOW and Hive Research Lab four areas that education organizations engaging in internship placements should pay attention to when placing youth at work-sites: organizational mission, staff diversity and cultural competency, youth development orientation, and positive workplace “vibe”.

- **Organizational mission** — In looking at an organization, how much does its work reflect social responsibility? Is social impact embedded in its business model? How might the ‘core work’ of the organization speak to, or not, a young person from your organization?
- **Staff Diversity & Cultural Competency** — How diverse is the staff of the organization? How diverse is the leadership? Are there people in positions of power from under-represented groups? Has the organization developed specific policies or strategic goals around diversity and inclusion? Has it engaged in internal trainings or capacity building around these issues, or demonstrated a public commitment to these issues?
- **Youth development orientation** — Does the organization currently have an established internship program that’s oriented towards the development of young talent? Do youth work on substantive projects? Have they ever partnered before with a youth development or community-based organization? Do they display understanding of what it means to effectively support and mentor youth not only in terms of technical skills, but in their socio-emotional development and soft skills?
- **Positive Workplace “Vibe”** — Does the organization have a generally positive environment? Do the staff seem connected, friendly and open? Will a young person feel encouraged and welcome in terms of the everyday interactions that make up the work culture?

### Finding out about Organizational Cultures

Knowing what to look for is one thing, the second step is to go about actually finding information about a potential internship placement site. To do this, Scope of Work utilizes different strategies, ranging from less to more resource-intensive:

- **Reviewing an organization’s digital ‘footprint’**, including not just company websites but press, social media and public reports, can be helpful in filling in blanks about an organization’s stated values and commitments, and potentially existing work around inclusion.
- **Initial “getting to know you” meetings with potential placement organizations** provide opportunities to learn about the culture and priorities of an organization, and to see how they respond to an organization focused on youth inclusion and representation.

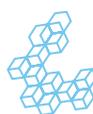


- **More formal interviews or staff surveys** can provide more in-depth information, and may be helpful if there aren't as many other sources of information on these areas for a given partner. These approaches also help to make clear to a potential placement organization what you value in terms of equity and youth development.
- **Have existing partners recommend new ones.** Organizations you've already vetted will often have a sense of what other potential partners are like in terms of being a good fit for youth interns.

Of course, if an organization is dedicated to connecting youth to early work experiences in outside organizations, learning about a site isn't something that should only happen before an internship placement. During a placement, check-ins with youth and their on-site supervisors can be critical in order to learn what kinds of supports they need and whether the placement is playing out productively. This can facilitate support for both the youth as well as the placement site supervisor, and the placement organization more broadly. Similarly, getting feedback from youth and the placement organization after a placement is a critically important source of information about whether a company should be a on-going internship site partner. All of this can be part of taking a developmental approach to working with and building the capacity of partner organizations to be good and supportive hosts for youth interns.

### **Taking a Contextual Approach**

Finally, it's important to note that how productive a company could be for an early youth work experience isn't objectively the same - it depends on the conditions. The same company might be considered differently for a young person that's never had a job versus one that has a number of years of experience. A company that may have some "yellow flags" might be treated differently if you know that your program model involves active check-ins and support for youth and their supervisors at the partner company. In that case, some small concerns might be ameliorated since you know that there will be a parallel supportive context for sensemaking, support, and, potentially, intervention. If for some reason your model isn't able to provide this sort of support, it could be more important to weed out potentially challenging or less youth development-oriented work environments.



## REFLECTION QUESTIONS

- What level of “safety” is acceptable given who your youth are, what sorts of support you’re providing during the internship, and what kind of learning might come from encountering challenges?
- Are there ways to involve your youth directly in the process of vetting their placement sites, or sites that future program participants might be placed in?
- After I help to connect my youth to an internship in a company, when and how am I supporting them to make sense of the experience before, during and after the internship?
- Are there ways I can help prepare organizations that are acting as internship placement sites to be attendant to the needs of my youth?

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# STAYING CONNECTED: ORGANIZATIONAL APPROACHES TO ONGOING YOUTH RE-ENGAGEMENT

Dixie Ching, Rafi Santo, Chris Hoadley, & Kylie Pepler (Hive Research Lab)

## AUDIENCE

Informal / OST Educators  
Education Directors  
School-Partnership Directors  
School Administrators or Ost-Point Person

## WHAT'S THE ISSUE

OST educators often first come to know a young person through a program or event offered by the OST organization. We have written extensively about how educators, youth mentors, and program youth can play an instrumental role in supporting youth engagement in interest-driven learning with digital media by offering brokering support during programs and events (Ching, Santo, Hoadley & Pepler, 2018). However, we also observed that, for many youth, such crucial support can taper off or disappear altogether once the program ends, due to a loss of ties with helpful individuals (Ching, Santo, Hoadley & Pepler, 2015). One promising approach to minimizing this “post-program slump” in social support is through ongoing re-engagement with youth. This brief focuses on strategies OST organizations may employ to continuously re-engage with youth in their contexts.

## CHALLENGES

There are several practical challenges to supporting youth through ongoing re-engagement. These include:

- **Lack of organizational processes and structures.** Approaches to engaging alumni require that significant effort and organizational routines be in place, as well as staff dedicated to carrying out these activities.
- **Misaligned communication strategies.** Traditional practices around alumni communication — posting updates on organization’s website, publishing a monthly newsletter, sending messages via email — might not align with the communication practices of youth today (e.g., social media, SMS).
- **Lack of opportunities at institution.** Organizations may not have additional opportunities to share with youth who have already engaged in a majority of their programming.
- **Youth may be shy about keeping in touch.** While some youth may naturally keep in touch with organizational staff after a program ends — occasionally dropping by, sending updates, asking for college recommendation letters — other youth may assume that it would be inappropriate to try and maintain ties.

## ATTENDING TO EQUITY

One of the most important equity issues to keep in mind when it comes to this topic is that youth may differ in terms of the strategies that will successfully communicate opportunities to them or opportunities that may attract them or meet their needs. It is advisable that organizations pursue a diverse strategy and also invest in ways to evaluate how well those strategies are working, especially in terms of who is and is not responding to them.

## APPROACHES TO CONSIDER

To stay connected to youth, organizations may wish to experiment with effective ways to stay in touch with youth who have gone through their programs, with opportunities they share through this ongoing relationship that youth will value. In this section, we briefly describe some approaches to consider.

- **Explore youth-centric ways to stay connected.** Use social media tools to share organizational opportunities. For example, Mouse, a non-profit youth development organization in New York City, has an active Instagram account that it uses to post pictures of its programs and events, including an open monthly “Maker Night” where teens are invited to visit the Mouse office and partake of various maker and DIY activities.



- **Develop strategies for alumni cultivation.** Offering ways to stay in touch by joining a program’s “alumni group” has many benefits in terms of re-engagement, including providing a way for youth to feel valued by and connected to an organization and creating a rationale for potential future re-engagement. Staff may share with their alumni an update on the organization’s activities, relevant opportunities including internships and jobs, as well as leadership and speaking opportunities. For example, GripTape, an organization that organizes small grants to youth to pursue their own crafted Learning Challenges, keeps in touch with each cohort of Learning Challenge winners. A subset of those winners have also served on the organization’s youth leadership board. Consider how “power” resides in both young people and the broker. Brokers are not the only individuals with power
- **Consider offering a wider array of opportunities to meet a wider range of students’ needs.** Some organizations have been offering events and services to meet students’ needs. For example, the Harold Hunter Foundation, an organization formed to serve the needs of urban skater youth, and City Lore, an arts and urban history organization, offered a free legal aid and college counseling session to youth after they noticed that some youth had experienced conflict with local law enforcement!



## REFLECTION QUESTIONS

- Am I making an effort to re-engage with all past youth participants?
- Are the strategies I'm using/planning for youth re-engagement likely to be effective for all youth participants?
- Are there additional opportunities we can offer past youth participants?
- Are there other organizations or opportunities we endorse that we should also recommend?
- How might I leverage my growing alumni network of youth advocates to assist me with key organizational objectives such as program recruitment and programming?
- Are there youth leadership or "levelling up" opportunities that I might share with past participants?
- What are things we can do, now, in a year, and in five years, to increase our ongoing youth-engagement strategies?

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