

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

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AUDIENCE

Informal Educators and teaching Artists,
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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 intentionality¹.

¹ 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?

REFERENCES

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