

Using a Collective Impact Approach to Support Youth Pathways in Technology

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Collective impact represents an approach to actively coordinate many local institutions around an ambitious goal. In this case example, we explore how a digital learning organization uses this approach to support youth pathways into technology careers.

What's the Issue?

Many digital learning organizations care about not only supporting young people to have powerful experiences in a single program, but also with engagement in future experiences beyond their own programs. For some, this pathway orientation focuses on supporting economic empowerment for youth, envisioning young people from their programs eventually connecting to well-paying jobs in technology and other creative sectors. These are sectors where non-dominant youth are traditionally underrepresented, but ones that also represent potential economic opportunity through higher wages and entrepreneurship.



However, supporting youth pathways into technology is rarely something a single organization can accomplish on its own. Pathways to opportunity don't exist within individual institutions. They require the creation of interlinked ecosystems. Achieving this vision means coordination among many organizations across different sectors, coordination that can be achieved through what are called collective impact approaches (Kania & Kramer, 2011). Collective impact efforts aim to involve multiple sectors in order to achieve commonly agreed upon ambitious goals, engagement in mutually reinforcing activities, utilization of shared data to understand efficacy, and

support of all of this by active stewardship of a 'backbone' organization.

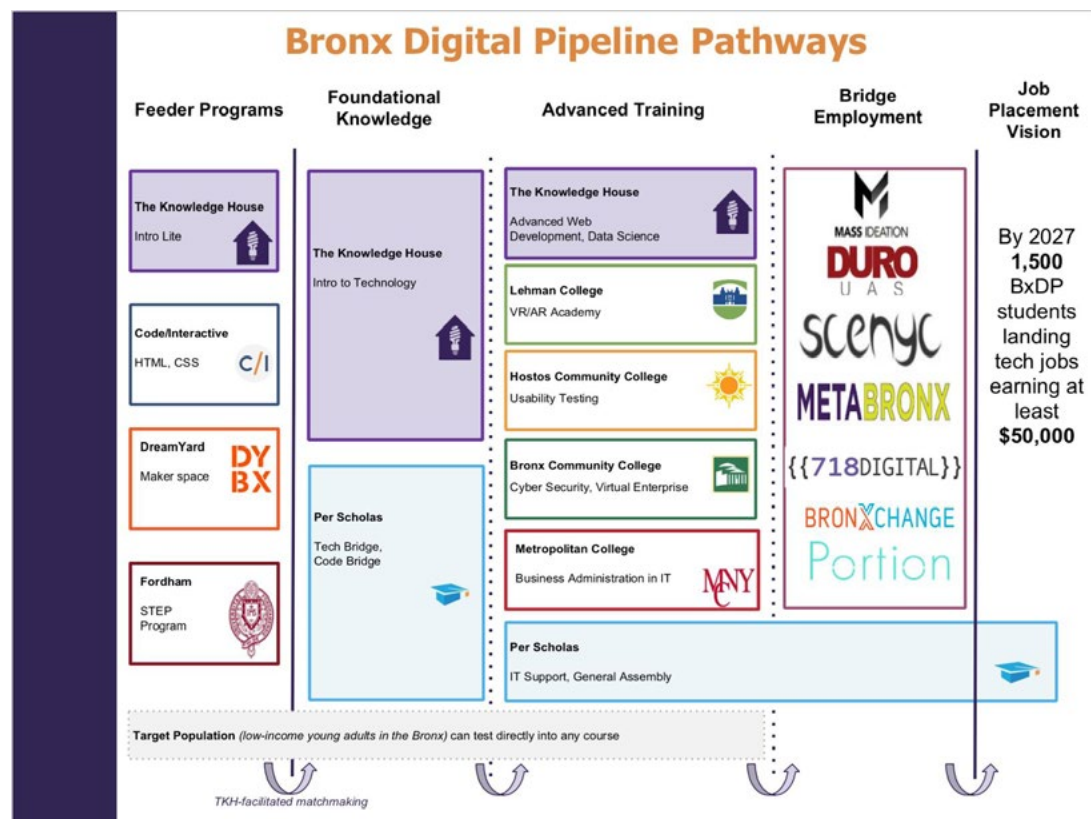
To highlight what this can look like in practice, we share about the Bronx Digital Pipeline (BxDP), a collective impact effort organized by The Knowledge House (TKH). The BxDP is an effort involving over a dozen organizations in the South Bronx with a goal of supporting youth pathways towards technology jobs and a broader vision of "organizing and strengthening the Bronx's entire innovation ecosystem," as TKH puts it.

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What Does it Look Like?

The Knowledge House has a goal of supporting 1,500 students from the Bronx enter tech careers by 2027. Its program offerings include introductory, intermediate and advanced classes in areas like web design, user experience/user interface design, and computer programming. However, the organization knows that it would be impossible to achieve their goals through courses alone. Jerelyn Rodriguez, the co-founder and CEO of TKH, shared, "We realized that there needs to be stronger coordination across different organizations or else our students fall through the cracks."

This realization spurred TKH to develop the Bronx Digital Pipeline, an initiative that focuses on coordinating action with other youth development groups, workforce development programs, community colleges and industry partners. Rodriguez shared that the "goal is for each of the pipeline partners to contribute to the Bronx tech ecosystem



Bronx Digital Pipeline collective impact model aiming to support youth pathways into technology careers, achieved by coordinating partners across sectors.

in its own way, by training, offering jobs, providing feedback on curricula, coaching candidates, strengthening internship networks, and granting community college credits as a gateway to postsecondary education.”

Some of these partners act as ‘feeder programs,’ such as DreamYard and Code/Interactive, which offer high school aged programs related to technology. These programs feed into “foundational knowledge” programs, offered by both TKH and Per Scholas, that have a more substantive focus on developing hard skills in technology along with workforce readiness preparation in areas such as resume design and interviewing. These same organizations, along with a group of community colleges, then offer more advanced training to students who have gone through foundational knowledge programs, with various technology specializations in areas like project management, cyber security, virtual and augmented reality, usability design and javascript programming. At the most advanced part of the BxDP, a set of ‘bridge employment’ partners from industry act as internship placement settings for young adults.

An important feature of this pipeline ecosystem is the ‘connective tissue’ across different organizations. All of the organizations aim to actively broker young people from one part of the pipeline to the next. They also aim to share metrics that help the entire ecosystem understand key outcomes, including how many young people from a given program enter more advanced offerings, as well as how many eventually gain employment.

Additionally, industry partners that are part of BxDP give feedback on curricula and program designs to education partners to ensure skill alignment with employer needs. In order to accomplish all of this, TKH dedicated staff roles to the development and management of the BxDP, talent managers that focus on understanding the skills and interests of young people in the initiative and industry partnership coordinators that liaise with employers.

What Does it Lead to?

Utilizing a collective impact model focused on supporting youth pathways into technology can lead to a number of important outcomes that might otherwise be difficult to achieve:

Guiding Questions

Organizations interested in a collective impact initiative, either from the standpoint of organizing one or participating in one, can reflect on a number of questions:

- Does the collective impact initiative align with the projected futures you value for your young people?
- Who are the partners whose programs either feed into or build on the experiences provided by your organization? How would you find them?
- Which staff in your organization should or can be dedicated to a collective impact effort? This includes responsibilities such as planning meetings and supervising the implementation of key strategies determined by the collective?
- What methods can be used to help stakeholders arrive at a commonly agreed upon goal for a collective impact effort?
- What routines and norms of communication can be set up in order to effectively coordinate action?



- **Improved program design.** Evidence of outcomes can be gathered through data sharing about program completion and student performance within programs within the BxDP. These data can be helpful for both internal improvement for BxDP organizations as well as for pointing to evidence for funders. Additionally, stronger coordination across parts of the pipeline can help individual programs better align their offerings that are more effective in leading to future youth opportunity.
- **Informed educators.** Shared knowledge across institutions about young people's expertise and interests can help instructors understand the students coming into their programs. This data can also support staff or organizations who are placing youth in internships or full-time jobs.
- **Increased youth opportunity.** The primary outcome of this approach is that young adults are able to find opportunities at each step of the pipeline, ultimately resulting in more robust career options thus economic independence in the long term.
- **Stronger and more responsive communities.** Through the process of cross-institutional coordination, communities can form stronger relationships and thus better understandings of community needs. Ideally, this can mean that new community challenges are more quickly identified and addressed.

Tensions and Challenges

Collective approaches that support youth pathways are complex and ambitious endeavors, and those interested in designing or participating in them face unique challenges, including:

- Coordination and relationship development requires time and resources, and funders are often focused on supporting specific programs that reach young people as opposed to resources to organize broader ecosystem initiatives.
- The right partners might not all be available in a given region, resulting in gaps in a pathway ecosystem.
- Creating effective alignment across programmatic experiences involves continual tweaking, requiring a commitment to resource intensive program iteration.
- Participating organizations may have different goals and pedagogies, requiring negotiation around partner priorities and values.
- Engaging in data collection and sharing across organizations raises important student privacy issues that must be attended to carefully, aiming to maintain participants' privacy and security with goals of using data to help coordinate action.
- A commitment to continued engagement and program participation, especially at more advanced parts of a pathway ecosystem, means norms of accountability that might look different from more traditional youth development approaches that are more flexible. For example, in advanced TKH programs, students that miss more than two sessions are put on a form

of probation, and continued absences can result in being asked to leave the program. Jerelyn Rodriguez, TKH Co-founder and CEO, frames the approach in this way: “We’re going to be tough with you all because no one else out there cares as much as we do.”

The Role of Media and Technology

Technology can play multiple roles in a collective impact effort. In some cases, it is the centerpiece of program design. In others, it plays a critical part in coordinating the efforts of the entire ecosystem. For example:

- Data infrastructure can support tracking of student participation across organizations, as well as profiles of students with relevant information about their skills, interests, and life circumstances that may impact their participation.
- Data dashboards can provide snapshots of programs associated with particular organizations in the BxDP.
- TKH utilizes a technology supported ‘leaderboard’ system both within individual programs as well as across them where students gain points for areas such as program attendance, project completion, and attendance at supplemental events (e.g. hackathons and job fairs).
- TKH is aiming to develop an integrated job board system where industry partners that are part of BxDP can circulate postings for job descriptions. The system would also automatically pull relevant postings from major job sites like Monster and Indeed.