

It Takes an Ecosystem



The Role of Convening Organisations, Local Legacies,
and Partnerships in Shaping the Future of Education



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Introduction

What are the key elements that make for a successful educational ecosystem that supports innovative learning opportunities? Are there contextual learnings that can inform approaches elsewhere?

HundrED partnered with Pittsburgh, Pennsylvania-based Remake Learning to explore and learn more about successful education ecosystems. The project focused on the ecosystems of four very different cities across the globe: Pittsburgh, USA; Bogotá, Colombia; Doncaster, England; and Nairobi, Kenya. Through an examination of the similarities and differences in practices, we revealed some shared insights and came to a better understanding of how, and to what degree, these cities enable collaboration across schools, community organisations, cultural institutions, and informal learning spaces.

Within this report we highlight best practices across the systems, discuss common needs, and explore city-specific successes and challenges. What we discovered through our research strengthened some of what we already know: context is a factor in the success of an educational ecosystem, but so is the power of the convener combined with the work of local actors who see their shared purpose in making meaningful connections between learning and life.

Within this report we highlight best practices across the systems, discuss common needs, and explore city-specific successes and challenges.



Reflections from Remake Learning

An Interview with Tyler Samstag, Executive Director

What started Remake Learning was breakfast over pancakes with a handful of people who were doing creative stuff in education, a gathering with no agenda except to share.

In the early 2000's, there was a lot of uncertainty about what new technology, like smartphones, meant for teaching and learning. We saw it across all educational organisations: libraries, higher education, and museums. There were a lot of people wrestling with it - a new thing we could take advantage of, but there was a lot of fear, similar to what we are now seeing with AI.

A conversation between the Grable Foundation's Gregg Behr and a professor at Carnegie Mellon University's Entertainment Technology Center spurred the idea for a programme to leverage technology for teaching and learning.

Remake Learning stewards the ecosystem, using network support strategies, our playbook, and our Pittsburgh Principles. We see ourselves creating conditions for adults where they can show up in support of the goals of the ecosystem. This really guides our work.

This project with HundrED will allow Remake Learning a structured opportunity to reflect on and strengthen our learning ecosystem through a global lens. We want to see what is distinctive about our own ecosystem, validate practices that are already working well across local institutions and organisations, and identify areas that need further development. Sharing these insights across Bogotá, Doncaster, Nairobi, and Pittsburgh will help all four cities to strengthen our ecosystems through reflection, learning, and exchange.

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Ecosystems to Support Innovative Education

From Relationships to Resources: 4 Pillars of a Productive Education Ecosystem

Education stakeholders in Bogotá, Doncaster, Nairobi, and Pittsburgh have been building 21st century educational ecosystems to support innovation and systemic change in their communities for years, if not decades. Local contexts and historical legacies influence the degree of adoption for this model in each location, but some key best practices came through in our focus groups. All quotes in this section are taken from focus groups and interviews conducted between May and July, 2026.

For more information about specific practices within each city, take a look at the [City Educational Ecosystem Summaries](#).

Everything starts with **building relationships** founded on shared goals and trust. Across the four cities, coming together with like-minded communities, organisations, or individuals, is essential to supporting educational opportunities. Out of this engagement, **partnerships** are forged. These partnerships may not extend through the whole ecosystem or be continuous over long periods of time; however, they form networks and spur initiatives that support the ecosystem's overarching goals. When partners come together, **knowledge exchange** makes it possible for new ideas to flourish and to test innovative approaches to learning. One of the most important, if not the most important, best practices in education ecosystems, is maintaining fidelity to evidence, and using that evidence for improvement of services provided by and through ecosystem actors.



Finally, the sustainability of the ecosystem is dependent on **capacity building and system investment**: resourcing the system and people involved in creating these ecosystems is critical to achieving its goals.

BUILDING RELATIONSHIPS. Whether the convener is an organisation like Pittsburgh's Remake Learning, Bogotá's Secretariat of Education, the Kenyan Ministry of Education, or the Doncaster City Council, it is unsurprising that seeking out and identifying important relationships with local actors and building upon them forms the backbone of a successful and intentional education ecosystem. These actors have common goals for innovative educational approaches, and benefit from coming together under the umbrella of the local convener, whose initial role is to organise actors' efforts. Over time, these conveners also facilitate the investment of resources, financial or otherwise, that supports the shared work. One study participant in Doncaster highlighted trust as essential in this process of coming together:

"It takes a long time, but change only happens at the speed of trust."¹

Additionally, the emphasis on community and shared successes - cultivating pride in the achievements of ecosystem actors toward the common goals - is a glue that binds the ecosystem together, allowing for positive reflection and supporting continued participation. "Showing up," as one focus group participant in Pittsburgh highlighted, is a key part of the relationship building.² When several of the same actors are consistently involved, informal connections can develop when the time is right. This can build into partnerships and develop the ecosystem into a network of networks.

PARTNERSHIPS. Within the ecosystem, partnerships allow for collaboration and, in cases where resources and capacity are stretched, the "overcoming [of] a scarcity mindset."³ If a convener has facilitated the alignment of missions and goals while simultaneously allowing for adaptability to circumstance and context, collaboration between partners can lead to successful outcomes. This is most important in times of crisis, when

emergency situations like natural disasters or political upheaval require swift action to address local challenges.⁴ According to those interviewed for the study, these partnerships can and should extend to the specific strengths of the organisation, for example, collaboration between the Bogotá Education Secretariat and the British Council to upskill educators and learners in their English proficiency, or the engagement of an NGO like EIDU to assist the Kenyan Ministry of Education with a registry of educational NGOs supporting foundational literacy.⁵

KNOWLEDGE EXCHANGE. Innovation is difficult to enact or spread without knowledge exchange. In Doncaster, for example, one of their best practices is to highlight community organisations' learning opportunities via the most beneficial and appropriate showcase. On a more basic level, within Pittsburgh's Remake Learning ecosystem, its strategic body of council members highlighted the importance of making time for "shop talk" and how the simple act of sharing experiences can help ecosystem actors and beneficiaries address common challenges or come up with ways to reach goals.⁶ And of course, being willing to learn from successful work in other places, whether local or far-afield, breathes fresh ideas into ecosystems in need of recharging.

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CAPACITY BUILDING AND SYSTEM INVESTMENT. Within an education ecosystem, both teacher professional development and building the capacity of the conveners are necessary for sustainability. For example, in the Nairobi region, where the goals of the ecosystem are to support innovative foundational education, on-the-ground delivery of programming relies heavily on educators and their abilities. However, there is such a wide variety of programmes that the Ministry of Education needs capacity provided by tools to deploy those programmes - in other words, to organise the system actors - effectively and efficiently.⁷ Similarly, in Pittsburgh, areas recognised as needing reinforcement were building capacity in educators for best practices, and cataloging and disseminating best practices for leadership and learning.⁸ Beyond capacity building, financial investment can also strengthen the ecosystem, but ultimately, "the system does not function well without interconnectedness."⁹

Start Ecosystem Building by Naming the Needs and Closing the Gaps

Just as important as best practices are the process goals each ecosystem sets for itself. A key starting point is the identification of ecosystem needs: this can point to areas for improvement, and could also give new conveners food for thought as they start to bring ecosystem actors together.

1. MAKE STRONGER CONNECTIONS BETWEEN ON-THE-GROUND NEEDS AND LARGER SYSTEMIC GOALS OF ECOSYSTEMS. Conveners with direct policy-making power may not have the longevity or close-up view to see the impacts of inconsistent or duplicative programming; they may serve so many people that the needs of groups on the margins may not be fully addressed. In contrast, conveners who have a tenuous or peripheral relationship with policy-makers might miss out on the unique perspective and power to effect educational change on a broader scale, even as they have the relative freedom to act and be efficient. Both types of conveners have their strengths, but both should strive to make the best connections between their overarching goals and the lived realities of stakeholders like educators and learners. Ecosystem actors, such as local businesses, community organisations, and other local institutions have a role here in providing these insights to each other as well as the conveners, and working toward effective solutions together.

2. INVITE AND ACTIVATE ENGAGEMENT WITH STAKEHOLDERS NOT FULLY INVOLVED WITH THE ECOSYSTEM. Each focus group reflected on the gaps within their ecosystem in which particular groups of stakeholders were not present in decision-making processes. Across the cities, businesses were one group who could be more involved, and were highlighted as stakeholders who have vested interests in the educational outcomes of citizens. Youth and minorities were high-potential stakeholder groups which ecosystem actors identified: as direct beneficiaries of the system, their voices should be centred, valued, and represented by the ecosystem's goals. Finally, academics were identified as key stakeholders who could inform the actions of the ecosystem both with their ability to support innovative learning environments and experiences, as well as their expertise in investigating and analysing the effects of the ecosystem's efforts.



3. TEAM UP WITH ACADEMICS TO GATHER EVIDENCE AND IMPROVE THE OUTCOMES. Innovative educational approaches gain strength from the evidence documenting their impact. Accordingly, successful educational ecosystems include institutions of higher learning to drive the connections between education innovation and implementation outcomes. In this vein, the willingness of ecosystem actors to remain flexible and adaptable, reflect on their practices, and iterate to improve outcomes, is also extremely important. These practices tended to be strong for individual ecosystem actors in the study, but all four cities highlighted a need to be even more engaged in strengthening relationships with colleges and universities in order to ensure that the adopted innovative practices demonstrated measurable and replicable impact on the ground.

While the four cities were quite different, the above takeaways point to recurring themes in best practices and needs for strong education ecosystems. As a participant from Bogotá mentioned, learning from others is a cornerstone of innovative thinking: “Context is important, but where similar challenges exist, there might be solutions that work.”¹⁰



City Educational Ecosystem Summaries

Four Cities – Four Unique Approaches for Successful Ecosystem Building

We compared four cities: Pittsburgh, Bogota, Doncaster and Nairobi; in the following section we provide summaries of their thriving education ecosystems with unique legacies. We also highlight each city's specific contexts, goals, needs, and recommendations for emerging or developing ecosystems. Analysis of focus groups, individual interview, and follow-up email data form the basis for the illustration of each ecosystem, its convener, and learnings we can take away. For a brief description of our methodology and the study, see [Annex I](#) and [Annex II](#).

We highlight each city's specific context, goals, and needs, and provide system actors' recommendations for emerging or developing ecosystems.

Bogotá, Colombia



DEMOGRAPHICS¹¹



Population: **8 M** (2024 est)



Education: **92%** of 5–16 year olds are enrolled in school (2023); **28%** of working age people out of the workforce (2026) are in educational programming



Labour force: **70%** of people aged 15–64 (2026)



Child poverty: Data unavailable

Bogotá has a strong history of providing universal public access to educational opportunities.¹² Transitions to higher and technical education have been prioritised, although foundational skills attainment is still a main need. Internal displacement and the influx of refugees has grown the population of learners who require specialised support.¹³ Recent efforts toward expanding enrolment and enhancing overall quality were disrupted by COVID-19, leading to “an urgent, resilient post-pandemic recovery strategy aimed at restoring educational equity.”¹⁴ The next three to five years are critical for closing the literacy gap, and for Bogotá to reclaim its role as leader in national academic performance.¹⁵

THE LOCAL CONVENER: SECRETARÍA DE EDUCACIÓN DE BOGOTÁ

GOALS OF THE ECOSYSTEM ACTORS

- To strengthen the pathways between primary and secondary schooling and onward.
- To create opportunities for communities.
- To develop leaders who can create systems change.

NEEDS

- Closing the learning gap via targeted, evidence-based interventions for basic literacy and numeracy skills development.
- Learning from cities like Medellín or Manizales where foundations engage in ecosystemic work.

LOCAL ECOSYSTEM ACTORS' RECOMMENDATIONS FOR EMERGING OR DEVELOPING ECOSYSTEMS

- Make sure that goals are common and well communicated between organisations in the network.
- Put students at the centre of the education discussions - from initiative design to implementation and through to evaluation - so that their learning is truly driven by what is needed for positive future outcomes.
- Set milestones of early successes where a community can feel like they are moving in the right direction because the journey is long.
- Continue to benchmark progress against global and regional best practices.

OTHER LOCAL CONVENERS

Compromiso Bogotá, Fundación Corona, Fundación Aprender a Quererte

Doncaster, England, UK

THE LOCAL CONVENER: DONCASTER CITY COUNCIL

DEMOGRAPHICS¹⁶

-  Population: **319 K** (2024)
-  Education: **67%** of 19 year olds completed GCSEs in English and Mathematics (2016-2025), **4%** of people ≥19 have completed further education and skills (2019-2025)
-  Labor force: **74%** of people 16-65 (2023)
-  Child poverty: **31%** of people ≤16

A natural connection between schools and local employers was borne out of the closure of mines and railway in the 1990s, and the desire to “reinvent a culture of education for new economic priorities.”¹⁷ As a result, the ecosystem views its guiding purpose as one of connecting people of all ages to employment. There is a strong commitment to providing educational opportunities for youth living in deprivation, and creating a culture of lifelong learning drives the ecosystem’s engine.¹⁸ The ecosystem convener, Doncaster City Council, looks toward a future in which they are recognised world-wide for their approach to lifelong learning.

GOALS OF THE ECOSYSTEM CONVENER¹⁹

- To be a learning city, where every space and every opportunity is one to learn and engage, expanding the learner’s experience, and building community and connections.
- To make connections between informal and formal learning.
- To use education as the driver for economic growth and lifting people out of poverty.
- To grow the ecosystem into neighbouring counties.

NEEDS

- Access to financial resources to provide tech-related innovation in education.
- Greater sponsorship of events by the local employers to build the connection between learning opportunities and employment.
- Involvement of a broader range of employers, particularly from high-growth sectors such as advanced manufacturing, logistics, digital, green technologies and health.
- Tap the potential of small-to-medium enterprises that have valuable expertise and real-world learning opportunities to offer.
- Partner with local charities and organisations that can apply for funding streams that are inaccessible to the local authority.

LOCAL ECOSYSTEM ACTORS’ RECOMMENDATIONS FOR EMERGING OR DEVELOPING ECOSYSTEMS

- Carry on despite funding challenges; generate excitement around the movement.
- Encourage businesses to become active partners in learning, helping to shape projects, provide mentoring, offer workplace experiences and inspire future talent.
- Cultivate a tight relationship between the ecosystem and the government at the national, regional, and local levels.

Nairobi, Kenya



DEMOGRAPHICS²⁰



Population: **5 M** (2025 est)



Education: Data not available



Labor force: **66%** of people aged 16 to 64 (2025 projection)



Child poverty: **13%** of people ≤17 (2019)

Nairobi's history as a capital city and the seat of the government positions it as “a place where people go to get things done” with respect to creating and deploying innovative educational opportunities.²¹ The after-effects of colonialism, followed by three rounds of major educational reforms, and the continued existence of unequal schools, have led to the need for specific attention to foundational skills education.²² The future of conveners, including the National Ministry of Education, involves building stronger relationships between actors in order to improve literacy, numeracy and connections from education to employment for young people.

THE LOCAL CONVENER: NATIONAL MINISTRY OF EDUCATION

GOALS OF THE ECOSYSTEM ACTORS

- To provide high-quality foundational learning in order to bridge the gaps in foundational learning.
- To create / develop learner-centred experiences in the classrooms.
- To support young people in the year(s) between upper-secondary school and higher education and/or employment.

NEEDS

- Include the voices of refugee and refugee-led education groups as well as pastoralist peoples.
- Equitable access to technological resources.
- Consistency and equity of innovative programming implementation.
- Collaboration between philanthropy and traditional donors.

LOCAL ECOSYSTEM ACTORS' RECOMMENDATIONS FOR EMERGING OR DEVELOPING ECOSYSTEMS

- Directly involve youth, as they present a potential untapped resource for positively impacting the education sector.
- Decentralise access to resources so that they can be more equally distributed across the ecosystem.
- Strengthen coordination between actors in the ecosystem.

OTHER LOCAL CONVENERS

Mzizi Afrique Foundation

Pittsburgh, Pennsylvania, US



THE LOCAL CONVENER: REMAKE LEARNING

GOALS OF THE ECOSYSTEM CONVENER

- To provide innovation- and creativity-based educational experiences.
- To support engaging, hands-on learning.
- To encourage adults to be active in the development of and participation in exceptional learning experiences.

NEEDS

- Explore resources beyond philanthropy.
- A high-level organiser of leadership frameworks.
- Stronger representation of neighborhood-based and cultural organisations, especially for communities with less access to opportunity.

RECOMMENDATIONS FOR EMERGING OR DEVELOPING ECOSYSTEMS

- Prioritise relationships and shared goals before structure.
- Leave the comfortable spaces and explore unique opportunities.
- Build leadership skills across the ecosystem.

DEMOGRAPHICS²³



Population: **307 K** (2025)



Education: **94%** of people ≥25 have a high school diploma



Labor force: **64%** of people ≥16



Child poverty: **15%** of people ≤17 (2023)

The foundations of Pittsburgh's approach are built on its early 20th century steel industry work ethic, a culture of problem-solving, and the philanthropic nature of the region.²⁴ These qualities not only spark innovative education, but also spur efforts to address “inequities tied to race, economics, and access to opportunity... [by creating] pathways for youth who have historically been underserved.”²⁵ The local convener, Remake Learning, continues to build relationships with actors from local institutions and organisations, bringing them together to reimagine learning. Having been agile and efficient in creating innovative educational opportunities, they see themselves as ready to engage in systems-level, policy-oriented work in the next few years.²⁶

Annex I: Project Background

What is an education ecosystem?

'Ecosystem,' first a concept linked to biology, has been used to describe human social structures as early as the 1970s.²⁷ An educational ecosystem is composed of the interconnected relationships, functions, and undertakings of actors and stakeholders that come together to influence programming, processes, and ultimately outcomes for learners. As such, we also considered that an educational ecosystem functions like a network of networks. They are influenced by external factors like culture, organisations, or individuals.²⁸ As well, local legacies and broader historical circumstances impact ecosystem evolution. Education ecosystems "are both communal (supported by individual commitments to the greater good) and stable."²⁹ Simultaneously, they are fluid, which allows for new ideas and actors to be integrated with the support of core elements that promote sustainability.

The role of the convener

In speaking to ecosystem actors and/or conveners in all four cities, we were able to distil the role of the convener into these key actions:

- Know the educational landscape and set the tone of the ecosystem
- Build community and cultivate relationships long-term
- Extend the invitation to potential actors
- Provide the space for ecosystem actors to initially engage
- Set the stage for the alignment of common goals
- Be aware of the composition of the ecosystem and help it to evolve based on the needs of the beneficiaries
- Facilitate the infusion of resources to the system



Annex II: The Study

The purpose of this study was to glean stakeholder impressions of their own involvement in an educational ecosystem. We engaged 18 participants via focus groups, individual interviews, and email correspondence, identifying conveners and their main role(s); best practices of ecosystem actors; areas of need within each ecosystem; and suggestions for improvements.

The following questions guided this project, which was also informed by exploratory desk research about each city's educational system:

1. What are the factors that contribute to building a flourishing education ecosystem?
2. In particular, how do community stakeholders come together to support high quality, equitable education experiences for learners?
3. What are the legacies (historical or cultural) within the community that have shaped how the education ecosystem has developed?

Limitations of Research

We found that it was complicated to compare cities such as Bogotá and Nairobi to Doncaster and Pittsburgh, given the size differences between them. Pittsburgh and Doncaster, each with populations of around 300,000, demonstrate that one major ecosystem convener can manage to recruit the numbers of actors required for sustainability. Nairobi and Bogotá, with five and eight million inhabitants respectively, would potentially have 15 to 25 more similarly equipped conveners. As such, in Bogotá and Nairobi, additional focus groups with different actors, as well as stakeholder mapping in all four cities could have provided a more comprehensive picture of the ecosystems' landscapes.



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Endnotes

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