ECOSYSTEMS FOR THE FUTURE OF LEARNING

education reimagined | THE HISTORY CO:LAB™

COMMISSIONED BY THE CARNEGIE FOUNDATION FOR THE ADVANCEMENT OF TEACHING

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FOREWORD BY THE CARNEGIE FOUNDATION FOR THE ADVANCEMENT OF TEACHING

The Carnegie Foundation for the Advancement of Teaching (Carnegie) was chartered by an act of Congress in 1906 and has transformed US education in multiple eras and arenas over its 117-year history. The Carnegie Foundation is a rare educational institution, charged to look around the corner, try to best predict what is coming, and to envision how to make it better. Over the last century, the foundation's efforts have taken many forms.

At the turn of the 20th century, Carnegie helped usher in universal public education by using the Carnegie Unit to standardize the time requirements for the courses and credits needed to attain secondary and post-secondary degrees. The Carnegie Unit or "credit hour" plays an instrumental role in almost every aspect of American schooling, K–16. It is central to how K–12 and post-secondary schools are organized; defines what "counts" as learning (credits, courses); determines what is assessed; establishes who is eligible for financial aid; and is foundational both to what goes on transcripts and institutional accreditation. At its time, the Carnegie Unit was a transformative idea, standardizing schooling across the nation at the dawn of the industrial era.

However, the foundation is now arguing for a fundamental shift in the core currency of the educational economy. This argument is based on scientific research over the last century, the demands of a post-industrial, globalized economy, and America's commitment to social and economic mobility. Put succinctly, simplistic, time-bound constructions of what knowledge is and how it is acquired do not meet the needs of today's students, economy, or society. In essence, we need a new version of the Carnegie Unit, which is outcomes based, and allows learning to happen anywhere.

Today, the mission of the Carnegie Foundation is to catalyze transformational change in education so that every student has the opportunity to live a healthy, dignified, and fulfilling life. The foundation has established a strategy to advance educational and economic opportunity at national scale, to reduce inequality, to strengthen democracy, and to sustain civil society. Following this strategy, the foundation aims to significantly increase the number of underrepresented, low-income, and first-generation students who complete secondary, post-secondary education, and embark on purposeful careers.

One aspect of this work seeks to catalyze a national network of communities committed to increasing the number of secondary students with equitable access to engaging, experiential, and effective learning opportunities. This network will coalesce and cohere existing community assets and partnerships, and curate connections to new resources, tools, and modalities that enable powerful learning experiences in schools, homes, and communities. These community-based efforts will be designed to reinforce a vision of learning that is contextually expansive, culturally responsive, and socially connected.

As part of this work, Carnegie commissioned this report from Education Reimagined and History Co:Lab to explore what it may take to catalyze, instantiate, and improve new models of K–12 learning at scale across the nation. Together, with our partners, we can have a demonstrable impact on the trajectories of millions of young people, and in so doing, impact economic, educational, and racial justice at a broad scale.

Carnegie Foundation
for the Advancement of Teaching

Photo by Ben Filio for Remake Learning

AUTHORSHIP & ACKNOWLEDGMENTS

This report was requested by the Carnegie Foundation for the Advancement of Teaching, an organization with extensive experience and a dedicated focus on catalyzing transformational change in education so that every student has the opportunity to live a healthy, dignified, and fulfilling life. The authors of this report include Education Reimagined, a catalyst for transformative learner-centered approaches, and the History Co:Lab, an agent for systemic change aiming to transform learning for democracy. Both organizations bring a unique perspective and share a common belief in the significant potential of public education as a means for social innovation.

With its commitment to dismantling its own creations (i.e., the Carnegie Unit and standardized, one-dimensional assessments), Carnegie is setting an example for the kind of transformation that is required across our system in order for deep learning to reach and nurture all young people. The foundation is also setting an example of accelerating the rate of innovation and improvement by weaving partnerships with community-connected systems-innovators—in this case with Education Reimagined and the History Co:Lab—to surface patterns of success and uncover barriers to scale.

We extend our sincerest appreciation to the individuals and organizations that contributed to this work. The approach we employed encompassed in-depth interviews and a comprehensive review of publicly available information on innovative educational programs throughout the United States. Our research drew from diverse sources, including academic research, media articles, organizational websites, site visits, and interviews. Our focus centered on programs that champion a learner-centered, competency-based educational approach and have demonstrated remarkable success in enhancing student outcomes by providing learner-centered experiences and fostering deep relationships with community partners. A complete list of individuals who contributed to this report is included on page 68.

Once again, we express our gratitude to all those who generously shared their insights and experiences, enabling us to compile this landscape analysis and provide valuable insights for the advancement of learner-centered ecosystems.

Thank you.

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ECOSYSTEMS FOR THE FUTURE OF LEARNING

Long before the COVID-19 pandemic cast the shortcomings of the current school system into stark relief and triggered a call for accelerated innovation, the practice of enhancing student learning by breaking down the walls between school and community had started gaining momentum across America. Over the last couple decades, education innovators in urban and rural settings from coast to coast have been creating systems that enable students to grow, thrive, and experience rich and varied learning experiences.

These efforts are not just implementing new practices inside the four walls of a school, but building connected learning ecosystems that are linked to communities. Fueled by a radically optimistic worldview that each child is capable and can thrive when embedded in the community, innovators have been working on the ground to create the future of education. In practice, these innovative efforts have been largely disconnected from one another. They have followed different trajectories and been advanced by different kinds of institutions, networks, and individuals. This has made it difficult for communities that want to strengthen student learning to chart a course for their own transformation.

The need for transformation of education practices has, however, never been more urgent. We are facing a crisis of belonging and connection, encapsulated by headlines about the adolescent mental health crisis and deep political rifts. We are facing a crisis of learning, with teachers and students disengaging from the current system, citing that it fails to deliver the experiences and opportunities they are looking for, and to do so equitably for families and young people. We are facing a crisis of democracy, with trust in the government and in the media at an all-time low. In this environment, the mandate to improve learning is not that of an individual educator or administrator. It is a mandate for the whole community to come together with a shared commitment of transforming learning so that all students grow up thriving and ready to contribute to society as a whole.

The intent of this report is to help communities build their capacity for transformation of education, advancing toward what our society needs most—a system that works for young people. It draws on the experiences and insights of innovators across the United States who are already answering this challenge—creating learner-centered, community-based ecosystems.

This report includes:

- **a landscape analysis** of select communities creating learning ecosystems;
- **a framework** that emerged from the analysis and can be used by communities to consider their readiness and appetite for this transformation;
- **an invitation to communities** to explore and discover their own path for reimagining education; and
- **a call for national and regional institutions** to listen, learn from, and create the conditions for communities to pursue their visions.

A LANDSCAPE ANALYSIS AND FRAMEWORK OF LEARNING ECOSYSTEMS

In preparing this landscape analysis, we looked at a range of sites where ecosystems are emerging, and we dug deep into what different communities are doing to create such learning ecosystems. We analyzed their origins, their strengths, and the challenges they face in their efforts. The process of building ecosystems that enable deeper learning outcomes for all young people requires substantial shifts in all aspects of how we think and do school. This report outlines four main levers and the ten key domains within them that communities can use as a framework to build successful learning ecosystems. More specifically, the analysis explores the way in which the communities are—to varying degrees and in different ways—pushing on the levers necessary to create thriving learning ecosystems.

Through the lens of this report's framework, a comprehensive analysis has revealed common strengths across various communities in their implementation of learning ecosystems. One of the key strengths identified is the practice of co-creating a shared vision for learning, accompanied by the establishment of systems change goals. However, alongside these strengths, common challenges have also emerged. These challenges illuminate opportunities for national and regional organizations to identify where and how they can provide support to communities pursuing education transformation.

INTRODUCTION

The journey of transforming education toward a model that truly offers opportunities for all young people to thrive is a journey—not a discrete problem that a new product or a single technology can solve. It is also a collaborative endeavor, requiring the wisdom and commitment of different institutions and individuals.

This report is an invitation to join a collaborative journey—one through which we, along with many others across the nation, are initiating a new chapter in the history of American schools, in the history of our nation, and in democratic education worldwide. The story we are writing together is the story of how the American people responded to the realization that the system their forebears built was failing their kids. It is about how we decided to invent a new system, even though the current one had been built to last and made many people comfortable and prosperous. It is about how we overcame all obstacles to finally bend the arc of our nation's narrative toward justice by ensuring that the promise of democracy is deeply felt by every young person. It is the story of how we began weaving together learning ecosystems that extend beyond the walls of the classroom and nurture each learner as an individual who is seen, loved, and supported to build a future of their own choosing.

What we are on a journey to find is not just a different approach but a new architecture of education. This new architecture will reimagine the structures for accountability, governance, assessment, credentialing of learning, resource allocation, and people and people systems that are aligned to support all learners to grow, navigate, and thrive within an ecosystem. This journey will require a shift away from conventional education models with highly centralized management, control of standardized curriculum delivery, and two-dimensional assessment and credentialing mechanisms.

Future historians will note the fortuitous confluence of emerging trends in science, community, and interconnected thinking that enabled this shift. We are living in a time of significant breakthroughs in learning science, improvement science, and technology. Post-pandemic, we have also rediscovered the power of building inclusive communities in neighborhoods. This was not only the original feature of American democracy so admired by de Tocqueville back in 1831, but it has been a staple of our culture as epitomized by Mister Rogers' Neighborhood for over 50 years.[1] Furthermore, establishing community is a core cultural trait of our nation, which enables us to recenter education around the needs of

families and young people. Finally, in response to sobering data on climate change, more and more people are realizing that we are all interconnected as stewards of the planet's finite resources, which amplifies the call to embrace a new, regenerative model of learning.

Given this historic challenge, what should designers of improvement at the classroom, school, and district levels consider when aspiring to set their organizations on a developmental path toward system-wide transformation? To consider this question, Education Reimagined and History Co:Lab interviewed ecosystem leaders and participants around the country. We offer their insights and lessons learned in this report, together with a framework to begin transformation efforts.

Photo by Ben Filio for Remake Learning

Learner-Centered Ecosystems Defined

A learner-centered ecosystem is an adaptive, networked structure that offers a transformed way of organizing, supporting, and credentialing learning that focuses on nurturing the development of whole human beings within caring communities. It provides the conditions for partnership among young learners, their peers, and adults, emphasizing the importance of each learner's agency and enabling them to make meaningful choices about their learning and their contributions to society. Young people and their families are supported to engage with a vibrant world of learning experiences, make sense of them, identify areas for growth, and see next steps. The community and world become the playground for learning with libraries, community centers, churches, public parks, school buildings, and businesses all being seen as valid and valuable sites for learning. The power of technology is leveraged as a means to widening access to learning opportunities; to flexibly acknowledge, track, and credential a child's learning journey; and to make it translatable to families, employers, and higher education institutions.

Source: Education Reimagined, 2023

CHAPTER I

THE OPPORTUNITY OF LEARNER-CENTERED ECOSYSTEMS

"Learning ecosystem" or "ecosystem of learning" are relatively new terms that have evolved to describe the integration of learning into communities as a way to improve student outcomes. They are a frame for education to help students develop a holistic set of competencies, both by providing opportunities for cognitive development and by providing the building blocks for learning, including a sense of belonging and identity that students need to thrive.[2]

The term "learner-centered ecosystem" builds upon the integration of education into the community; it intentionally includes an approach to education that is learner-centered.[3] Learner-centered ecosystems, therefore, are networked systems that support children and young people to find, build, and navigate their individual learning journeys while tapping into the connections, community, and resources that have widely been left out of the conventional public education experience. Equity in access, experience, and outcomes is central. And because they are learner-centered in their orientation, the learning experiences prioritize each learner's agency; build connection and social embeddedness within a learning community; are personalized, relevant, and contextualized to the unique child; leverage the full breadth of community and virtual assets; and credential the child's competency development in translatable, useful ways.

The concept of learning rooted in community and place is not novel. Learning ecosystems are merely a modern-day manifestation of Indigenous and classical education practices that preceded the industrial schooling era. For centuries, Indigenous communities have emphasized the interconnectedness of individuals, communities, and the natural world, and they have placed value on the process of learning through experience, human connection, observation, and participation in real-world activities.[4] This kind of learning has persisted in pockets around the world even in the industrial schooling era—just at the fringes, not at the core.

> **Gregory Cajete, a Tewa from Santa Clara Pueblo, states, "Each Indigenous community is considered a sacred place, a place of living, learning, teaching, healing, and ritual, a place where the people share the breath of their life and thought—the community is a living spiritual entity—supported by every responsible adult and striving to 'think the highest thought.'"**
>
> Source: Gregory Cajete, Native Science: Natural Laws of Interdependence (Santa Fe: Clear Light Publishers, 2000).

The idea of an "ecological system" of learning around a young person was brought forward by developmental psychologists Yuri Bronfenbrenner and Lev Vygotsky, who saw human development through the lens of the diverse environmental influences in which the individual must operate throughout their day.[5] They emphasized the need to see the child at the center of learning—taking their full environmental, ecosystemic context into account, including family, peers, beliefs, and culture.

In the past decades, government efforts like "No Child Left Behind" and "Race to the Top" put test scores at the center, and this ecosystemic thinking around learning was sidelined. It has recently re-entered the mainstream as disturbing data on student outcomes and declining mental health and well-being have forced a national conversation on reimagining education for the 21st century.[6] Researchers from several fields are highlighting the inability of the current system to honor the many facets of diversity among learners, and the result has been endemically negative effects on the equity of learning outcomes.[7]

These strands of research, when woven together, make a strong case that an ecosystems approach is effective at meeting the needs of diverse learners and communities across the country. The key themes of this research posit that:

1. Ecosystems advance equity and inclusion by creating a sense of belonging and the network of love and support young people need to thrive.
2. Learning that is authentic and matters to young people is more effective at building durable skills and cognitive development.
3. Ecosystems are a way of growing a dynamic, living system of interconnected people and planet.

The first powerful strand of research supporting ecosystems emerges from the fields of neuroscience and child psychology, where researchers on child development have become vocal advocates for breaking down the walls of school and redesigning learning. The goal is to allow students to weave connections throughout an ecosystem that enable their individual growth and a sense of belonging, curiosity, and safety.

This strand of research is as passionate in the public sphere as it is rigorous and diverse in expertise. Neuroscientist Dr. Pamela Cantor has been a pioneer and field-builder in understanding the dynamic systems that support whole-child development. Her most recent work underscores the importance of seeing children in a dynamic system of relationships and contexts that shift throughout their lives.[8] Julia Freeland Fisher has proven the central importance of social networks and supportive in- and out-of-school relationships to a young person's success in school and in life,[9] while David Osher, Karen Pittman, and others have directly researched the link between positive relationships and specific competencies and learning outcomes.[10] Kathy Hirsh-Pasek and Roberta Golinkoff, after decades of research on the connection of joy in learning experiences to student outcomes, underline the importance of allowing young people to experience learning in community in a way that is hands-on, authentic, and experiential.[11]

On the second theme, a report commissioned by the Jacobs Foundation, which is committed to advancing science-backed learning approaches, also highlights that ecosystems are more effective at developing 21st-century competencies than purely classroom-based learning environments.[12] Similarly, a recent series of commentary from the Brookings Institute highlighted the ability of learning in ecosystems to support a young person in developing a sense of agency and civic readiness, in addition to the core skills of communication, critical thinking, and collaboration.[13] Additional research has proven that learning that is connected to people, play, and place leads to much improved outcomes across a wide array of holistic student competencies and health metrics.[14]

Third, when we look even more broadly, there is a strong case to be made that an ecosystemic approach to education helps support the economy and society, socioeconomic mobility, and a thriving planet. For example,

the research team at Global Education Futures and Moscow School of Management studied forty emerging ecosystems around the world and found that there is potential for ecosystems to help human flourishing and prepare young people for the increasingly complex, volatile, and connected world. The authors concluded that "learning ecosystems have the potential to unite diverse stakeholders in collective learning for mutually beneficial outcomes that lead toward desired futures for humanity and all life on Earth."[15] This theme of "thrivability" as a pillar of the new educational paradigm is emerging particularly in places—such as the Netherlands—where educational policy research is intertwined with research on new economic paradigms and sustainability.[16]

Overall, a myriad of data points to the widespread benefits of interweaving learning with community and a focus on supporting youth to develop their own agency, find their place in the world, and identify ways to contribute and belong to their community. That being said, recent reports underscore the need for more data collection and research on how ecosystems enhance youth learning and opportunity outcomes, as well as the need for tools and methods to measure the health and functionality of the learning ecosystems themselves.[17]

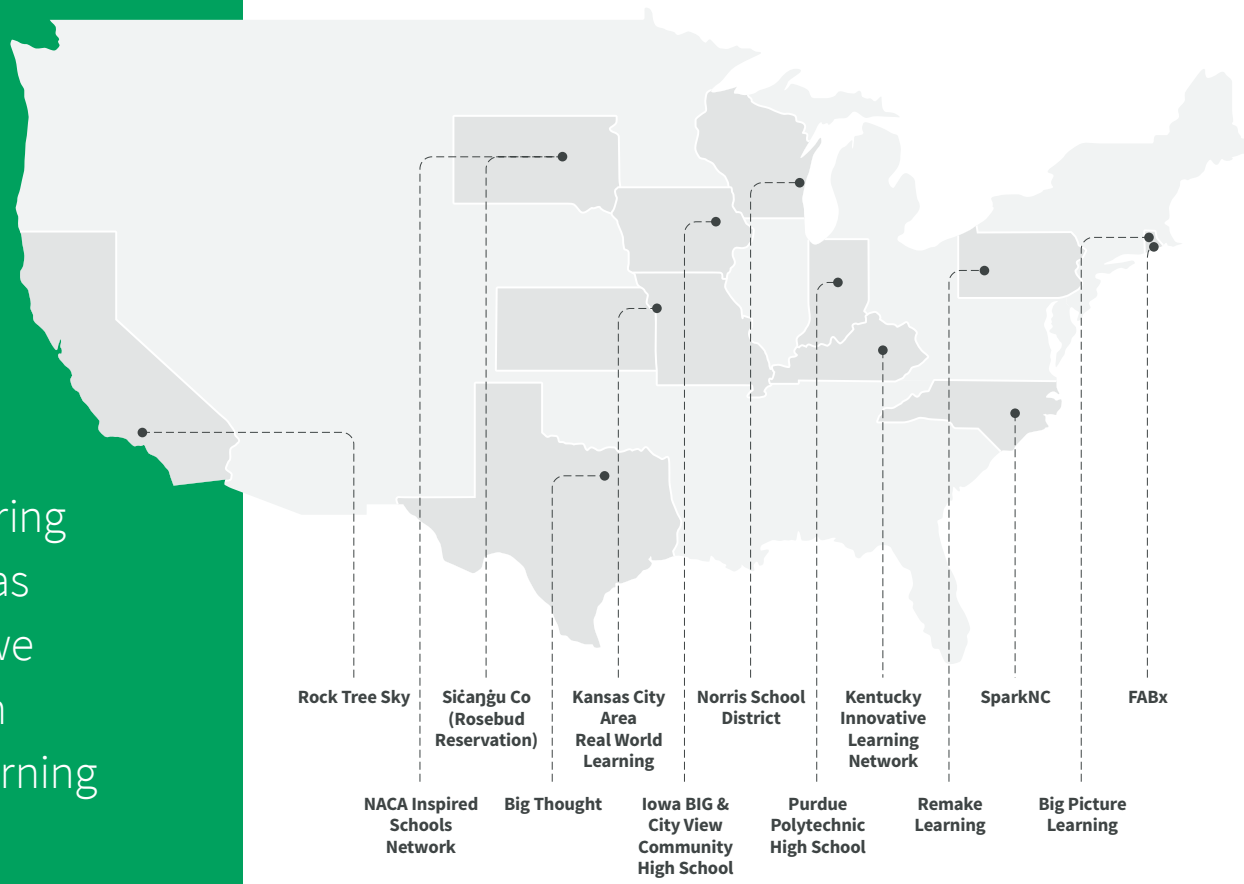
This report seeks to both contribute to addressing those research gaps and to providing practical insights and pathways for communities and leaders interested in advancing a more ecosystemic, learner-centered approach to organizing, supporting, and credentialing learning.

The purpose of this report was to develop deepened insight into the conditions for, as well as barriers to, this innovative work across varied community contexts. By doing so, we aim to gain deeper insights into the most viable starting points for implementation, the necessary conditions for success, and the key barriers that impede progress within diverse community contexts. This comprehensive understanding will provide the necessary groundwork for informing strategic approaches and guiding future efforts in advancing learner-centered ecosystems throughout the country.

CHAPTER II

ANALYSIS OF LEARNING ECOSYSTEMS

This landscape analysis was designed to provide inspiration and courage for anyone seeking to develop learning ecosystems in their own communities. By sharing examples from different settings as well as an emerging framework, we hope to illuminate the many open roads to reaching the vision of learning transformed.



We conducted a scan of emerging ecosystems to see what has enabled their emergence and is contributing to this sustainability. Through the analysis and work on these profiles, we identified common themes and trends that could inform the transformation of systems in other contexts.

APPROACH TO THE ANALYSIS

For this landscape analysis, we identified and studied thirteen sites that promote a learner-centered, competency-based approach to education. Each site has demonstrated success in improving student outcomes. Some are intent on radically reimagining the entire structure of teaching and learning, while others are focused on creating a surrounding ecosystem that will allow practices to shift.

We employed a set of selection criteria to identify ecosystem initiatives that encompassed a wide range of contexts and stakeholders. The criteria considered in the selection process included the following:

- **Multiple sector/entry points:** The selected initiatives involve collaboration and active participation from multiple sectors, including education, community organizations, government agencies, and businesses.
- **Variety of geographical settings:** The initiatives span different geographical settings, encompassing urban, suburban, and rural areas.
- **Diversity of population served:** The selected initiatives serve a variety of populations, including underserved communities, marginalized groups, and diverse cultural and ethnic backgrounds.
- **Variety of development phases:** The initiatives chosen represent a range of development phases, including established ecosystems that have been operational for some time and emerging initiatives that are in the early stages of implementation.

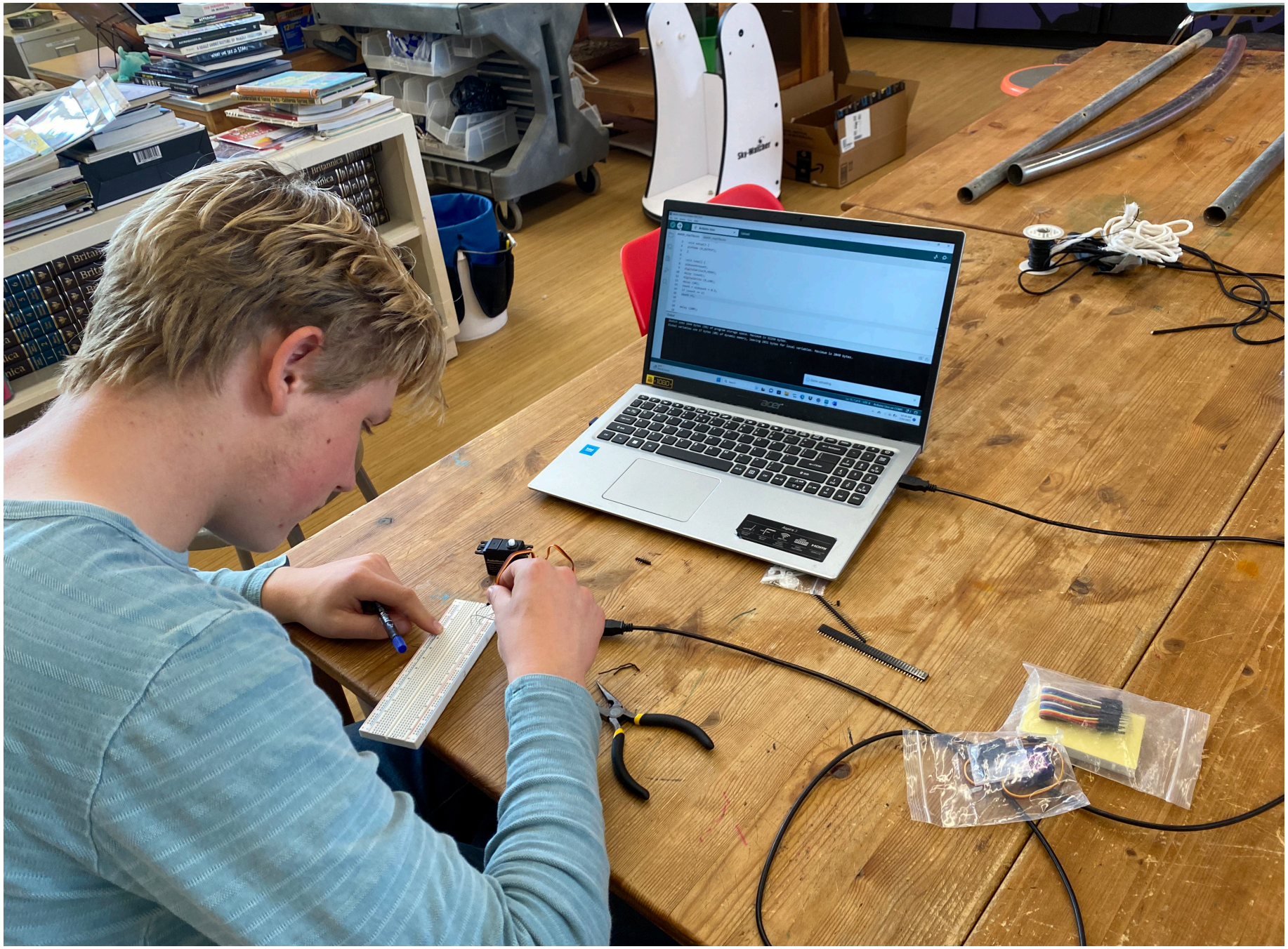
We acknowledge all of the emergent work and inspired leadership across the country. From many possible sites, we chose these thirteen sites to provide an expansive view of emergent ecosystems (see Figure 1). We were honored to learn from these thirteen samples, which enhanced the validity and relevance of the findings and facilitated a deeper understanding of the strengths, challenges, and opportunities within learner-centered ecosystem initiatives.

Figure 1
Multiple sector/entry points of 13 sites

Public District and Public Charter Authorizer	**Norris School District** (MUKWONAGO, WI) **Purdue Polytechnic High School** (INDIANAPOLIS, IN)
District-Led Program or School	**Iowa BIG and City View Community High School** (CEDAR RAPIDS, IA)
Home School Learning Center	**Rock Tree Sky** (OJAI, CA)
Out of School Intermediary	**Big Thought** (DALLAS, TX) **FABx** (NEWPORT, RI) **Remake Learning** (PITTSBURGH, PA)
Regional or National Network	**Big Picture Learning** (NATIONAL) **NACA Inspired Schools Network** (NATIONAL) **Innovative Learning Network** (KENTUCKY) **SparkNC** (NORTH CAROLINA) **Kansas City Area Real World Learning** (KANSAS/MISSOURI) **Sićaŋǧu Co | Rosebud Reservation** (SOUTH DAKOTA)

METHODOLOGY

We met with the leaders and communities from all of these sites, visited many, and conducted research from publicly available information to create short profiles of their work. We utilized a variety of sources, including academic research, media articles, organizational websites, site visits, and interviews.



CHAPTER III

FINDINGS & INSIGHTS: AN INVITATION TO BE INSPIRED

By examining a range of programs across different geographies and demographics, we were able to better understand what makes each program unique and to see the common levers that can be set in motion—in any context—to bring to life a local ecosystem of learning.

Our most significant takeaway is that the transition from the prevailing industrial model of schooling to a holistic learning ecosystem is a complex and multifaceted endeavor, intertwining both educational and broader societal and economic impacts. This means that those pursuing ecosystem development in their own local contexts must operate at varying levels and maintain a broad view that allows them to see and weave together more potential partners, places, and resources than might be immediately apparent within K–12 silos.

This complexity illuminated the challenge and opportunity of this work. Through our engagement with the thirteen sites, we were able to break down this multifaceted approach into four common levers that enable their ecosystemic work to unfold. By understanding these levers and how others have made advances in them, interested communities can embark on their own journey of transformation. The four levers are:

1. **People:** Grounded in a shared vision, the varied people and how they operate together.
2. **Practices:** The aligned sets of methodologies and approaches that develop the networked learning experiences of young people and the ways in which families, educators, and community members can contribute.
3. **Connections:** An intricate web of physical, virtual, and social infrastructures that create the foundation that ensures equity, quality, and trust.
4. **Conditions:** The financial and policy forces that combine to create an enabling environment in which an ecosystem can be built and operate.

When taken together, these four levers create a more comprehensive view of the complex, nuanced undertaking of engaging a community to develop new ways of organizing, supporting, and credentialing learning.

ECOSYSTEM READINESS: CHARTING A PATH FORWARD

As we pursued our research, we recognized that, within each of the four levers, there are key domains that were consistently elevated. We categorized these domains into ten key characteristics that fall under the main levers of the ecosystem. Under the first lever of People, we have Shared Vision, Leadership, and Educators. The Practices include Learning Experiences, Data and Metrics, and Culture. The lever of Connections hold the domains of Collaborative Infrastructure and Community Partnerships. Finally, the lever of Conditions has the domains of Resources and Policy.

Together, the levers and domains comprise the Ecosystem Readiness Framework, which is depicted in Figure 2. The Ecosystem Readiness Framework is intended to help a community chart a path toward learner-centered transformation, just as frameworks for corporate innovation have proven able to enhance a large and ossified corporation's ability to become an engine of innovation.

To provide a more detailed understanding of each domain and its significance to the framework, we have compiled a table in Figure 3 with quick definitions and insights into the ten domains. This table offers valuable information on why each domain matters, making it an essential reference for communities seeking to determine their readiness for ecosystems.

Figure 2
Ecosystem Readiness Framework

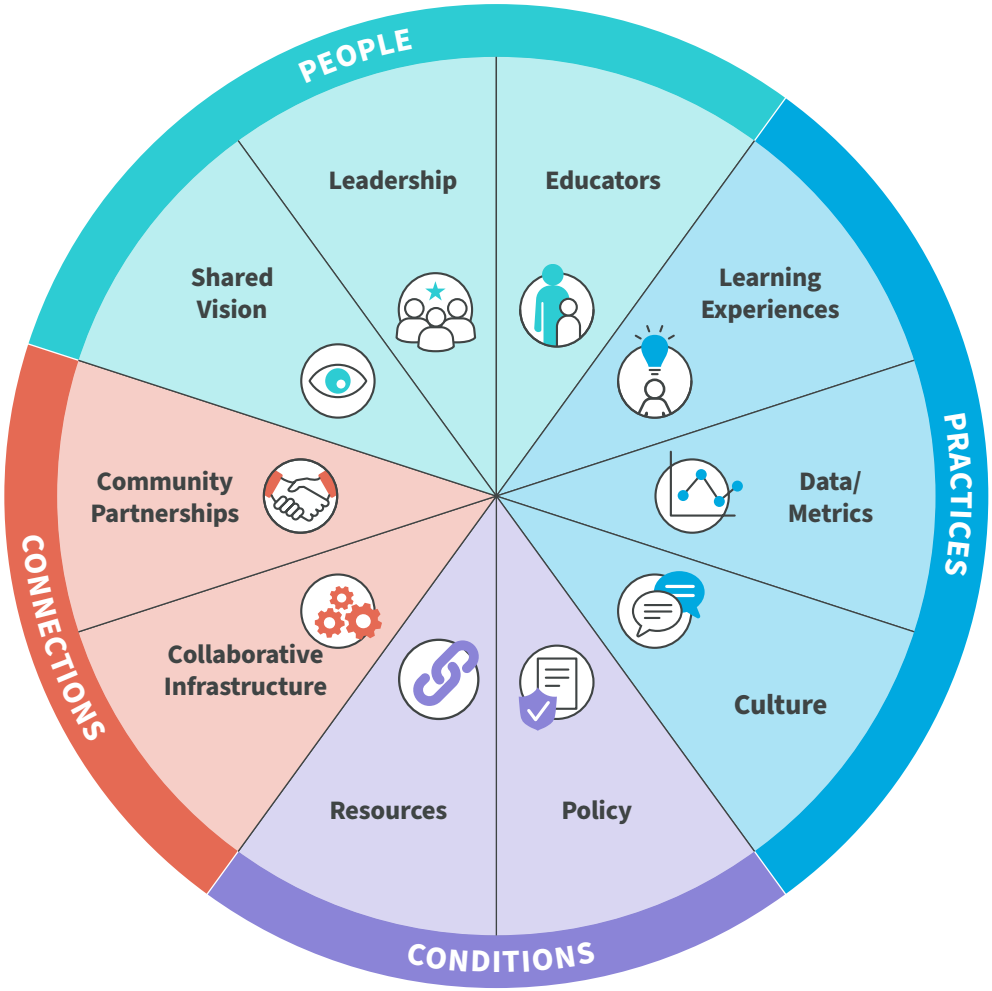


Figure 3

Domains for Ecosystem Readiness

	Domain	Description	Why it matters
PEOPLE	**Shared Vision** 	A willing community is engaged and aligned on a vision of how they see learners, learning, and the purpose of education. They commit to reimagine how learning can be organized, supported, and credentialed to best support learners in their educational journeys.	Co-creation of a shared vision is crucial to growing ecosystems as it allows for the equitable distribution of power and fosters a sense of belonging and a sense of ownership and investment, leading to greater participation, collaboration, and commitment to the ecosystem's success. Competency-based learning has been proven to advance readiness for employment and student well-being. Aligning all players within an ecosystem to a shared set of goals enables the creation of integrated learning journeys and clear accountability toward outcomes.
	Leadership 	Sustained and sustaining distributed leadership structures with strong relationships and interconnectedness form the basis of the ecosystem. Creating a culture of continual improvement, iteration, and invention is welcomed and supported as essential.	High turnover and unstable leadership disrupt efforts at transformation and can cause setbacks that a system may take years/decades to recover from. Without leadership that creates a culture of growth and learning, the default of "how we have always done school" is strong.
	Educators 	Educators—representing expertise from K–12, out-of-school, early childhood, and workforce development—partner to form cross-functional teams to support learners' growth and are themselves supported in communities of practice to advance their craft and professional capacity.	Having incentive models and support systems for educators in and outside of school to receive training in competency-based, learning-science-backed education models is a critical factor to improve the impact of learning. It is essential to break down the arbitrary silo between in- and out-of-school educators, recognizing the need for all these stakeholders to equitably and powerfully serve the holistic development of the whole child. This includes expanding roles to incorporate advisors and coaches who can provide personalized guidance and support to learners.

	Domain	Description	Why it matters
PRACTICES	**Learning Experiences** 	Learners benefit from rigorous, authentic, and project-based experiences in a unique journey enabling them to simultaneously pursue their curiosities and aspirations and build community and belonging. Learning can occur anywhere. Connecting youth with peers, advisors, and mentors makes learning meaningful and relevant.	When students lack access to learning experiences with the proper resources, support, and guidance, the result is disengagement, lack of motivation, and decreased achievement in school and in life. This can lead to a lack of connection to their learning and their community, which can negatively impact their overall development and success.
PRACTICES	**Data/Metrics** 	There are multiple ways to capture learning and communicate student growth in mastery-based transcripts and/or badging systems.	Students have to be able to track and transfer their progress against learning goals in a way that builds agency and is recognized by employers and institutions of higher education.
PRACTICES	**Culture** 	Community institutions and schools have established models and rhythms of communication and collaboration.	An information and communications architecture among the constituent parts of the ecosystem is critical to enable alignment and the consistent, safe delivery of learning experiences. These varied learning providers ensure that children with varied needs, interests, and aspirations have access to what and who they need when they need them.
CONNECTIONS	**Collaborative Infrastructure** 	Learning management systems and community collaboration platforms are critical to enable community-connected learning at scale, as well as systems for scheduling, transportation, and assessment.	Without supporting systems to enable the ecosystem with shared services and access to out-of-school learning as well as connection to mentors, there will continue to be uneven access to opportunity among learners. In addition, using old systems not designed to support this vision will constrain the full expression of the ecosystem.
CONNECTIONS	**Community Partnerships** 	A wide array of community institutions, including museums, libraries, local businesses, and out-of-school learning providers, and virtual options are integrated into the offering of learning experiences.	Schools and districts can't do this alone. Transitioning to a learning ecosystem is not just about improving outcomes for individual students, it is about strengthening the social fabric and advancing the civic renewal of communities by integrating young people as changemakers through an infrastructure that cultivates and nurtures partnerships.

	Domain	Description	Why it matters
CONDITIONS	**Policy** 	Policies enable the development and growth of systems, structures, practice, and governance that centers the child, rather than the system or school. Examples include seat-time flexibility, learner-centered accountability and assessment frameworks, and new pathways for educators.	Policies are in place that enable education design resulting in learning experiences that foster self-discovery, self-expression, and belonging, allowing for every stakeholder to engage with and contribute to the ecosystem as their full selves. Systems are in place to enroll and empower stakeholders to elevate and advocate for equitable policies.
	Resources 	Resources of all types are approached with a broad lens beyond the pre-K–12 silos, including public and private funds; local or municipal spending on education, youth development, preventative healthcare, and afterschool care; philanthropic spending on education, etc.	Funding and resources are allocated in a way that provides stakeholders what they need to thrive within the ecosystem, while correcting for challenges that stem from historic and current inequities. Thus, the community holds an "entrepreneurial" stance, continuously looking for new and innovative ways to provide opportunities for learning and resources to the ecosystem.

Researchers and practitioners in the corporate space have identified key pillars of innovation, which—not surprisingly—are strikingly similar to the ones we see in education, including the need for a focus on the end-user's needs, a mindset of innovation, and the ability to reimagine structures of collaboration.[18] In the following section, "Combining Frameworks for Deepened Insight," we explore how the four levers and ten domains are crucial to understanding organizational effectiveness.

COMBINING FRAMEWORKS FOR DEEPENED INSIGHT

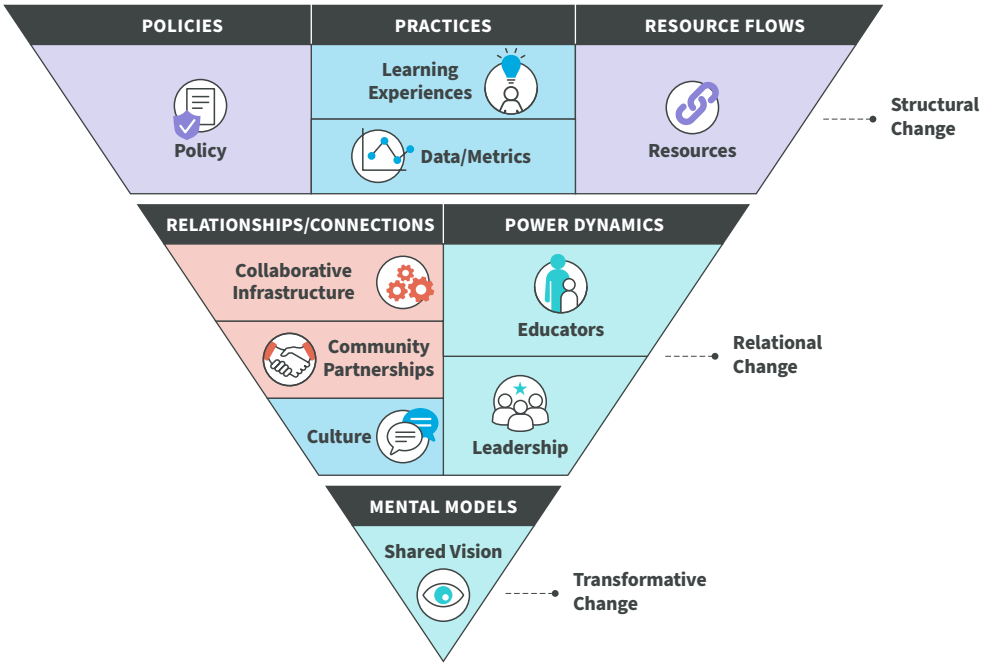
In recent years, there have been significant advances in research on how systems change, with researchers from different fields emphasizing the importance of collaborative, context-specific, data-informed networks to achieve the transformation of systems that do not serve their stakeholders well. Peter Senge, John Kania, and Mark Kramer, in particular, have advocated for adopting a holistic approach to solving complex problems, and they have presented an influential framework to accelerate collaboration by visualizing how systems change is like a river, with multiple interconnected streams of influence that must be navigated in order to achieve a desired outcome.[19]

While our Ecosystems Readiness Framework was developed out of conversations with communities and practitioners, its levers and domains map neatly into Senge and Kania's system change map, which outlines key elements of systems change, such as policy, practices, resource flows, relationships and connections, and power dynamics. When taken together—even if not all shifting at the same time—these elements can collectively affect systems change in education. Below we have mapped the domains of our framework against that of Senge and Kania. Doing so reveals another layer of our framework's utility as a mechanism to help communities orient themselves toward systems transformation. When the framework is viewed in this model, there is new insight into how to prioritize and organize the work of pushing on multiple levers. For example, it illuminates the importance of setting shared vision as the foundation upon which the other levers must be pushed.

Educational transformation is a complex endeavor that requires addressing interconnected elements within the broader system. By marrying the two frameworks, we gain insight into the specificity of ecosystem readiness assessment and how it can be leveraged to enact systems change. The same could be done with other frameworks.

Figure 4

Ecosystems Readiness Framework mapped to "The Water of Systems Change"



TENSIONS AND CHALLENGES

As communities push on the framework levers, they invariably encounter tensions and obstacles that require them to make strategic choices. Any kind of system transformation can result in unintended consequences, so it is a continuous challenge for leaders to keep in mind the potential risks and equity traps that may arise along the way.

Through our analysis, we saw community leaders encountering similar tensions and obstacles. Three key obstacles stood out: 1) lack of enabling infrastructure, 2) historic power dynamics, and 3) misalignment between

policy and practice. Below we share a summary of these challenges while highlighting how leaders are responding to them in unique ways.

1. **Lack of Enabling Infrastructure:** In the absence of reimagined systems and structures, communities often end up piecing together solutions from the systems that are already in place. This leaves them limited in their ability to fully express their vision of what is possible. Instead, there is an opportunity here to develop infrastructure that by design supports an ecosystemic way of organizing learning. For example, such an infrastructure would facilitate the widespread adoption of community-connected learning, leverage supportive technology, and promote research and data collection as a driving force for informed decision-making and improvement within learner-centered ecosystems. Moreover, this infrastructure could be adaptable and adoptable by other communities, thereby making it possible to have ecosystems come to life more quickly across more communities. In particular, across the sites studied, two unique infrastructural challenges emerged regarding resource allocation and accountability systems.

   Resource Allocation: The key challenge in regard to resource allocation that requires careful assessment is the distribution of resources and opportunities so that all children benefit from the creation of an integrated learner-centered ecosystem. Across the sites we studied, we recognized that at present, many of the most dynamic and engaging learning opportunities are created outside of school and thus, not covered by public funds, limiting their accessibility and sustainability. Without intentional efforts to address systemic inequities in access to these kinds of learning opportunities, there is a risk that certain groups or communities may continue to face barriers and marginalization, even as others benefit from an ecosystem's existence.

   Ensuring that all of these vibrant learning opportunities can be included in the publicly funded learning infrastructure will require that budgets reflect a more holistic approach. Yet adjusting funding formulas and ensuring these adjustments are done equitably and responsively to each unique child's needs, interests, and aspirations is a challenge. It will present tricky trade-offs and choices for districts.

   This kind of work is starting in both Kansas City and Dallas, where strong partnerships between districts and out-of-school intermediaries are forging new bonds of partnership and lowering the walls put up between in-school and out-of-school learning. However, it is still dependent on philanthropic support and not yet in sync with the budget planning process of the district as a whole.

   Accountability Systems: Leaders from numerous sites expressed that a primary obstacle they encounter is the predominance of accountability systems that perpetuate the old educational model. These systems rely on a narrow range of metrics to measure school and individual success. The accountability models at both the federal and state levels, which often entail standardized testing and inflexible curriculum mandates, are at odds with a learner-centered vision and, thus, hinder the adoption of learner-centered and ecosystemic approaches.

   In recent years, several states have made strides by developing graduate profiles or learner portraits, aiming to move away from solely test-based outcomes. These endeavors signify an important first step toward embracing more comprehensive approaches.

   Moreover, some states are starting to redesign their accountability models with a view to ecosystemic learning, including Kentucky and Indiana. In these cases, state school boards are placing a reimagined definition of the learner and of learning at the heart of their new assessment models—a process that itself was a co-creation with the community. This is showing signs of alignment toward a shared vision for the future of learning and new expectations for distributed leadership and ongoing participation. Many of these new accountability measures are aspirational, but they are intentionally set as such to create a pull toward a reimagined future of thriving learners in thriving communities.

2 **Historic Power Dynamics:** Another potential equity trap lies in the power dynamics and decision-making processes within the ecosystem. If the development and governance of the ecosystem are not inclusive and participatory, there is a risk of perpetuating existing power imbalances and marginalizing certain voices. Across sites, we saw the importance of the active involvement of diverse stakeholders (including young people, families, educators, and community members) in decision-making processes to create structures that amplify marginalized perspectives and foster collaboration.

At a higher systems level view, we can look to Big Picture Learning's national network of schools for a model of governance that empowers local school-based communities, while uniting them around core principles and offering support and engagement as a learning community. Anchored by ten underlying distinguishers and a shared mission and vision of empowerment, each Big Picture Learning school has autonomy to express and embody these commitments according to its local contexts. One of Big Picture Learning's stated outcomes refers specifically to the need for collaboration in ecosystem design:

> *There is collaboration in designing learning experiences rooted in BPL's 10 Distinguishers, 10 Expectations and 5 Equity Driven Practices (Personalization, Advisory, Real-World Learning, Interest-Driven Project Based Learning and Authentic Assessment).*[20]

This decentralized decision-making structure acknowledges the value of diverse perspectives and local expertise. It empowers educators, families, and community members to actively participate in shaping the educational experiences of young people, ensuring that the needs and aspirations of each unique community are at the forefront. Having said this, many of the Big Picture Learning schools are still constrained by the local context and governance of local authorizers, even as they strive to provide this empowering context.

3 **Policy and Practice Misalignment:** Lastly, many sites we studied noted the occasional disconnect between policy and practice—between what is on paper and what is in people's hearts and minds. Policies that enable learner-centered and ecosystemic approaches are often created in silos, or with only a specific population or element of the ecosystem in mind (e.g., the structure of the school day or accreditation of learning). If these policies and practices are not connected to one another through a common vision and with shared language, they fall short of being able to transform the culture of learning. Stakeholders—particularly teachers and parents—can end up feeling disoriented or disconnected from the purpose of the changes made, causing a slowdown or sometimes even a backlash.[21]

In our analysis of learner-centered and ecosystemic approaches, we saw positive steps taken where leaders begin to create and enable feedback loops in regard to policy conditions. Their practical, on-the-ground experience and the growing demand from families and community can come together to better inform policy leaders on what is most necessary. Seeking feedback shows ecosystem leaders where the limitations lie and prepares them to advocate for improved or new policies that codify the flexibilities needed to enable the design, infrastructure, accountability, relationships, and empowerment of learners. Ecosystem design is an emerging field, and across the sites we see new framing for education narratives; this work grows out of strong relationships between practitioners, families, community leaders, and policy leaders.

Throughout our analysis, while these equity traps and policy obstacles presented challenges and required community leaders to make trade-offs, we saw success where they maintained an ongoing commitment to reflection, dialogue, and collaboration. This ensured that decisions and actions were aligned with their commitments to serving each child, prioritizing equity, and leveraging the community.

For example, FABx is building a coalition of stakeholders and civic leaders to create a shared understanding for deeper alignment of its growing ecosystem and the policy environment needed to support it. This effort presents a strong example of what is possible when community leaders tackle the levers head-on and attend to the conditions in which their broader vision will unfold.

By approaching this work with a clear-eyed realism, we can construct learning ecosystems that upend unjust outcomes and provide all learners with opportunities to grow up in a supportive environment designed for their thriving and belonging.

PARTS OF A WHOLE: PERSPECTIVES ACROSS AN ECOSYSTEM

The opportunity of a learner-centered ecosystem is in many ways the fulfillment of what families, learners, educators, community members, and district administrators most want in their engagement with education. It is about creating a new infrastructure that allows for that fulfillment. Throughout our visits and conversations, we heard new ways of conceiving of their roles, their work, and their relationships.

As the authors of this report, we have each played many roles in the system ourselves. Reflecting on what we heard throughout the interviews and visits we conducted, and, if we stand in those roles and think about what it would be like to play that role in a thriving ecosystem, we can see new worlds open up. In Figure 5, we share ideas for how the roles within an ecosystem may potentially develop and expand.

As communities seek to explore and create their unique ecosystems, the opportunity lies in recognizing and embracing the diverse roles we can play within the ecosystem. By doing so, we empower individuals to actively engage and contribute, collaborate with others, and adapt to change. This drives the transformation toward a thriving and learner-centered ecosystem, where everyone's unique contributions are valued, leading to a more dynamic and impactful learning environment for all. Understanding our roles and their significance creates a sense of purpose, collaboration, and ownership while fostering an inclusive and dynamic environment where each person's contributions are valued and leveraged for the greater good.

Figure 5

The Opportunity of Ecosystems from Multiple Perspectives

If I am a…	Then I can…
Educator	• Develop a sense of belonging and community within the ecosystem, with opportunities for contributing to the ecosystem based on who I am and my gifts, talents, and time. • Receive support for growth and learning with ongoing professional development. • Experience greater autonomy and creativity in designing learning experiences that meet the unique learning journeys, needs, and interests of my students. • Access a wider range of resources and tools to support teaching and learning, including technology, community partnerships, and interdisciplinary approaches. • Access support from people in diversified roles such as advisor, learning specialist, curriculum designer, community liaison, special educators, and more.
Family or Caregiver	• Collaborate and build relationships with my child's learning team as we set and navigate my child's unique learning journey within the ecosystem. • Receive regular updates on my child's progress and achievements in a collaborative, transparent, and relevant way. • Bring my unique gifts and cultural knowledge to contribute to the ecosystem's asset-based approach, strengthening the community as a whole with my expertise and participation.

If I am a…	Then I can…
Child or Young Adult	• Have the opportunity to be in a variety of settings that are aligned with who I am, what I need, and where I want to go in my life, no matter how old I am. • Be supported to chart my own unique learning journey that is tailored to my interests, passions, needs, and aspirations. • Make friends with and access a wide range of peers and adults, finding those who share my interests, and get opportunities to learn, play, and engage with them across varied settings. • Have learning that happens anywhere in my community be acknowledged and counted as relevant to my educational journey. • Build the network of people I can go to for guidance, support, and real-world learning opportunities. • Feel a sense of belonging and connection to my learning and the community; know that I can make a difference and it matters who I am. • Contribute to the life and well-being of the community as a respected participant.
Community Organization Leader	• Find new allies and develop a resilient network that I can work with to advance my organization's work and mission. • Seek out a whole new realm of collaborators including youth and families. • Make a contribution to the growth and development of my community's young people and share my experience and insight with them.

If I am a…	Then I can…
Administrator	• Exercise greater flexibility and autonomy in decision-making and be more creative and innovative in approaching challenges and opportunities, such as use and distribution of resources, scheduling and organizing people, and engaging with families and community. • Establish a culture of shared leadership and co-creation that increases the potential to attract and retain top talent among educators and staff by offering a more dynamic and supportive work environment. • Connect deeply with the community and facilitate shared conversations and development of new infrastructure to cultivate partnerships across different organizations and sectors. • Access more expansive and holistic data-driven insights to better understand and support student learning and growth and the practices leading to thriving ecosystems.
Local Employer or Business Leader	• Access a more robust, local pipeline of diverse talent. • Inform the kinds of competencies and skills young people in my locality are developing to build a stronger local workforce. • Infuse my business with new ideas coming from people of varied backgrounds, ages, and lived experiences. • Increase capacity to address outstanding issues, questions, and challenges faced by my business.

CHAPTER IV

LEARNING ECOSYSTEM PROFILES

The profiles in this section highlight the thirteen sites that we selected to analyze for this report. These thirteen sites exemplify the transformative power of learning ecosystems. They showcase the emerging narrative about the profound impact that arises from empowering young learners to express themselves, from educators building authentic relationships, and from communities united by a shared vision of learning and community well-being.

Through extensive conversations and site visits, we witnessed remarkable instances where young voices confidently took the stage, sharing their personal learning journeys. Educators passionately emphasized the immeasurable value they place on forging deep connections with their young people and families. We also observed communities coming together, collectively envisioning a future that seamlessly integrates learning and community development. We met business leaders who welcomed the opportunity to provide internships and mentorships, and we connected with civic leaders who are seeking partnerships to offer learning experiences and opportunities to youth who want to learn and participate in the community as changemakers.

The following profiles provide glimpses into thirteen sites by showcasing their distinct contexts, highlighting the benchmark attributes of their ecosystems, and shedding light on the ongoing work in their communities. By applying the framework lens, we identify strengths and present a concise analysis that highlights the transformative efforts required to foster the growth of learning ecosystems.

PROFILES FOR LEARNING ECOSYSTEM SITES:

1. Big Picture Learning
2. Big Thought
3. Ewing Marion Kauffman Foundation
   Kansas City Area Real World Learning
4. FABx
5. Iowa BIG & City View Community High School
6. Kentucky Innovative Learning Network
7. NACA Inspired Schools Network
8. Norris School District
9. Purdue Polytechnic High School
10. Remake Learning
11. Rock Tree Sky
12. Siċaŋġu Co
13. SparkNC

PROFILE:

Big Picture Learning

NATIONAL MODEL

> We have a bold strategy for revitalizing schools and for graduating and preparing young people for success in their future learning and work. This 'leaving to learn' strategy is driven by our image of that future. Our goal is not merely to graduate every student but to prepare graduates who are uncommonly ready for success in their workplaces and their communities.[22]
>
> ***Elliot Washor, Co-Founder, Big Picture Learning and Charles Mojkowski***

bigpicture.org

QUICK CONTEXT *Decentralized network of schools and initiatives*

LEARNERS SERVED

- 26,000+ students in the US
- 65%+ Black, Latinx, or Indigenous
- 21% receive special education services

WHAT IS BIG PICTURE LEARNING?

Big Picture Learning was founded in 1995 by Dennis Littky and Elliot Washor as The Met School, a public school in Providence, Rhode Island. Big Picture Learning is an international nonprofit organization that aims to transform education by providing personalized and student-centered learning experiences. The organization partners with over 111 schools in 28 states, and hundreds more around the world in countries like Australia, the Netherlands, Belize, Italy, India, and Canada.

ECOSYSTEM NARRATIVE

The schools under Big Picture Learning's umbrella share a commitment to personalized, student-centered learning. These schools look very different in different contexts but hold a shared commitment to the "one student at a time" mantra of Big Picture Learning and to creating learning environments that are tailored to the unique interests and needs of each student. Through a combination of internships, project-based learning, and personalized coaching, students are able to pursue their passions, develop valuable skills, and build a strong foundation for future success. Big Picture Learning also focuses on advocacy and research to promote policies that support student-centered learning. One of Big Picture

Learning's innovative features is its use of personalized, performance-based assessments and credentials. Big Picture Learning utilizes various assessment tools such as student portfolios, exhibitions of learning, and performance-based assessments aligned with specific learning objectives and competencies to provide accurate and meaningful representations of what learners know and can do.

BENCHMARK ECOSYSTEM ATTRIBUTES

1. **Leaving to learn:** Big Picture Learning connects students with real-world learning experiences that are aligned with their interests and goals. They call this "leaving to learn" and have developed systems of finding, connecting, and supporting partnerships with the community across many field sites.

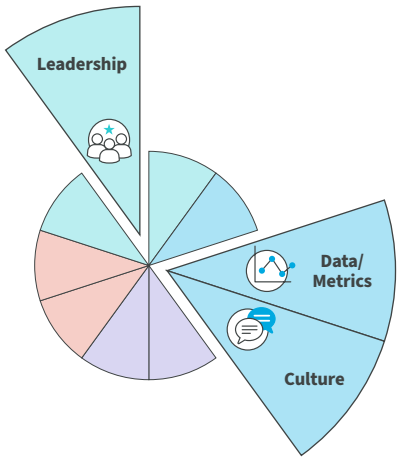
2. **Authentic assessment:** The International Big Picture Learning Credential creates a comprehensive portrait of each learner's abilities and achievements. This personalized approach recognizes the distinctive learning, achievements, competencies, and potential of each student, and provides meaningful information to the wider community. The Learner Profile resulting from the International Big Picture Learning Credential is a showcase of a graduate's attainments, backed up by evidence of their work, and is personalized to reflect the richness of students' real-world experiences, personal qualities, and academic results.

3. **Advisory model:** Each student is embedded in a small group of learners for multiple years and supported by an advisor who serves as a mentor, coach, and facilitator of each unique learning journey. In addition, advisory serves as a home base—a place to know and connect deeply with families and develop strong relationships and engagement in the learning process.

BRIEF ANALYSIS OF BIG PICTURE LEARNING

Ecosystem Readiness Framework Strengths:

- ☑ **Leadership**
- ☑ **Data and Metrics**
- ☑ **Culture**



Over the span of 25 years, **Big Picture Learning** has initiated numerous impactful projects and conducted substantial research, highlighting the potential of learner-centered education. This approach connects students with mentors, real-world experiences, and supports educators as advisors. Big Picture Learning's tools and resources are shaped by collaborating with diverse communities sharing their core principles. Their holistic approach, emphasizing connections, adaptability, and personalized growth, reshapes education's foundation.

Big Picture Learning's model offers the potential for a thriving ecosystem due to its practical implementation and foundational principles. By bridging students with mentors and real-world experiences, the approach integrates theory with practical application. Collaboration with diverse communities ensures adaptability and relevance, essential for a thriving education system. The focus on personalized growth and learning adapts to individual needs, further enhancing the potential for a robust and responsive ecosystem.

Most recently, Big Picture Living is a campaign that employs lifestyle medicine as a foundational framework to educate and empower young individuals, concentrating on enhancing six key lifestyle components: elevating physical activities, optimizing sleep, adopting healthy dietary habits, steering clear of hazardous substances, mastering stress management, and nurturing mental well-being.

Big Picture Learning's holistic multi-faceted approach, reshapes the landscape of education by creating conditions of empowerment by fostering connections, adaptability, and personalized growth. Through their unwavering commitment to nurturing passions and championing individuality, Big Picture Learning serves as an inspiring beacon, illuminating a path towards weaving together a strong ecosystem aimed at thriving.

PROFILE:

Big Thought

DALLAS, TEXAS

> “I am the beneficiary of other people’s grace and other people giving me a chance, which is why a lot of our kids resonate with me personally. A lot of them are similar to where I was at one point: They’ve been written off and they think they don’t have anything left to give, and I know for a fact they do.”[23]
>
> ***Byron Sanders, Executive Director, Big Thought***

bigthought.org

QUICK CONTEXT *Urban, out-of-school intermediary*

LEARNERS SERVED

Organizationally, Big Thought serves on average 109,000+ youth annually through a combination of direct programming and learning systems. As a learning systems intermediary, Big Thought supports both in-school (Learning Partners) and out-of-school (DCoL: Dallas City of Learning) learning ecosystems.

- **Learning Partners** (in-school) serves on average 55,000+ youth annually
- **DCoL** (out-of-school) serves on average 54,000+ youth annually

DEMOGRAPHICS

- 6% White
- 70% Hispanic/Latinx
- 20% Black
- 2% Asian
- 1% Native Hawaiian/Pacific Islander
- 1% American Indian/Alaskan Native

WHAT IS BIG THOUGHT?

Big Thought is a nonprofit organization based in Dallas, Texas, that aims to close the opportunity gap for young people by providing equitable access to creative learning experiences that help build future-proof skills and competencies. The organization partners with schools, institutes of higher education, community organizations, local government agencies, and cultural institutions to provide programs that encourage creativity, foster critical thinking, and develop leadership skills in children and youth. Some of the programs offered by Big Thought include afterschool programs, summer camps, and professional development opportunities for educators. The organization also focuses on advocating for policies that support creative learning and empowering youth voice in decision-making.

ECOSYSTEM NARRATIVE

Big Thought was initially established in 1987 as Young Audiences of Dallas, an affiliate of the national Young Audiences network, bringing arts experiences into the classroom. Over time, the organization has expanded and evolved to offer both direct programming and also serve as an intermediary for learning systems, rebranding as Big Thought in 2004 to represent the organization's broadening areas of work. Altogether, Big Thought's services reflect a network of community organizations that offer various out-of-school and integrated in-school learning experiences. Big Thought has collaborated with Dallas Independent School District (ISD) and other districts in the region, serving tens of thousands of students annually. In 2019, Big Thought Institute was launched to share the organization's learning and expertise regionally and nationally.

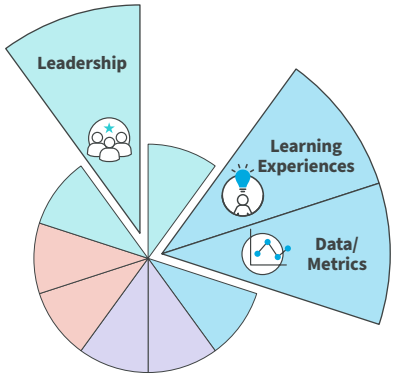
BENCHMARK ECOSYSTEM ATTRIBUTES

- **Shared vision and learner profile:** "Creator Archetype" used across ecosystem.
- **Collaborative leadership:** Decades of trust and a culture of collaboration across the out-of-school ecosystem with a wide range of stakeholders.
- **Data interoperability:** Collaboration with Dallas Afterschool and Southern Methodist University's Center on Research & Evaluation (CORE) has created a system in which program and learner data is compiled and shared back with ecosystem partners.

BRIEF ANALYSIS OF BIG THOUGHT

Ecosystem Readiness Framework Strengths:

- ☑ **Leadership**
- ☑ **Learning Experiences**
- ☑ **Data and Metrics**



Big Thought provides valuable insights into creating a comprehensive and interconnected ecosystem of learning that supports learner-centered education, facilitates collaboration, and enables effective data sharing and use. Big Thought's strategic approach to connecting partners and resources across Dallas creates a powerful learning system, a landscape of opportunity that identifies partners to become field sites, and learning hubs where learners can pursue learning based on their needs and interests.

Big Thought uses the "Profile of a Creator Archetype," ensuring that everyone is aligned on the goal of empowering students to become creators in their own right. This creator archetype in the out-of-school time (OST) system provides valuable insights into the importance of credentialing learning beyond the walls of any building. The strategy of credentialing learning pathways and using credentials as currency provides clarity and name recognition for learners. The creator archetype also allows learners to get mapped into a specific learning pathway that is aligned with 21st-century skills. By submitting artifacts to earn badges, learners can showcase their skills and accomplishments.

This process of earning badges is not just about the learner; it also involves the work of building a new skill set for the partner, such as how to support the learner, help them badge, and help them talk about it. The Creator Archetype also emphasizes the development of skills beyond just academic proficiency, including social-emotional learning (SEL), digital fluency, design thinking, and civics and service. Through this approach, learners are able to gain recognition and validation for their skills and experiences outside of conventional academic settings, which can be particularly valuable for those who may not excel in classroom settings.

Sustained and collaborative leadership is another critical component of Big Thought's success. Over decades, they have built a culture of collaboration and trust across a diverse range of schools and out-of-school partners. This ensures that all partners are working together effectively to support student learning and success. From that platform of relationships and trust, they continue to iterate on their model, and they are partnering with Dallas ISD and other institutional partners in new ways to weave together a stronger ecosystem of learning.

One of the ways that they are weaving together the learning outside of school into school is through a unique partnership with Southern Methodist University and Dallas Afterschool that enables data pooling, giving all partners access to valuable insights about student learning and progress. These insights help partners better tailor their programs and interventions to meet the needs of individual learners and opens the way for transformational practices to be introduced within the district.

PROFILE:

Ewing Marion Kauffman Foundation Kansas City Area Real World Learning

KANSAS CITY REGION

> It makes me feel like I have influence over what others are learning. I need to make sure I am leading them in the right direction. I thought this was going to be something small—I never realized that what I did could have such an impact. This is a big deal.
>
> ***CJ, Student***

realworldlearning.org

QUICK CONTEXT *Foundation-created regional initiative*

LEARNERS SERVED

→ Multiple sites and partnerships designed to impact 85,000+ high school students

WHAT IS KANSAS CITY AREA REAL WORLD LEARNING?

Kansas City Area Real World Learning was incubated by the Ewing Marion Kauffman Foundation (EMKF), a community philanthropy based in Kansas City, Missouri. The initiative seeks to create a model of experiential learning that allows students to develop the skills and credentials they need for success in life after high school. Through the initiative, school districts provide hands-on, real-world learning experiences that help students develop core competencies such as critical thinking, problem-solving, and communication. The initiative partners with schools, businesses, and community organizations to create a more cohesive and effective education-to-workforce pipeline in the Kansas City region.

ECOSYSTEM NARRATIVE

After a year of planning, EMKF sponsored and published a landscape survey of career and technical education in 2017. Two years later, community leaders and educators across the Kansas City region, from Missouri and Kansas, came together to create a set of regional agreements that prioritize valuable learning experiences.

Supported by more than 800 business and civic partners to provide internships and project connections, districts created teams made up of all stakeholders to determine baseline data, goals, obstacles, and

innovative solutions. Kansas City Area Real World Learning has partnered with dozens of schools, businesses, and community organizations in the region to provide students with meaningful real-world learning experiences, such as internships, apprenticeships, and other work-based learning opportunities.

BENCHMARK ECOSYSTEM ATTRIBUTES

1. **Shared vision:** Activated by community agreements about learning priorities and invitations from one education leader to another, Kansas City Area Real World Learning grew into a regional initiative that not only crossed state lines and traditional education/business boundaries, but also had a wide urban, rural, and suburban reach.

2. **Portrait of a Graduate:** Each district develops its own Portrait of a Graduate. Each of the participating school districts approaches these experiences slightly differently, but all work within the parameters of Kansas City Area Real World Learning expectations.

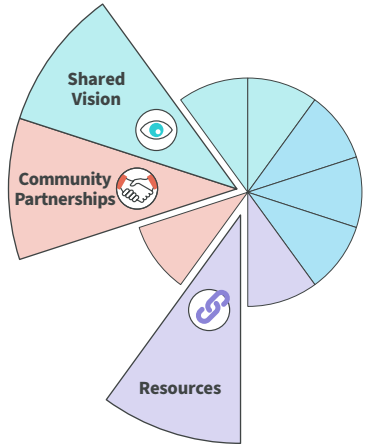
3. **Framework for authentic learning experiences:** Kansas City Area Real World Learning has developed a robust framework for giving students learning experiences that go beyond the classroom, such as client-connected projects that provide students with resume-worthy "market value assets." These assets provide them with the skills and experiences to ensure success beyond graduation.

4. **Competency framework:** KC Rising with Mid-America Regional Council launched a set of Common Sector Competencies for the Kansas City region in 2016. EMKF used these as a template for designing its Real World Learning Initiative and the market value assets.

BRIEF ANALYSIS OF KANSAS CITY AREA REAL WORLD LEARNING

Ecosystem Readiness Framework Strengths:

- ☑ **Shared Vision**
- ☑ **Community Partnerships**
- ☑ **Resources**



With a bold philanthropic investment in 2019, the **Ewing Marion Kauffman Foundation** launched **Kansas City Area Real World Learning**, which has incentivized and nurtured school districts to design learning experiences that result in students gaining "market value assets" that demonstrate their competencies with skills that employers value. Since then, three cohorts of districts in the Kansas City metro area—now totaling more than 35—have joined the effort to build a learning ecosystem that supports integrating student voice, industry-recognized credentials, internships, and "Client-Connected Projects" into students' regular high school experiences. EMKF's role includes developing shared tools and platforms that allow for collaborative data collection, evaluation, and reporting. This is especially important given the number of participating school districts and the fact that the metro region encompasses part of both Kansas and Missouri.

A unique feature of this ecosystem is its incubation from a cross-sector partnership and its early focus on innovation in the use of learner profiles, technology and credentialing. The started from a cross-sector

alliance committed to growing a qualified workforce to strengthen the local economy, and was followed by a process of aligning on a regional framework of common sector competencies. These competencies have been used by local school districts to create their own "Portrait of a Graduate."

The role of area employers in driving this work is especially important to its sustained success, as is the intentional effort to create multiple pathways for students to achieve Market Value Assets. A distinguishing characteristic of this initiative is that it includes civic competencies in career-readiness. In partnership with the History Co:Lab, EMKF, and other regional funders—including the Hall Family Foundation and the William T. Kemper Foundation—have nurtured the growth of a civic learning ecosystem. This emerging ecosystem includes dozens of museums, libraries, and archives, that together offer students the opportunity to conduct Client-Connected Projects.

PROFILE:

FABx

NEWPORT/PROVIDENCE, RHODE ISLAND

> If we emphasize the raw aspect of a young person's life, the kid is going to be a lot happier, and those traditional metrics will rise…Kids are farming, biking, sailing, surfing, golfing, making stuff. We make sure all the seventh graders experience this and understand all the opportunities that exist [that they can use] to connect with their positive future vision, which connects with their individual learning plan…That's one way to reach all the kids, and then [we] figure out how we can get more time with the kids during the day who need more attention, and [the school district is] open to bringing them out into the ecosystem.

Steve Heath, FABx Executive Director & Co-founder

gofabx.org

QUICK CONTEXT *Urban, out-of-school intermediary*

LEARNERS SERVED

- 740+ students
- 32% White
- 28% Hispanic/Latinx
- 33% Black
- 2% Asian
- 77% economically disadvantaged

WHAT IS FABX?

FABx is the newly established umbrella organization that started as FabNewport in 2013 and added PVD Young Makers in 2018. FABx's organizational strategy is to run model programs, expand community collaborations, and influence decision-makers. Its vision is to ensure all youth have access to resources, opportunities, and relationships so they can thrive today and in the future. As youth develop the competencies, commitment, and confidence to positively impact their communities, they will realize their positive future visions.

FABx is a community-based learning initiative that offers year-round opportunities for learners to explore the relationships, resources, and opportunities available across Newport County. During the summer, learners can participate in a six-week program with over forty partners, choosing focus areas in a range of disciplines, such as farming, restoration, entrepreneurship, art, STEM, self-care, sports, sailing, surfing, music, biking, golf, hiking, and storytelling. Throughout the school year, FABx runs independent programming, as well as programming in partnership with community partners, including the Young Philosophers teen leadership

development program, FabAdventures (hiking, biking, and surfing), and Heart Club, among others. The initiative also offers a year-round teen intern program, providing paid internships that encourage students to pursue their passions and explore career pathways. Additionally, FABx offers programming in golf, STEAM, and 3D modeling, among other areas, in partnership with schools, libraries, and community organizations throughout Providence and Newport County.

ECOSYSTEM NARRATIVE

FABx was founded in 2013 by a group of educators and community leaders in Newport, Rhode Island. Since then, the organization has grown to include partnerships with schools, community organizations, and businesses throughout Rhode Island. FABx has collaborated with local schools to integrate maker-centered learning into the curriculum and has helped establish maker spaces in schools and libraries in the region.

FABx also hosts community events that showcase STEAM projects and initiatives, such as the annual STEAMfest, a two-day festival that celebrates STEAM learning and innovation in Rhode Island.

BENCHMARK ECOSYSTEM ATTRIBUTES

1. **Learner agency:** The Framework for Positive Future Vision is a tool developed by the FABx initiative to help students create a positive vision for their future. It is designed to be used by individual students, but it can also be adapted for use by groups or classes.

2. **Maker-centered learning:** FABx's programs are designed to encourage hands-on, experiential learning that promotes creativity, problem-solving, and critical thinking skills.

3. **Community partnerships:** FABx collaborates with a range of partners, including schools, libraries, and businesses, to provide learning opportunities that meet the needs of different learners and communities.

4. **Inclusive programming:** FABxs programs are designed to be accessible and inclusive to learners of all backgrounds and abilities.

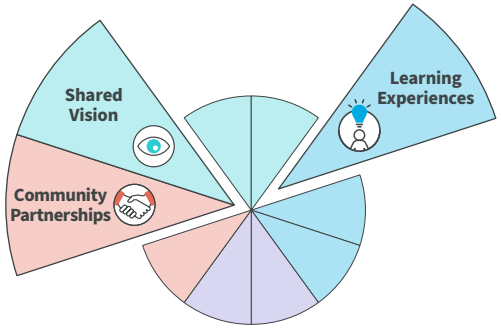
5. **Community organizing and engagement:** FABx intentionally works to build leadership and support families and youth through collaboration, training, and community-led initiatives designed to empower and engage participants while building beloved community.

6. **Positive future vision:** All learners have a positive future vision grounded in their emerging competencies and their identity, and they have the confidence to act on their goals.

BRIEF ANALYSIS OF FABX

Ecosystem Readiness Framework Strengths:

- ☑ **Shared Vision**
- ☑ **Learning Experiences**
- ☑ **Community Partnerships**



FABx believes that local organizations have an important role to play in developing a culture and climate that fosters relevant and engaging learning experiences for students. This involves developing rigorous programming with the leaders of the local economy. FABx sees this as an area for growth within the community and recognizes the need to support local organizations in creating more meaningful opportunities for learners. By doing so, the community can better leverage the unique economy of the area and provide learners with the skills and competencies they need to succeed in life. Through partnerships with local schools and community organizations, FABx provides access to tools and resources that support hands-on learning experiences for learners. This integration of community organizations into the ecosystem creates a more robust and diverse set of learning opportunities for learners.

The programming is both directly and indirectly connected to the Blue Economy of Rhode Island. The Blue Economy refers to the sustainable use of ocean resources and economic activities that promote the conservation of marine ecosystems while fostering social and economic well-being. The organization offers activities such as golf, hiking, surfing, sailing, and farming, which are linked to the local environment and local economy.

By actively engaging with leaders in the local economy, FABx ensures that the learning experiences it provides are not detached from real-world relevance but are intricately woven into the fabric of the community's needs and aspirations. This approach acknowledges that education should be a living, evolving entity, constantly adapting to the evolving demands of the region. In essence, FABx's model illuminates the transformative power of ecosystems when they are rooted in the unique assets and needs of a community. It serves as a testament to the idea that education is not an isolated endeavor but an integral part of a thriving, interconnected system. Such ecosystems provide learners with not just knowledge but also a deep sense of belonging, purpose, and the practical skills required to succeed in both their personal and professional lives, thereby aligning closely with the core principles of learner-centered ecosystems.

PROFILE:

Iowa BIG & City View Community High School

CEDAR RAPIDS, IOWA

> “Iowa BIG gave me the opportunity to apply my knowledge in real-life interactions and settings rather than taking tests on what I think I would do or how I think I would react. I was able to work with people from all different walks of life and really experience what it’s like to be a young person in our community. Our community is alive during the day but being stuck inside a classroom for years didn’t allow me to get out and see how we are flourishing. Iowa BIG gave me the opportunity not only to see it, but be a part of it and make an impact.”
>
> ***Iowa BIG Graduate***

iowabig.org | **cityview.crschools.us**

QUICK CONTEXT *Urban and rural, district program and magnet school*

LEARNERS SERVED AT IOWA BIG

- 105 students
- 63.8% White
- 15.2% Multi race
- 13.3% Black
- 5.7% Hispanic/Latinx
- 1.9% Native Hawaiian or other
- 19% students with disabilities
- 44% economically disadvantaged

LEARNERS SERVED AT CITY VIEW

- 97 students
- 71% White
- 12% Multi race
- 10% Black
- 6% Hispanic/Latinx
- 3% Asian
- 24% students with disabilities
- 44% economically disadvantaged

WHAT ARE IOWA BIG & CITY VIEW COMMUNITY HIGH SCHOOL?

Iowa BIG is an innovative high school program in Cedar Rapids, Iowa, that provides students with project-based learning experiences that are driven by their interests and passions and validates their learning in core academic and business standards. BIG partners with local businesses, nonprofits, and community organizations to provide real-world learning opportunities that allow students to develop skills in collaboration, problem-solving, communication, and critical thinking. Iowa BIG aims to prepare students for success in college and career by providing them with authentic learning experiences that build on their strengths and interests.

City View Community High School, opened fall of 2023, offers a distinctive approach to learning that sets it apart from traditional schools. With a focus on hands-on community projects and personalized learning experiences, City View aims to cater to the unique interests and needs of its students. By integrating interdisciplinary studies, a single course at City View can encompass multiple standards across various disciplines, granting students the freedom to explore their passions while developing essential workplace and life skills. Located in the heart of the city and co-located with its Chamber of Commerce, City View Community High School provides students with unparalleled access to downtown's abundant resources, including an exceptional library, diverse museums, recreational areas, convenient city transportation, and a multitude of outstanding local businesses. This strategic location enables students to engage with their surroundings, fostering a deep connection to the community and preparing them for active participation in the city's cultural and economic fabric.

BENCHMARK ECOSYSTEM ATTRIBUTES

1. **Entrepreneurship and design:** Iowa BIG and City View are committed to learner-centered learning that is driven by student interests and passions. Students have the freedom to design their own projects and to work on projects that are meaningful to them. Students are encouraged to identify problems in their community and to develop creative solutions through the design thinking process.

2. **Relationships:** Students are paired with mentors who work with them throughout their projects and their high school career, providing guidance and support. This allows students to develop deeper connections with adults in their community and gain real-world experience working on projects that have tangible impact.

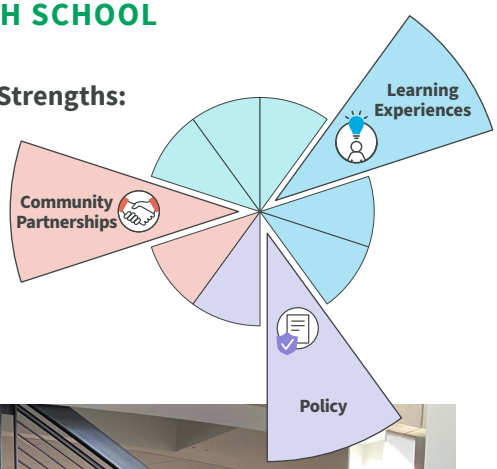
3. **Community partnerships:** Iowa BIG has a strong network of partnerships with local businesses, nonprofits, and community organizations that provide students with real-world learning experiences.

4. **Community-based curriculum:** The community-based curriculum anchored by authentic projects with community allows students to develop skills in collaboration, problem-solving, communication, and critical thinking. This is real work identified by community partners with outcomes that impact the community and/or the organization.

BRIEF ANALYSIS OF IOWA BIG AND CITY VIEW COMMUNITY HIGH SCHOOL

Ecosystem Readiness Framework Strengths:

- ☑ **Policy**
- ☑ **Community Partnerships**
- ☑ **Learning Experiences**



Iowa BIG and the new **City View Community High School** are unique educational programs that deeply engage the business community in Iowa's Creative Corridor (Iowa City and Cedar Rapids metro area). The Iowa BIG program involves two school districts and is a half-day option for 10–12th graders. City View Community High School operates as a magnet school in the Cedar Rapids Community School District. Both operate as work-and-community-based learning environments that leverage the wealth of the community and available technologies to enhance learning opportunities for students.

One of the key features of Iowa BIG and City View are its strong partnerships with the business, nonprofit, and government community. Companies and organizations approach Iowa BIG and City View with problems that they need solved, and the learners at the school collaborate to develop solutions. This approach provides students with the opportunity to work on real-world problems and develop skills that are highly valued in the workforce, such as critical thinking, collaboration, and problem-solving. The programs were made possible by several policy changes in Iowa that created an avenue for competency-based learning systems, and freed them from restrictive seat time requirements. The Iowa Core Curriculum and the Competency-Based Education Task Force provided a framework for essential skills and knowledge that students should learn, and encouraged schools to move away from a traditional time-based approach to education and move toward a focus on mastery of competencies.

Moreover, the state has been supportive of innovative educational programs like Iowa BIG through initiatives such as the Iowa Governor's STEM Advisory Council and the Future Ready Iowa initiative. By providing a policy environment that encourages innovation and experimentation, Iowa has created opportunities for programs like Iowa BIG to flourish and develop into successful models for educational transformation.

PROFILE:

Kentucky Innovative Learning Network

STATEWIDE IN KENTUCKY

“

Kentuckians told us what they wanted for the future of education: Vibrant student experiences, innovation—especially in assessment, and collaboration with communities…. [The latter] is the most important thing on this list…. What makes what's happening now different—different from anything that is happening on a state level anywhere else?... It's not just the old-fashioned way of 'Oh, we're going to do something in our district.'... We have basically required that this work be done in a co-creative way with the community. ”[24]

David Cook, Director of Innovative Learning, Kentucky Department of Education

education.ky.gov/school/innov/Pages/Innovation-Lab-Network.aspx

QUICK CONTEXT *Kentucky State Department and local school districts*

LEARNERS SERVED

Jefferson County (urban)

- 166 schools, P–12
- 93,658 students
- 66.6% economically disadvantaged
- 38.4% White
- 37% African American

Shelby County (suburban)

- 13 schools, P–12
- 6,930 students
- 50.5% economically disadvantaged
- 62% White
- 24.3% Hispanic/Latinx

Johnson County (rural, Appalachian)

- 8 schools, P–12
- 3,237 students
- 63% economically disadvantaged
- 96.6% White
- 1.4% two or more races

WHAT IS THE KENTUCKY INNOVATIVE LEARNING NETWORK?

The Kentucky Innovative Learning Network (KY ILN) is a collaboration between local school districts and the Kentucky Department of Education (KDE). Its aim is to create a system of equitable, learner-centered, collaborative, and authentic learning opportunities by sharing innovative educational strategies. The initiative shifts the focus of the conversation about learning, assessment, and accountability from state and federal systems to the local level.

Local coalitions co-led by the superintendent of the local school district and a community leader design an equitable, learner-centered education system, focusing on the profile of the local graduate. The coalition is supported by the KDE, the Center for Innovation in Education, and the University of Kentucky's Next Generation Leadership Network. Leading education partners are also available to provide design, consulting, and policy services to help school districts make transformational changes. These partners are selected through a short application process and provide a range of services, including assessment, accountability, instructional design, and professional learning. KY ILN serves as a clearinghouse for providers, with funds flowing to partners as needs arise.

KY ILN focuses on implementing new strategies and technologies to enhance student learning outcomes. The organization provides ongoing technical assistance support and coordination from the KDE and its partners. It also provides opportunities for intentional collaboration with fellow KY ILN districts to support initiatives and innovative practices. Districts that participate in the network are expected to provide ongoing feedback to KDE staff to improve the KY ILN experience. The initiative aims to shift the power and decision-making to the local level by involving local communities in designing their own equitable education systems.

ECOSYSTEM NARRATIVE

The Commonwealth of Kentucky's "United We Learn" initiative represents a groundbreaking transformation of the State Department of Education's role and influence. This innovative approach is driven by collaboration with local communities, implementing inventive practices and establishing supportive frameworks for continuous co-creation and development across districts. KY ILN provides ongoing opportunities for networking, learning, and professional development for education leaders in Kentucky. This is a vision for the future of public education in the state that was developed under the leadership of Commissioner Jason Glass. It centers around three big ideas:

- creating a more vibrant experience for every student,
- encouraging innovation in schools (especially when it comes to assessment), and
- creating a bold new future for Kentucky's schools through collaboration with communities.

The vision was created through a highly participatory 18-month effort that engaged every community in a series of conversations to identify a shared vision for education in the state. The initiative aims to transform Kentucky's education system into one that is more equitable, learner-centered, and community-driven. The process involves reciprocal community-driven learning partnerships that inform learner-centered system transformation, including accountability and assessment redesign. The goal is to create a system that can support the unique needs and contexts of communities and the learners and families within them.

BENCHMARK ECOSYSTEM ATTRIBUTES

1. **Local laboratories of learning:** Each participating district created inclusive coalitions designing solutions to local assessment & accountability challenges.

2. **Project-based learning:** KY ILN facilitated a trailblazer cohort—the first to scale a statewide gold-standard project-based learning effort through a partnership with PBLWorks.

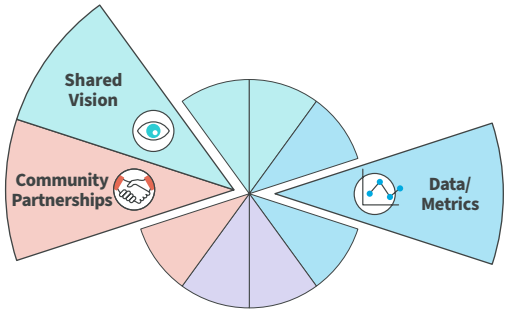
3. **Student micro-credentials:** KY ILN conducted a pilot of math badging framework in Algebra I to reimagine credentialing of learning with the Kentucky Center for Mathematics and XQ Institute.

4. **Deeper Learning Grant:** Statewide grant designed to support Kentucky's regional educational cooperatives and participating districts to build capacity, hire staff, and participate in a community of practice.

BRIEF ANALYSIS OF KENTUCKY INNOVATIVE LEARNING NETWORK

Ecosystem Readiness Framework Strengths:

- ☑ **Shared Vision**
- ☑ **Data and Metrics**
- ☑ **Community Partnerships**



What truly sets Kentucky apart is the core concept of reciprocal accountability, developed by school improvement expert Richard Elmore. Reciprocal accountability is a next-generation approach to accountability systems that emphasizes shared responsibility and mutual obligations. The aim is to diminish assumptions made by the state about district needs and to diminish assumptions schools make about community needs. To accomplish this, they bring together diverse stakeholders in collaborative coalitions, fostering a co-creative environment. Kentucky acknowledges the need for new approaches to operations, thinking, and collective engagement. They have also built supportive structures to facilitate ongoing co-creation, learning, and growth across districts.

Through participation in the KY ILN, education leaders come together to learn about transformational strategies and practices that are fundamentally different from the current assumptions and apply them to their own contexts. Kentucky's focus on individualized learning and innovative assessment methods can be leveraged by other ecosystems looking to personalize learning and reimagine the credentialing of learning in their own schools.

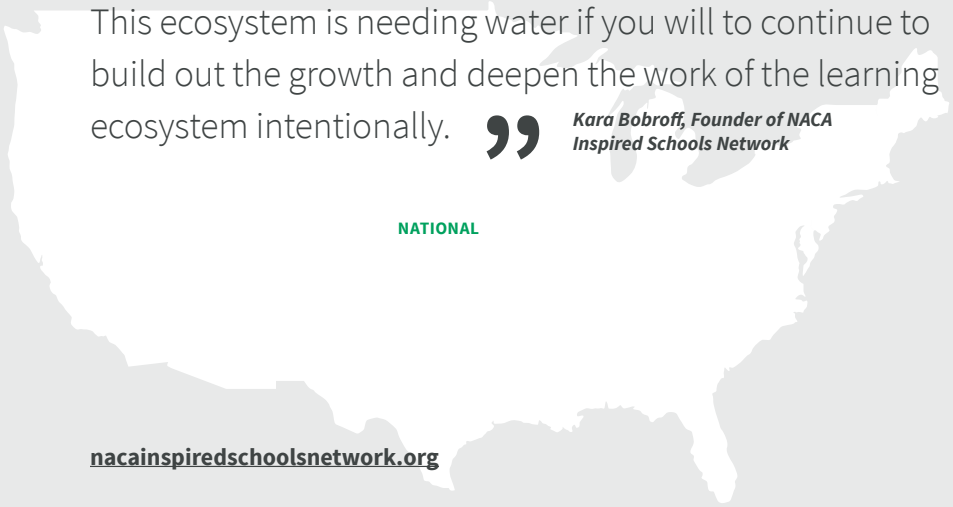
By challenging traditional roles and embracing new practices, Kentucky's leaders have paved the way for a dynamic and responsive education system that empowers students and communities.

PROFILE:

NACA Inspired Schools Network

NATIONAL NETWORK

> Currently, there are several Indigenous communities who are working to renew and build stronger ecosystems that are inclusive of food, learning, language revitalization, culture, and knowledge. Early in the growth of NISN, we brought together the community to envision what a school could be and how a community would come together to serve Native American youth in Albuquerque. That grew into a large community-based ecosystem. This ecosystem is needing water if you will to continue to build out the growth and deepen the work of the learning ecosystem intentionally.
>
> ***Kara Bobroff, Founder of NACA Inspired Schools Network***



nacainspiredschoolsnetwork.org

QUICK CONTEXT *National, Indigenous*

LEARNERS SERVED

- 1,841 students
- ≤5% White
- 19% Hispanic/Latinx
- ≤5% Black
- ≤5% Asian
- ≤5% Multi race
- 80% American Indian
- 15% students with disabilities
- 53% economically disadvantaged

WHAT IS THE NACA INSPIRED SCHOOLS NETWORK?

The NACA Inspired Schools Network (NISN) is a network of charter schools that aim to provide an education that promotes academic excellence, cultural values, and civic responsibility. The network is inspired by the Native American Community Academy (NACA) in Albuquerque, New Mexico, which has a unique approach to education that emphasizes community, culture, and student voice. The network serves students from diverse backgrounds, with a focus on Native American, Alaskan Native, and Native Hawaiian students, but welcomes students of all backgrounds.

ECOSYSTEM NARRATIVE

NISN was founded in 2006 by educators and community leaders in Albuquerque as a response to the growing achievement gap for Native American students. Today, NISN operates three schools in New Mexico and serves over 1,500 students from pre-K through 12th grade. The schools focus on serving Native American, Hispanic, and low-income students.

BENCHMARK ECOSYSTEM ATTRIBUTES

1. **Youth voice and empowerment:** The network places a strong emphasis on revitalizing their culture and reclaiming their sovereignty, engaging student voice, and building student agency in the learning process.

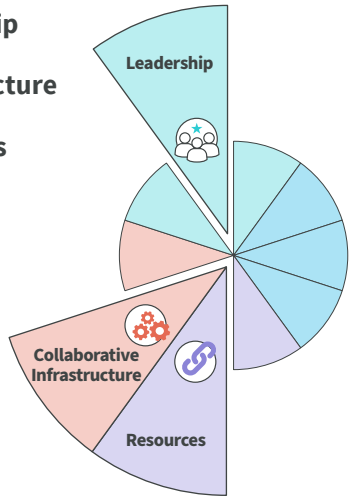
2. **Backbone infrastructure with local control:** The network is dedicated to supporting each of its member schools in creating a unique school culture that reflects the unique values and needs of its community, while also providing support and resources to ensure academic excellence.

3. **Holistic, intergenerational, and land-based:** The Land-Based Learning component of the Indigenous Farm Hub is a unique approach to education that integrates Indigenous languages, culture, and history with farming and food systems. By engaging students in intergenerational learning that focuses on revitalizing Indigenous languages and understanding the historical context of food and farming in their communities, the Farm Hub promotes a holistic and culturally-responsive approach to education.

BRIEF ANALYSIS OF THE OPPORTUNITY

Ecosystem Readiness Framework Strengths:

- ☑ **Leadership**
- ☑ **Infrastructure**
- ☑ **Resources**



The **NACA Inspired Schools Network** is a national network of schools that provides support and resources to Indigenous communities and leaders who are interested in developing schools that provide rigorous academic curriculum and community investment while also promoting Indigenous culture and identity through food, learning, language revitalization, and knowledge.

One of the strengths of the NISN is its community-led design, which means that each school is tailored to the unique needs and desires of the community it serves. This approach helps to create a sense of ownership and investment among community members, which can lead to greater support and participation in the school's programs and activities. Being community-led is especially important for growing unique ecosystems because it helps to counteract the legacy of systemic racism and oppression that has historically excluded marginalized communities from decision-making processes. For many Indigenous communities in particular, the legacy of colonization and forced assimilation has created deep wounds and traumas that continue to impact their communities today. By being community-led, NISN is able to empower Indigenous communities to take ownership of their own education and reclaim their cultural identities and practices.

The backbone infrastructure of NISN provides such resources and support as mentorship, technical assistance, and networking opportunities that help school leaders to develop the skills and knowledge they need to succeed. NISN actively fosters innovative attitudes and behaviors, which helps to promote continuous learning and improvement. This includes encouraging experimentation, risk-taking, and creativity, as well as a willingness to adapt and change in response to new challenges and opportunities.

The idea of seeding new ideas and intentionally building learning ecosystems grounded in community-driven values and perspectives is a crucial insight that can be applied to all communities. Creating an environment that fosters co-creation and new ways of thinking among learners, educators, families, and the community is key to transforming our current systems. It requires a deep commitment to healing, reclaiming community, and culture, as well as a willingness to creatively seek out and build partnerships that bring wisdom and expertise into the ecosystem. A backbone organization, such as this, can play a critical role in providing the support and resources to sustain the growth and development of these learning ecosystems.

PROFILE:

Norris School District

MUKWONAGO, WISCONSIN

> “As our model grows, we are constantly faced with onboarding challenges of new staff. These staff must understand the complexities of the system, as well as embrace the learner-centered restorative culture that we work hard to maintain.”
>
> ***Johnna Noll,***
> ***District Administrator***

norrisacademywi.org

QUICK CONTEXT *Rural, district*

LEARNERS SERVED

- Grades 4–12
- Enrollment: 107
- 48.1% Black
- 40.7% White
- 7.4% Hispanic/Latinx
- 3.7% Two or more races
- 33.3% students with disabilities
- 74.1% economically disadvantaged

WHAT IS NORRIS SCHOOL DISTRICT?

Norris is a public school district located in rural southwest Waukesha County, Wisconsin. It is the smallest public school district in the state and has been serving the needs of diverse learners from all different backgrounds since 1927. Norris operates two schools, Norris Academy and Norris Academy Virtual School, providing an integrated service for disadvantaged learners and their families.

ECOSYSTEM NARRATIVE

In January 2015, the Board of Education made a historic decision to commit to a complete redesign and transformation of the district to a learner-centric educational service system that leverages educational, behavioral health, and community services to provide youth with a world-class education that equips learners with the tools for career, community, and life success in a readily changing world. In 2017, the

Board of Education authorized Norris Academy Virtual School. The virtual charter school created flexibility of anytime, anywhere learning for all, particularly residents leaving the district who met success in the learner-centered model and desired to maintain enrollment.

BENCHMARK ECOSYSTEM ATTRIBUTES

1. **Learner Profiles:** Through self-reflections, all learners (young and professional) develop and maintain a Learner Profile. The Learner Profile is a fluid collection of who the learner is and who they want to become across the four dimensions of academics, employability, citizenship, and wellness. Continuous cycles of self-reflection create an active picture of the learner across multiple dimensions. This robust Learner Profile is used to co-design personalized plans and pathways.

2. **Competency-based framework:** Competency-based continuums create a framework for learning across four dimensions. Learners navigate through the continuums demonstrating evidence of success through the use of personalized learning plans that identify relevant learning goals and pathways to achieve them.

3. **Learner agency:** Learners are empowered to design their own pathway to mastery or enduring practice. The Norris Interdependent Learning Team supports each learner's growth.

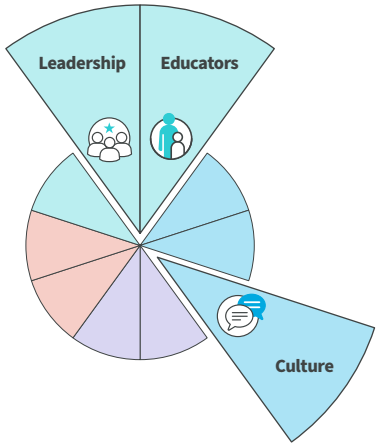
4. **Open-walled learning opportunities:** Learners engage in authentic, real-world applications related to their interests, hobbies, and talents. Extended Learning Opportunities (ELOs) connect learners with field practitioners and mentors throughout the local or global community.

5. **Norris design process:** All members of the learning network exercise their voice in creating relevant and powerful practices to support the educational model. The process utilizes continual reflection to identify challenges and engage in short-cycle iterations that offer solutions to problems of practice or bring the team closer to realizing their collective vision.

BRIEF ANALYSIS OF NORRIS SCHOOL DISTRICT

Ecosystem Readiness Framework Strengths:

- ☑ **Educators**
- ☑ **Leadership**
- ☑ **Culture**



Norris School District in Mukwonago, Wisconsin, is spearheading innovative initiatives for developing learning ecosystems. Central to its approach is the development of a distributed leadership model engaging educators in a variety of diverse roles and responsibilities that come together to create a dynamic and supportive environment for learners. Each role plays a crucial part in cultivating a unique learning journey for each learner while also developing strong connected learning experiences that are community based. Here are several of the roles developed:

- **Learning Strategist:** This role focuses on providing coaching, implementing multi-level systems of support, and overseeing case management to enhance learning practices within the ecosystem.
- **Engagement Strategist:** The engagement strategist is responsible for establishing connections with educational stakeholders to promote meaningful engagement and active participation.
- **Coordinator of Community-Based Ecosystem Work:** This role involves developing and nurturing the community-based aspects of the ecosystem, with a particular focus on employability and creating opportunities for learners in the workforce.
- **Virtual School Specialist and Data Analyst:** This specialist plays a key role in the virtual school, managing data analysis and program evaluation. They ensure accurate enrollment of new learners and maintain a dashboard that tracks learner success, engagement, and agency.
- **Learning Design Architect:** The Learning Design Architect collaborates with specialists and advocates to support the design process, particularly when learners express interest in pursuing personalized learning paths.
- **Director of Operations and Specialized Case Manager:** These roles focus on the operational aspects of the ecosystem, including overseeing day-to-day operations and providing specialized case management to address individual needs.

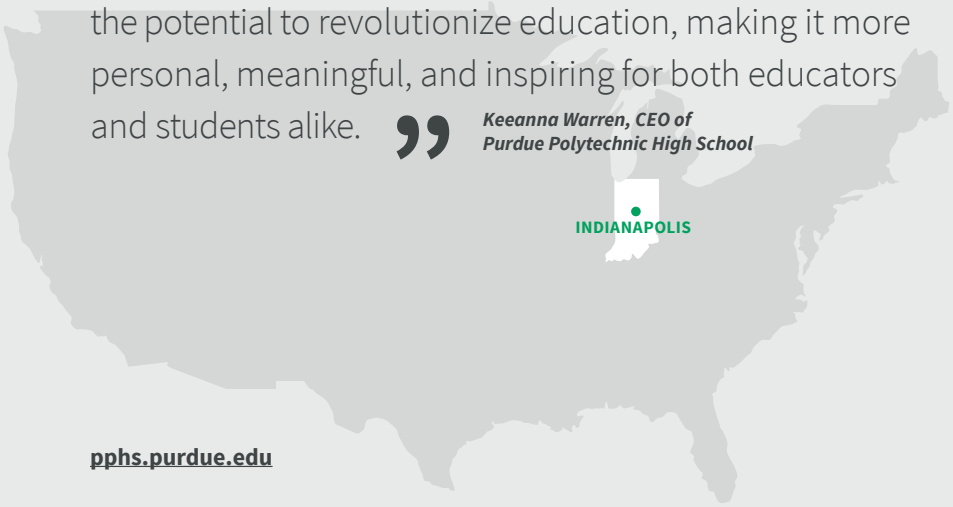
The leadership team is responsible for developing a playbook that provides guidelines and strategies to drive ecosystem development based on their collective expertise and on-the-ground experience. The ecosystem's leadership team establishes six guiding principles that underpin the ecosystem's values and serve as a basis for developing clusters of elements and practices to foster growth and effectiveness. The endeavors undertaken by Norris School District offer important insights and lessons for building and growing learning ecosystems.

PROFILE:

Purdue Polytechnic High School

INDIANAPOLIS, INDIANA

> “Micro-schools provide a truly learner-centered environment that provides educators with the opportunity to teach in a more meaningful and authentic way. Educators connect with their students on a deeper level, building strong relationships that inspire learning and encourage students to live out their freedom dreams. Educators can see first hand the impact of their work, which is incredibly motivating and fulfilling. Our work with micro-schools has the potential to revolutionize education, making it more personal, meaningful, and inspiring for both educators and students alike.”
>
> ***Keeanna Warren, CEO of Purdue Polytechnic High School***



pphs.purdue.edu

QUICK CONTEXT *Statewide charter network operator*

LEARNERS SERVED

- Over 1,000 students served
- 66% White
- 13% Hispanic/Latinx
- 13% Black
- 3% Asian
- 5% Multi race
- 47% economically disadvantaged

WHAT IS PURDUE POLYTECHNIC HIGH SCHOOL?

Purdue Polytechnic High School (PPHS) is a public charter school founded by Purdue University and the city of Indianapolis in partnership with community, industry, and academic leaders, and a statewide charter network operator with multiple locations with no admission requirements or entrance exams. There is particular focus at the high school on STEM education. The school operates on a project-based learning model that emphasizes hands-on experiences, collaboration, and real-world problem-solving. PPHS is designed to serve students who are underrepresented in STEM fields, including students of color, low-income students, and students who are first-generation college-bound.

ECOSYSTEM NARRATIVE

PPHS was established in 2017 with the support of Purdue University and in partnership with Indianapolis Public Schools. The school was created as a response to the need for a more innovative and equitable approach to education in Indianapolis, particularly in underserved communities. The school focuses on preparing students for technical, STEM-related, postsecondary programs and high-tech careers through hands-on and project-based learning, industry partnerships, and a flexible, personalized learning environment. Industry partners like Eli Lilly and Company and Citizens Energy Group collaborate with teachers to design projects and curricula, mentor and support students, and provide feedback on student work.

PPHS has seen significant growth and achieved several milestones since its inception. In 2017, the school opened its first campus in downtown Indianapolis with an inaugural class of 150 students. Since then, the school has opened three more campuses, serving a total of over 800 students in grades 9–12. This fall, it will open the first of several micro-schools using the existing organization as the backbone infrastructure.

BENCHMARK ECOSYSTEM ATTRIBUTES

1. **Project-based learning:** Students engage in hands-on projects and real-world problem-solving activities that emphasize critical thinking, collaboration, and creativity.

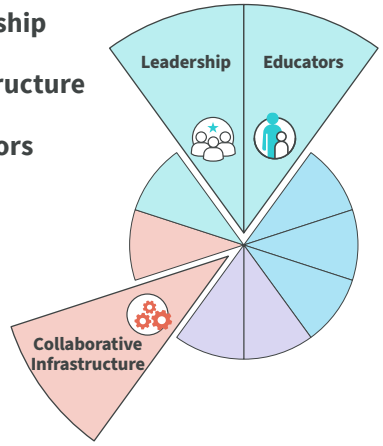
2. **Personalized learning:** Each student has a personalized learning coach and is assigned to an advisory group of 15 to 17 students. The school inspires students to pursue their passions through the lens of STEM. The school's model is designed to meet the individual needs and interests of each student, with a focus on project-based learning, mastery-based grading, and competency-based advancement.

3. **Industry partnerships:** The school has partnerships with a variety of organizations, including Eli Lilly and Company, Rolls-Royce, and Salesforce, to provide students with real-world learning experiences and mentorship opportunities.

BRIEF ANALYSIS OF PURDUE POLYTECHNIC HIGH SCHOOL

Ecosystem Readiness Framework Strengths:

- ☑ **Leadership**
- ☑ **Infrastructure**
- ☑ **Educators**



Purdue Polytechnic High School serves as a prime example of the need to pilot new ideas to transform our education systems. The launch of the pilot micro-schools in the PPHS system are designed to provide fully responsive learning experiences that connect to real-world career pathways in the community. They will offer interest-, problem-, and project-based learning opportunities, including internships and mentorships. Educators are seen as co-designers of this pilot, and are deeply engaged in exploring new ways of organizing, scheduling, and working with learners to develop unique pathways for each learner.

These micro-schools are a pilot that not only serves as an opportunity for exploring innovative approaches to scheduling, organizing, and credentialing learning but also present a solution for districts facing declining enrollment and lack of engagement. By using existing infrastructure from the current network of school such as transportation, special education services, professional development, and food services, they can more easily experiment with new models for expansion and developing home bases or advisories and learning hubs.

At the core of PPHS's success is its focus on agile leadership and innovation. It embraces a mindset of experimentation, iteration, and learning from failures to continuously adapt and enhance its model over time. This commitment to ongoing improvement is driving transformation and improving outcomes for learners.

In addition, the collaboration between the state board, local school districts, universities, and businesses demonstrates a shared vision for creating new models of partnership and coordinated efforts to devise new ways to credential learning leading to career pathways and successful outcomes for learners.

PROFILE:

Remake Learning

PITTSBURGH, PENNSYLVANIA

> “The lean staff at Remake Learning provides a gentle center of gravity for the network, asking members only to commit to a set of values, share information about their organization, and be an open and sharing partner to other network members when called on. For this modest commitment, organizations can engage in and receive support through coordinated shared learning at whatever level they want, and they are part of an annual showcase of local talent and energy during Remake Learning Days.”[25]

remakelearning.org

QUICK CONTEXT *Regional network serving southwestern Pennsylvania and northern West Virginia*

LEARNERS SERVED

→ Over 100,000 learners served

WHAT IS REMAKE LEARNING?

Remake Learning is a network of educators, innovators, and organizations based in Pittsburgh, Pennsylvania, that aims to create equitable, learner-centered, and engaging learning experiences for young people. The network consists of over 500 organizations, including schools, museums, libraries, and community centers, and aims to catalyze and support innovative learning practices and partnerships that enhance young people’s learning opportunities. Remake Learning convenes active working groups, ad-hoc exploratory groups, and collaborative special projects focused on a variety of topics, including STEAM education, maker learning, youth voice, and personalized learning.

ECOSYSTEM NARRATIVE

Remake Learning was founded in 2007 by a consortium of the region’s schools, museums, and libraries, including the Sprout Fund, the Allegheny Intermediate Unit, and the University of Pittsburgh’s Learning Research and Development Center, led by The Grable Foundation. Over time, the network has grown to include a diverse range of organizations and individuals who share a commitment to creating innovative and equitable learning opportunities for young people in the Pittsburgh region. Remake Learning has also expanded its reach beyond Pittsburgh through the Remake Learning Days initiative, which invites communities across the country to host events that showcase innovative learning practices.

Photo by Ben Filio for Remake Learning

BENCHMARK ECOSYSTEM ATTRIBUTES

1. **Innovative partnerships:** Remake Learning supports partnerships and collaborations among schools, libraries, museums, and community organizations to create innovative and engaging learning experiences for young people. These partnerships include the Remake Learning Council, a group of executives and learning scientists who work together to spark creativity in kids, activating them to acquire knowledge and skills necessary for navigating lifelong learning, the workforce, and citizenship in the region.

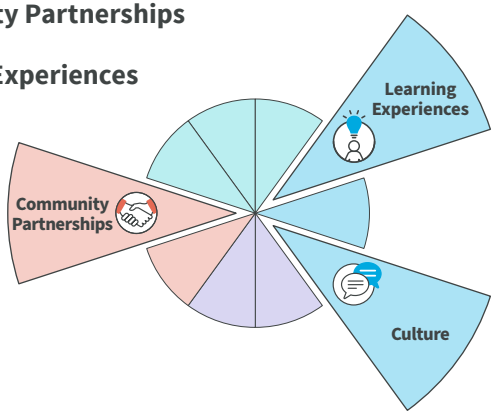
2. **Youth voice and leadership:** Remake Learning places a strong emphasis on empowering young people to be active participants in their own learning and to contribute to their communities. The network offers a variety of programs and events that promote youth voice and leadership, such as the Youth Voice Working Group and the Future of Work Collaborative.

3. **Equity-focused innovation:** Remake Learning pays particular attention to creating equitable opportunities for young people: "Based on national and regional research, this means particular attention is paid to working alongside, as well as uplifting and supporting the voices, strength, and potential of: learners in poverty; learners of color; learners in rural areas; girls in STEM (science, technology, engineering, and math); and learners with disabilities."[26]

BRIEF ANALYSIS OF REMAKE LEARNING

Ecosystem Readiness Framework Strengths:

- ☑ **Community Partnerships**
- ☑ **Learning Experiences**
- ☑ **Culture**



Established in 2007, **Remake Learning** describes itself as an open group of interconnected, creative, and innovative people and organizations in the greater Pittsburgh region. Its purpose is "to spark and share best practices and new ideas, make it easier for neighbors and colleagues to help each other, reduce duplicative efforts in the region, and leverage resources collectively for greater impact."[27]

Remake Learning uses the term "connected learning" to describe partnerships that make possible learning outside the school classroom. It cultivates learning that is engaging, relevant, and equitable by seeding and then providing support for educators, administrators, and funders in- and out-of-school to participate in working groups, exploratory groups, and special projects.

Remake Learning was founded in response to the realization that young people are pursuing knowledge, developing identities, and seeking support differently in this digital age and that educators, administrators, school districts, and organizations need to change in order to serve them better. The loosely knit communities of practice were formalized with funding from The Grable Foundation, and Remake has grown, partnering with the Allegheny Intermediate Unit and institutions of higher education, to become more intentional about the professional learning it cultivates. Remake is a national model for bringing a wide range of community organizations with different visions and assets together to share and collaborate, creating opportunities that can transform the experience of learning for students that need it most. For 15 years, it has woven relationships of trust, evolving to serve the needs of its community, which now includes all of Southwestern Pennsylvania and northern West Virginia.

PROFILE:

Rock Tree Sky

OJAI, CALIFORNIA

> “Our work is supporting kids in developing capabilities that, from my own life experience, are far more durable and essential for creating a great life. These are habits of mind like setting one’s own goals and confidently pursuing them, fostering and maintaining healthy relationships, engaging the world with curiosity and pursuing the questions with a learning mindset, as well as the essential literacies needed to navigate and make meaning of the world around us.”

Jim Bailey, Executive Director of Rock Tree Sky

rocktreesky.org

QUICK CONTEXT *Learning center*

LEARNERS SERVED

- 200 students
- 85% Caucasian
- 14% Latinx
- 1% Black
- 40% free and reduced lunch

WHAT IS ROCK TREE SKY?

Rock Tree Sky (RTS) is an experiential learning center primarily paid for through enrichment fees from California independent study schools. RTS serves families enrolled in independent study programs or homeschooling families looking for access to community and social connection as well as tools and resources for learning and exploration.

The program aims to provide children with hands-on learning experiences that foster a deep connection to place, support creative expression, and develop social and emotional learning. Within these contexts youth also receive support in essential literacies and pursue learning based on their interests. RTS offers programs for children ranging from preschool to high school, including outdoor explorations, field trips, and STEAM activities.

ECOSYSTEM NARRATIVE

RTS was founded in 2016 by parents and professional educators. RTS started as a self-directed learning community with twenty learners in a 600-square-foot makerspace and nearby access to the national forest and the founder's two-acre property. Currently, RTS is located on the campus of the former Summit Elementary School in Upper Ojai, employing thirteen key team members and serving over 200 learners per week. Over the past seven years the program has become increasingly dynamic in building community-based learning opportunities and developing a strong relationship with the local public school district, Ojai Unified School District. RTSs partnership with Ojai Unified School district may be unique in the state.

BENCHMARK ECOSYSTEM ATTRIBUTES

1. **Governance:** RTS utilizes cooperative decision-making structures involving staff, parents, and learners.

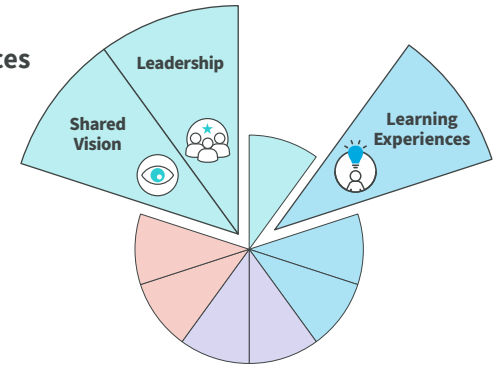
2. **Experiential education:** The program places a strong emphasis on 21st-century skills such as collaboration, communication, and technological/information literacy. It also places the needs of the whole child before content standards, helping children develop important skills such as empathy and self-awareness. There are high expectations for personal responsibility paired with a commitment for learners to learn at a pace that is natural for them. Focus on experiential education provides children with opportunities to learn about the world through hands-on experiences. Movement within the campus is open, with students provided free access to studio and natural learning spaces for lessons, guided and free exploration, playing, and building relationships.

3. **Expanded teacher role:** Teachers act as mentors and work with learners to identify pathways and opportunities. Advisors participate in the life of the school, sharing their interests, developing programming, governance, and supporting family connections. Emphasis is placed on well-being for all members of the community. Adult mentors focus on witnessing and relatedness; every learner has an identified "champion" on campus who thinks the world of that child.

BRIEF ANALYSIS OF ROCK TREE SKY

Ecosystem Readiness Framework Strengths:

- ☑ **Shared Vision**
- ☑ **Learning Experiences**
- ☑ **Leadership**



Rock Tree Sky is a learning center that is actively cultivating a forward-looking educational ecosystem. Through strategic partnerships with charter schools and local districts, RTS is not merely experimenting, but rather showcasing a practical blueprint with the potential to reshape conventional educational frameworks.

At the heart of RTS's approach is the concept of self-directed learning. By anchoring its pedagogy in this model, RTS empowers students to assume the reins of their own educational journey, instilling a sense of autonomy and responsibility that's essential in the modern world.

An outstanding facet of this partnership is the profound impact it extends to learners. Beyond conventional academic support, the district extends coverage for student attendance at RTS for up to two days per week. This provision not only widens access but also exemplifies the core principle of inclusivity, making top-tier education attainable for families who may have otherwise faced financial barriers.

Yet the collaboration's significance extends beyond accessibility. The synergy between RTS and the local district is symbiotic. This liaison underscores the legitimacy of RTS's self-directed learning model, validating its efficacy within established educational contexts. In turn, the district gains a remarkable advantage: the ability to offer students an alternative educational path that is increasingly essential in a rapidly evolving world.

Finally, the physical cohabitation of RTS and district staff on the same campus introduces another layer of promise. This arrangement holds potential for robust professional development and capacity enhancement, enriching all stakeholders. Shared space becomes a crucible for innovative ideas and practices, nurturing educational advancement.

PROFILE:

Siċaŋġu Co

ROSEBUD RESERVATION, SOUTH DAKOTA

> “You can take back the space that belongs to you because your uncles, your aunties, your grandmas, your grandparents, your mom and dad, your siblings, those are your first teachers. That’s your community. Take the time to teach them the languages, the values of who you are before you let them leave. This way, when they’re taking off into their career or their college, they take with them everything that makes them who they are. So, when they come back to their community, they know what their purpose is for in life.”
>
> ***Sage Fast Dog, Director of Siċaŋġu Co***

sicangu.co

QUICK CONTEXT *Indigenous Community*

LEARNERS SERVED

→ Intergenerational coalition

WHAT IS SIĊAŊĠU CO?

Siċaŋġu Co is a nonprofit organization based on the Rosebud Reservation in South Dakota. Its mission is to promote Laȯkota culture and language through education, community development, and leadership training. Siċaŋġu Co partners with local schools, community organizations, and tribal entities to provide programs and services that empower Native youth to become leaders in their communities. Some of the programs offered by Siċaŋġu Co include Laȯkota language and culture classes, afterschool programs, summer camps, and leadership development opportunities.

ECOSYSTEM NARRATIVE

Siċaŋġu Co was founded in 2009 by a group of Laȯkota educators and community leaders who recognized the need to promote Laȯkota culture and language among Native youth on the Rosebud Reservation. Since then, the organization has grown and established partnerships with schools and organizations in the region, serving thousands of youth. The ecosystem is deeply embedded in the local community, with many of its programs and services led by community members and elders.

BENCHMARK ECOSYSTEM ATTRIBUTES

1. **Ancestral and cultural wisdom:** Siċaŋġu Co's work is grounded in the ancestral and cultural wisdom of the Siċaŋġu Laḳota nation. This provides a strong foundation for community-driven development that is connected to the land, culture, and history of the people. This emphasis on culture and tradition can be leveraged to build ecosystems that are rooted in the unique cultural identity of the community.

2. **Wicozani:** "Wicozani" is a Laḳota word that means "to live in a good way with compassion, generosity, and respect for all of creation." It is often used as a guiding principle for Indigenous communities in their relationship with the natural world and with each other. The concept emphasizes the interconnectedness of all living beings and the importance of maintaining balance and harmony in all aspects of life. Siċaŋġu Co's vision for Wicozani includes a focus on holistic health, which encompasses physical, mental, emotional, and spiritual well-being. This emphasis on the whole person can be leveraged to build ecosystems that prioritize the health and well-being of learners, educators, families, and community members in a comprehensive way.

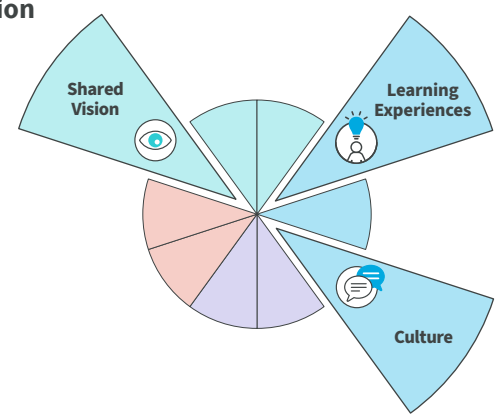
3. **Sustainable development:** Siċaŋġu Co's approach to economic development is guided by a commitment to sustainability. This includes sustainable housing, food sovereignty, and climate resilience. These principles can be leveraged to build ecosystems that prioritize sustainability and environmental stewardship.

4. **Shared, lasting prosperity:** Siċaŋġu Co's ultimate goal is shared, lasting prosperity for the Siċaŋġu Oyate. The term "Oyate" is a Laḳota word that means people or nation. In Indigenous cultures, it is often used to refer to a community or group of people who share a common ancestry, history, culture, language, and territory. The concept of Oyate is central to the social, political, and cultural organization of many Indigenous societies, as it reflects a sense of collective identity and responsibility for the well-being of the community as a whole. This can be achieved through economic self-sufficiency, cultural revitalization, and community-driven development. This emphasis on shared prosperity can be leveraged to build ecosystems that prioritize the collective well-being of the community over individual gain.

BRIEF ANALYSIS OF SIĊAŊĠU CO

Ecosystem Readiness Framework Strengths:

- ☑ **Shared Vision**
- ☑ **Learning**
- ☑ **Culture**



Siċaŋġu Co, located on the Rosebud Reservation in South Dakota, is an example of a site that has a holistic vision for a thriving community and that has created space for innovation and sustained collaboration. Siċaŋġu Co is a coalition of tribal leaders, educators, and community members who are working together to renew learning that is rooted in the community's culture and traditions. This collaborative effort has led to the development of a new school that is focused on integrating traditional Lakota knowledge with contemporary education practices. The community is working together and co-creating the system based on the ideas of belonging, healing, and empowerment.

They are guided by 7Gen Vision, which casts their vision forward 175 years. They ask, "How do we live today to create a healthy, just, abundant world for our grandchildren?"[28]

The Indigenous School Design movement, of which Siċaŋġu Co is a part, is an inspiring example that highlights the vital role of connection to the land and spirituality in the design of schools. It goes beyond the surface-level implementation of culturally responsive practices and, instead, delves into the profound essence of being present and deeply connected to culture and the land. The Lakota people refer to this approach as "children first" design, reminding us of the profound significance of prioritizing the holistic development of students.

The Land-Based Learning component of the Indigenous Farm Hub is a unique approach to education that integrates Indigenous languages, culture, and history with farming and food systems. By engaging students in intergenerational learning that focuses on revitalizing Indigenous languages and understanding the historical context of food and farming in their communities, the Farm Hub promotes a holistic and culturally-responsive approach to education. This approach can serve as a model for other communities and schools seeking to integrate Indigenous knowledge and practices into their education systems. Additionally, the Farm to School component of the initiative can provide insights into how schools can improve access to healthy food for Native American students, while also supporting local farmers and building sustainable local food systems.

PROFILE:

SparkNC

STATEWIDE IN NORTH CAROLINA

> “Spark has helped our district to better understand and implement personalized learning for our students. We have seen an increase in student engagement and achievement as a result.”
>
> ***Sarah Toothman, SparkLab Leader in New Hanover County***

sparknc.org

QUICK CONTEXT *Inter-district collaborative, connecting learners with pathways to careers in high-tech fields*

LEARNERS SERVED

→ SparkNC works with a range of different learner populations

WHAT IS SPARKNC?

SparkNC presents a new model of education that is focused on expanding pathways to high-tech fields, an area where there is a growing demand for skilled workers. The program provides learners with the opportunity to explore high-tech fields while earning high school credit through a unique multi-district collaboration that is learner-centered, industry-relevant, and competency-based. The model aims to help learners expand skill sets, build networks, gain confidence, and chart personalized pathways toward high-tech jobs.

The network aims to improve student outcomes by providing professional development opportunities for educators and by supporting the implementation of personalized learning initiatives in member districts.

ECOSYSTEM NARRATIVE

The Learning Management System (LMS) offered by SparkNC provides a personalized approach to learning for students, allowing them to choose from a variety of high-tech fields, including artificial intelligence and machine learning, cybersecurity, software development, data analytics, computer systems engineering, and user experience design. The network operates on a "choose your own adventure" model, where districts can choose to participate in various professional development opportunities, such as the Spark Conference, Spark Labs, and Spark Co-Labs, based on their needs and interests. SparkNC also partners with researchers and policymakers to share best practices and advocate for policies that support personalized learning.

BENCHMARK ECOSYSTEM ATTRIBUTES

1. **Learner-centered:** SparkNC emphasizes the importance of personalized learning and strives to create learning experiences that are tailored to the needs and interests of individual students.

2. **Data-driven:** The network collects and analyzes data on student outcomes, program participation, and other factors to inform programmatic decisions and identify areas for improvement.

3. **Design approach:** SparkNC will constantly improve the learner experience through data-driven analysis and feedback from learners and partners. The program is designed to continually build, expand, and refine the approach through iterative design.

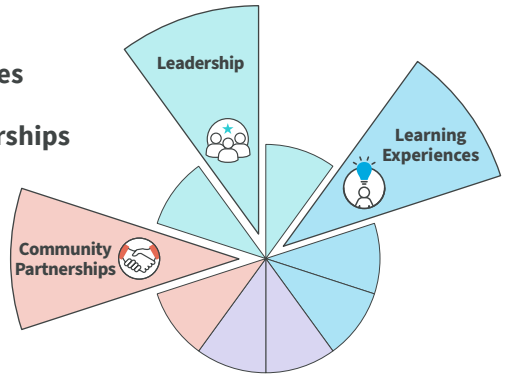
4. **Learning Management System:** The LMS provides the explicit authority to award credit for a student stacking together enough units to achieve a semester or year's worth of learning. This allows for flexible scheduling and personalized pathways for students. Learners progress at their own pace and are assessed on their ability to demonstrate mastery of specific skills and knowledge. This competency-based approach empowers learners to take ownership of their learning and to chart personalized pathways toward high-tech jobs that align with their unique interests and goals.

5. **SparkLab Leader:** A new and innovative role that is essential to the SparkNC ecosystem, the SparkLab Leader has a nontraditional opportunity to design and support learning experiences that are tailored to the needs of each and every learner. Working in collaboration with other SparkLab Leaders, district and school staff, the SparkNC team, and partners from the business community, the SparkLab Leader helps to bring cutting-edge learning experiences in high-tech fields to life.

BRIEF ANALYSIS OF SPARKNC

Ecosystem Readiness Framework Strengths:

- ☑ **Leadership**
- ☑ **Learning Experiences**
- ☑ **Community Partnerships**



SparkNC is a pioneering initiative of The Innovation Project (TIP), a nonprofit organization that aims to reimagine public education using equitable strategies. This collaborative model, bringing together school districts, an industry partner, and a dedicated learning lab facilitator at each school site, allows learners and districts to opt into the program, creating a culture of innovation and growth. SparkNC's growth strategy includes providing a full-time equivalent (FTE) for each school that wants to participate and ensuring that the program is accessible to all learners, regardless of their background.

From the SparkNC model, we can learn valuable insights about ecosystem development in education. By bridging the gap between education and industry, SparkNC addresses the issue of unfilled high-tech jobs while providing learners with experiential learning opportunities. Additionally, its collaborative and scalable nature, involving school districts, industry partners, and learning labs, fosters a culture of innovation and growth, ensuring accessibility for all learners and driving continuous improvement.

CONCLUSION

Ultimately, the vision of learner-centered ecosystems is a move to a new way of operating that begins with a shared vision to embrace each child as a unique individual and as a valued, vital contributor to our democracy and society. It will require shifting our practices and connections throughout the community to develop a powerful shared network of learning, as well as building the supportive infrastructure needed to deliver on a new promise for education. This is no simple task.

Yet the most heartening outcome of our research is the recognition that there is momentum toward a transformed future for education. We can see learner-centered ecosystems taking root and growing in a variety of settings across the United States. We have also gained renewed appreciation for the complex, painstaking nature of systems transformation, more present than ever in the challenges that lie ahead.

While there is a growing movement among school leaders to reimagine learning in ways that center the child, prioritize equity, and recognize the integrated nature of community,[29] most public school districts today struggle to see a path to transforming themselves into a learner-centered ecosystem. Their leaders often see more barriers than opportunities and wonder if it is even possible. Much of the dynamism of ecosystems has been created and driven by individual social entrepreneurs and their teams, who have created solutions for an urgent problem they saw—usually designing, testing, and iterating the infrastructure elements by themselves over long periods of time and often outside of the constraints of the current education system. They have done historically important work, breaking barriers and norms to create what works for young people. As a result, it is still a factor of historical luck whether a young person grows up with access to this kind of learning today.

Now is the time to take what we know, acknowledge what we have yet to learn, and pursue in earnest the work to transform our public education systems to make this kind of learning an available and equitable option to all young people. We need to create the conditions in which communities can step forward to reimagine and set forth a new vision for the education of their young people, and we need a national effort to create enabling policy and build the technical and research infrastructure to bring this proven format of learning to scale as a public good.

By supporting these critical components, we lay the groundwork for sustainable, impactful, and widespread implementation of learner-centered education nationwide.

CONTRIBUTORS

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ENDNOTES

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27 "About Remake Learning."

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29 One example is the Learning 25 project by the American Association of School Administrators (AASA). See "AASA Learning 2025" (web page), AASA, accessed July 13, 2023, https://www.aasa.org/professional-learning/learning-2025.

Education Reimagined is a national nonprofit organization, based in Washington DC, harnessing the power of visionaries and communities across the country to create a new design for public education that is centered around learners, versus schools. Since its inception, Education Reimagined has successfully furthered the effort to codify, advance, and elevate the field of learner-centered education. Its work now is focused on coalescing the partners, marshaling the funding and resources, and igniting the R&D process to advance the development of community-based, learner-centered ecosystems.

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History Co:Lab is a co:creation lab, working to ensure that every young person grows up with learning experiences in history and civics that develop them as full human beings who can thrive and contribute to the wellbeing of society and planet. Founded in 2019, History Co:Lab supports and accelerates transformation of the overall education system so that human-centric learning can become the norm. The History Co:Lab approach is rooted in community-driven and scientifically-backed methods, working to empower informed and creative citizenship through a deep understanding of human history.

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