



DESIGNED TO **THRIVE**

Guidebook to Equitable, Community-Based,
Learner-Centered Ecosystems



This is a guide for those leaning in, striving for, and working to invent a new system of education that can equitably and powerfully enable thriving learner-centered experiences for all children.

It isn't a guide to convince you this is the way to go; it is a guide for those who want to take on the challenge of inventing newly in service of this transformed vision.

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Preface

This guide was developed through a process organized by **Education Reimagined** to bring together forty diverse learner-centered practitioners, experts, systems thinkers, and young people. Together, we explored and imagined a future of thriving learner-centered ecosystems and generated frameworks and insights that can support on-the-ground invention.

The idea and possibility of equitable, community-based, learner-centered ecosystems is emerging from the collective work and imaginations of millions of people around the world. In many ways, what we are proposing is a return to more authentic learning in the natural ways in which humans develop and grow in connection and community with one another. We are imagining a public system that would enable, support, and intentionally nurture that orientation toward learning, growth, and development.

We see evidence of ecosystems across contexts and emerging from different starting places. We see:

- **Out-of-school alliances** that are serving family needs, creating safe and enlivening spaces for children to find community, learn, and grow;
- **Networks of museums, businesses, and civic structures** that are keeping their doors open and offering educational programming;
- **Districts that are striving to break the bounds of their campus** and partnering with higher education institutions to offer multiple pathways to college and career;

- **Schools that are creating models** for alternative schedules and credentials, interest-based internships, mentorships, community-based learning, advisories, graduate profiles, innovative transcripts, and partnerships with businesses;
- **Youth leadership organizations** that are calling for youth to be seen and recognized as full participants in the community long before they reach voting age;
- **Collaborative cross-sector coalitions** that are aimed at positive community impact;
- **Philanthropic organizations** that are fueling new invention and offering opportunities to create new ways of funding and investing in leadership, youth, and learning in communities; and
- **Self-organizing infrastructures** that are offering alternative flexible models such as micro schools, pods, unschooling, home schooling, liberation education networks, parent cooperatives, online learning management systems, and grassroots visionary charter schools.

“

Education either functions as an instrument which is used to facilitate integration of the younger generation into the logic of the present system and bring about conformity or it becomes the practice of freedom, the means by which men and women deal critically and creatively with reality and discover how to participate in the transformation of their world. ”



Paulo Freire
Educator and philosopher



Acknowledgments

While the revelations and insights we share are novel in our unique context and time, we gratefully acknowledge that much of what we share and were able to generate was founded on many years of wisdom and experiences from those who have come before us and been at this work for years.

In particular, we'd like to acknowledge and thank the many people who participated in the Ecosystems Working Group and provided the inspiration, ideas, and fodder for this guide. The members of this group were divided into three teams, and the invaluable work done by each subset culminated in the main chapters of this guide.

We also especially want to thank and acknowledge Jennifer Davis Poon, Maria Worthen, and Adriana Martinez Calvit, who served as lead authors for this guide by synthesizing the thinking, ideas, and work of their respective teams, and Julian Serrão, who served as a facilitator for the Ecosystems Working Group conversations. In addition, we would like to acknowledge Education Reimagined staff members who played significant roles in this work: Bobbi Macdonald, who served as the overall project lead and developer; Alin Bennett who served as a facilitator; Demi Edwards who served as project designer and scribe; and Shajan Abusalih and Lindsay Ogawa who served as scribes.

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Introduction

In May 2021, Education Reimagined launched a working group to collectively imagine the possibilities of equitable, community-based, learner-centered ecosystems. Together, we aimed to identify the principles that would underlie an infrastructure to enable those ecosystems.

The Ecosystems Working Group was composed of forty learner-centered practitioners, experts, systems thinkers, and young people—diverse across sectors, ideology, expertise, race, age, and geography. The group included educators, current and past superintendents, parents, community organizers, learners, researchers, and more. They brought with them lived experience and expertise from indigenous nations, liberation communities, entrepreneurial innovation, K–12 education, early childhood education, youth development, philanthropy, higher education, nonprofits, businesses, and homeschool cooperatives.

Over the course of eleven months of meeting and inventing together, they developed new understandings, frameworks, and resources. This guide is a synthesis of their work, which we hope inspired communities will leverage to boldly invent their own learner-centered ecosystems.

At its heart, this is the work of forming a new public education system designed to provide an equitable, learner-centered education for each and every child in the United States, inclusive of race, background, and circumstance.

This is a guide for those leaning in, striving for, and eager to invent a new system of education that can equitably and

powerfully enable thriving learner-centered experiences for all children. It isn't a guide to convince you this is the way to go; it is a guide for those who want to take on the challenge of inventing newly in service of this transformed vision.

Likewise, this guide is not designed to narrate what each unique community may hold dear, or how exactly they will get the work done. Instead, this is an exploration of the kinds of choices and considerations that communities might face as they begin to launch their own learner-centered ecosystems. It is a guide to help us all imagine an infrastructure designed to strengthen relationships, expand and grow networks, and bring transparency and access to the system such that it operates in ways that honor the uniqueness of every learner and embrace the diversity of communities. In such a system and future, our diversity and wide range of experiences and beliefs, our stories and hopes, become our greatest strength and the basis for our continued evolution.

As you read through the ideas, frameworks, and questions of the Ecosystems Working Group, keep in mind that each

unique place will have to chart their own journey, explore their own landscape, and acknowledge their own history, hopes, and shared possibilities for the future. Looking forward, there are varied pathways to choose—and it is up to each of us to decide not only which direction to go but how we will proceed together. With love. In community. And with a shared stand for creating together equitable, community-based, learner-centered ecosystems where every child is known, loved, and encouraged to live a life of meaning, connection, and contribution.

We hope these findings will offer jumping-off places for vital conversations and efforts as we work together to invent this transformed public education system and make this world a better place for our children, grandchildren, and great-grandchildren.

A handwritten signature in a cursive, grey font that reads "Bobbi Macdonald".

Bobbi Macdonald and the Education Reimagined Team

**Chapter One**

The Vision of Equitable, Community-Based, Learner-Centered Ecosystems



Every system in society is built upon and operates under a set of assumptions about that system's purpose and goals, how it operates, who it serves, and what it prioritizes. This is true of the current education system. It was built in an era that prioritized preparing mass numbers of people to work in factories and assimilating new people to a country finding its own

identity. Therefore, the assumptions that underlie the current education system stem from that place, time, and its founders' priorities. These assumptions and ways of operating are so ingrained in the system that they influence how the people in that system work, see themselves, see each other, see the outside world, and make choices.

Over time, people have sought to impact that system—adding new goals, altering the resources it uses, and seeking to remedy some of its negative impacts. Yet, these efforts have largely taken the underlying infrastructure of the current system as a given. They modify parts of it, reform aspects, and add new elements to it but leave its foundation untouched.

The Ecosystems Working Group took a different approach. Instead of starting with what has been a given, we started with a vision of what a thriving, dynamic learning experience would look like for our children—one built on what we now know about learning science and the power of relationship, autonomy, and community. We call this starting place **learner-centered education**.

And from there, we set out to discover, newly, what an infrastructure might look like that would enable this learning experience, for each and every child. We explored and identified a new set of principles, values, and assumptions that we would choose today. And we imagined what a system of education might look like with these assumptions and choices at the core.

When we stand in this full realization of the learner-centered vision, we see a world in which the public education system serves as the backbone for equitable, community-based, learner-centered ecosystems.

This is a bold, audacious challenge. And as we discovered again and again, not an easy one.

As committed as we might be to invent and imagine freely, the system we've grown up in (and for many of us, have worked in) has a strong gravitational pull. So, getting to a place where we could reliably and consistently stand in a world of learner-centered ecosystems required diligence and intention. But it was imperative to this work.

That is why the first chapter of this guide begins here—with the vision of learner-centered education and how equitable, community-based, learner-centered ecosystems would fulfill the promise of this vision. We invite readers to return to this section to regroup themselves as they make their way through the guide.



We set out to discover, newly, what an infrastructure would look like that would support the vision of learner-centered education.



The Foundations of a Learner-Centered Worldview

We start with the purpose of education. When we take a learner-centered approach to the growth and development of our children, the aim of the public education system is to support each young person to discover who they are, their unique gifts, and how to contribute those gifts meaningfully to their families, communities, and the world.

Said another way, it is “to nurture and support the development of whole human beings within caring communities where each learner is known, accepted for who they are, and supported to learn and thrive now and into the future. Education itself is seen as a partnership amongst young learners, their peers, and adults. Emphasis is placed on developing each learner’s own agency—growing their capacity to act independently and to effectively make meaningful choices regarding their learning, so that they are able to follow their own interests and pursue their own aspirations” (Education Reimagined 2021).

We are seeking to support each and every child—with no exceptions—to build and lead a secure and fulfilling life of their own choosing. This purpose contains within it myriad assumptions about who children are, how learning happens, and what it takes to create equitable, powerful learning experiences that serve each unique learner and create a collective community of learning.

It is important to note that these assumptions are in stark contrast with those at the foundation of our country’s current, standardized approach of education. Four key assumptions stand out:

- **The central work of education is learning itself.** Holding this assumption, it follows that the primary focus of the education system and those within it is on how to create and maintain the conditions for great learning to happen. This is in contrast to a system in which the work is the delivery of content. Instead, we have to get curious and ask such questions as: What does great learning look like? Does it look the same for everyone? How do we create sustainable structures that support, rather than inhibit, the conditions for learning? What does it take to ensure those conditions are equitable? How do we create a system that itself is based in learning, iteration, and adaptation?



A learner-centered approach nurtures and supports the development of each learner within caring communities.

- **Education is done by and with the learner.** If we assume learning is done by and with a child, the work becomes about creating the space for children to co-create and drive their learning journeys in developmentally appropriate ways. We set aside the assumption that learning is something you can do to or for someone. The role of the adults is to partner, to encourage, and to facilitate—not to dictate, force, and dominate the process. The role of the system is to ensure its conditions allow children equitable access to the resources, supports, and opportunities to own and pursue their learning goals.
- **All learners are unique, capable, curious, and wondrous.** Taking this view of learners invites us to be present to their inexhaustible potential and their ability to contribute their thinking, ideas, and gifts, right now. Moreover, it is an assumption that applies to each and every child without exception. This is inclusive of their race, neurodiversity, gender identity, age, socioeconomic status, family situation, religion, nationality, language, or life circumstances. Young learners are not vessels to be filled with knowledge, or people preparing for a life yet to come, or the sum of

their test scores. Instead, it becomes an honor to see each child as someone to discover, build relationship with, support, guide, and learn from.

- **Finally, learning happens when a learner’s interests, passions, and purpose are engaged.** As we get curious about what a system would look like that enables young people to co-create their own learning journeys, we see that learning lives everywhere. Young people grow and learn with and from their families, community, and peers. In fact, learning happens most naturally when they are in authentic, real-world situations that tap into their curiosities and invite their ideas and contributions. From this view, education is no longer an attempt to force learners into a standardized curriculum with a standardized set of outcomes, creating the problems

we may call poor engagement, classroom control issues, and lack of motivation. Rather, we start to see where, when, with whom, and how learning can happen in wholly new ways. And we begin to imagine what a system would look like that leverages varied learning providers, builds stable community, and ensures growth and development toward each learner’s goals.

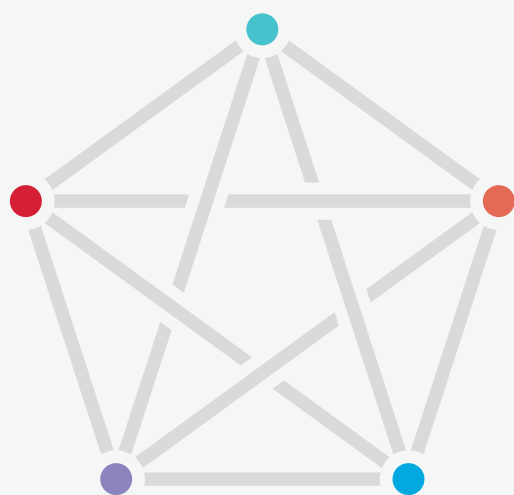
This is not an exhaustive list of the assumptions that a learner-centered purpose for education contains, but if we dig into each of them, we can see the world of a learner-centered future of education emerge.

The Learner-Centered Worldview Brought to Life

This future doesn’t take the current system as is or enable the perpetuation of inequitable access, opportunity, and life outcomes that pervade our current system, despite the years and dollars spent on reform. A learner-centered future strives for and sees the possibility of **equity** by which every child, no matter who they are or where they come from, is unequivocally supported with what they need to learn, grow, and build secure and fulfilling lives for themselves and their families.

In this future, we can see that each child’s **agency** is developed as they set their learning goals, make choices about and navigate their unique learning journey, and discover and equip themselves to lead lives of their own choosing. And we recognize they are not doing this in isolation because we learn, grow, and develop as human beings through relationships and in community. We are **socially embedded** by nature.

The learning pathways chosen and the learning goals set are clearly derived from who each child is—informed by their families, life circumstances, and aspirations for their futures. Because each child is known and their journey is co-created with them based on their interests, curiosities, and goals, their education is **personalized, relevant, and contextualized**. Because the full possibility of their journeys cannot be fulfilled within one building or by one set of adults, their experiences are **open-walled**—connected to and rooted in the community. And, all along the way, their growth and development of **competencies** is demonstrated, recognized, and credentialed, such that they are documenting and building the stories of their learning to tell themselves and their community, as well as admissions staff and employers.



Learner Agency

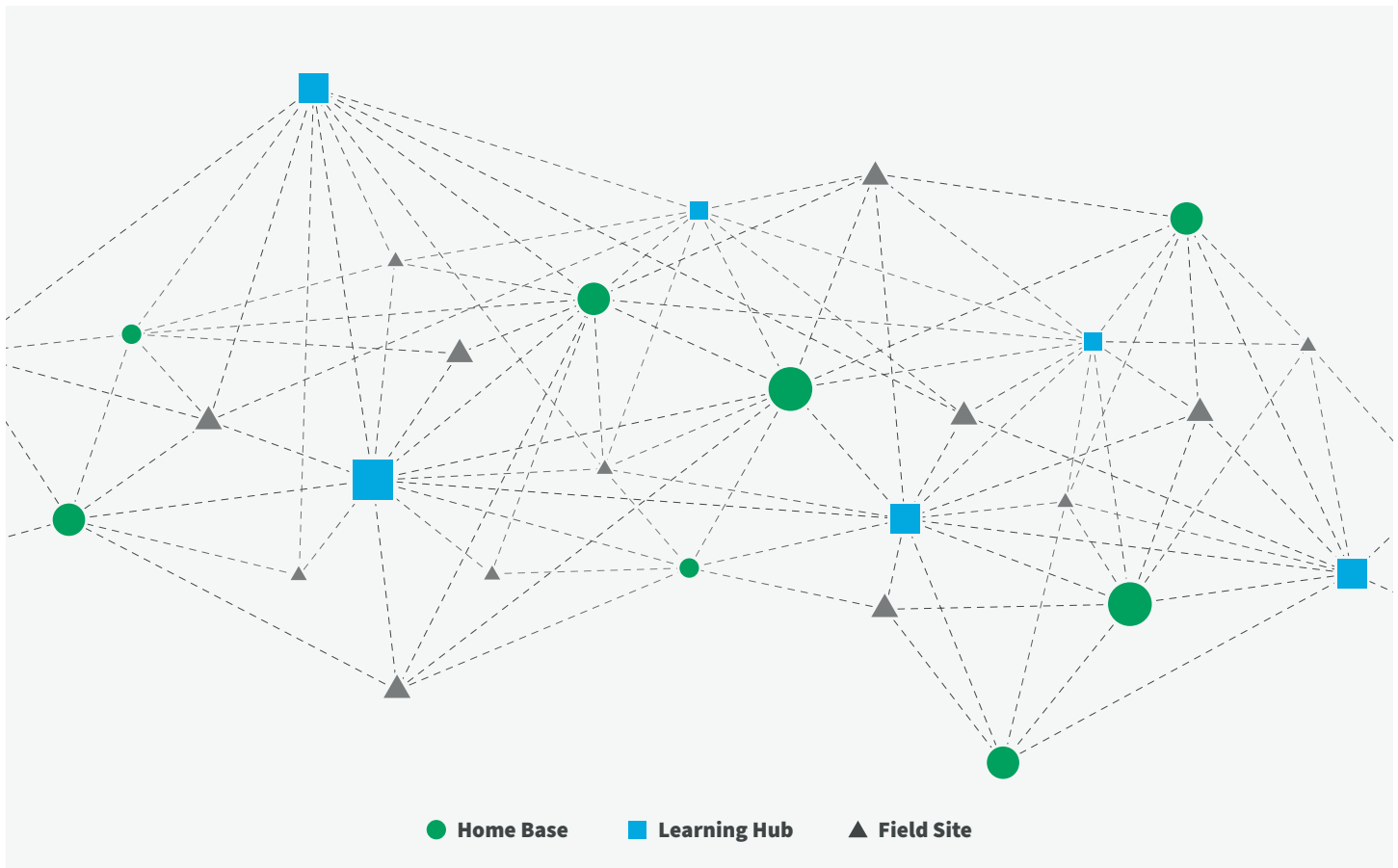
Socially Embedded

**Personalized, Relevant,
and Contextualized**

Open-Walled

Competency-Based

The five elements of learner-centered education



In this vision of a new dynamic education system, learning is interwoven across a community in three key spaces—Home Bases, Learning Hubs and Field Sites.

When brought to its full expression, this is a vision of dynamic, **community-based, learner-centered ecosystems** that center the humanity and dignity of each child. Yet we know that the current system of education cannot support this transformed reality of learning; in fact, its systems, policies, and requirements are all organized to push against the realization of this vision.

So, what is the system that would enable this future? What principles would guide this system, what tensions would it have to address, and what would it look like for its key stakeholders? These are the questions the Ecosystems Working Group set out to address. From the structures of governance, accountability, and resource allocation; to the dilemma of how to assess and credential learning in new ways; to the question of what people and people systems must be in place—our group generated new frameworks and images. We invite you to explore and consider what we created, acknowledging the invention of a transformed public education system is not only possible but within our reach.

“

What keeps many learners engaged is not only the meaningful relationships they have with adults, but the meaningful relationships they have with their peers and finding a space and place to be connected with each other. When I see a thriving ecosystem, I see agentic youth who are connecting and keeping one another accountable. ”



Sarah Lench

Partner, Center for Innovation in Education, and Director, Assessment for Learning Project

Governance, Accountability, and Resource Allocation



WRITTEN BY
Jennifer Davis Poon

Who supervises a learner-centered ecosystem? Who ensures it is working in optimal and equitable ways? What information—whose information—informs that picture, and how are decisions made based on that information? How are those decisions carried out?

In our vision of a learner-centered ecosystem, one thing becomes immediately clear: an equitable, learner-centered ecosystem requires new ways of thinking about governance, accountability, and funding. These components can be as flexible and distributed as the ecosystem itself, capable of operating at a level of nuance and complexity not realized by current systems.

Indeed, the challenge we face is that current systems of education governance, accountability, and resource allocation are intentionally intolerant of complexity: student expectations are standardized, metrics for schools are standardized, and money flows through standardized funding formulas and per-pupil allocations that reduce student identities to discrete points of data. Ironically, this systemic push toward one-size-fits-all outcomes creates competition that breeds inequity: students are ranked based on compliance rather than the realization of their individual



brilliance; school leaders are forced to check boxes imposed by outsiders, sometimes at the cost of what they know to be best for their communities; and schools fight over enrollment hoping to claim more dollars from a zero-sum pie. Everyone scrambles to get more of something, and those with more ways to get more leave others trailing.

But if we take a step back from this scarcity mindset and instead don a perspective of an abundant ecosystem, what would we notice? We would see learners gifted with innumerable diverse talents, ambitions, and expertise. Learning opportunities as varied as the people, buildings, offices, workshops, stages, and natural wonders they encompass. Resources available from every investment—personal, civic, and corporate—made for the betterment of humans and the spaces we inhabit.

With this mindset of abundance, we asked ourselves: How do power, money, and responsibility flow through an equitable, learner-centered ecosystem?



We can't expect rules to do everything for us. That is not a sustainable governance system. It actually has to live in the culture of the people that enact it. It has to live in the beliefs and hopes of the people. ”



Doannie Tran
Partner, Liberatory Co-Creation/
Center for Innovation in Education

A New Framing: Governance, Accountability, and Resource Allocation in a Learner-Centered Ecosystem			
Component	Purpose	Whereas current systems frame this as...	We reframe this in a learner-centered ecosystem as...
Governance	A means of ensuring that the system is working as it was intended, and a means of deciding what adjustments should be made when expectations fall short of reality.	Processes through which an exclusive group of people supervise and make decisions on behalf of everyone else.	A dynamic means through which collective learning and transparent, responsive decision-making occur.
Accountability	A means of making sure commitments are upheld.	Processes through which a centralized authority sets performance goals, measures progress, and intervenes if progress does not meet expectations.	A set of responsibilities defined for each participant in the ecosystem based on mutual commitments to the wellness of each other and the ecosystem as a whole.
Resource Allocation	A means through which investments of money, time, and expertise are funneled to various parts of a system.	Processes for allocating funding from federal formulas and local revenues to students on a per-pupil basis.	A means for distributing and making smart use of all of the resources and assets being invested in human development in an ecosystem.

Here in Chapter 2, we envision and explore possibilities for governance, accountability, and resource allocation in a learner-centered ecosystem. We consider a governance structure that is intended to build trust, clarity, and transparency. We reframe accountability as a way of looking out for the wellness of the ecosystem based on mutual commitments shared across all actors of the ecosystem. We explore the principles and tensions of allocating resources for education with a mindset of abundance. Through the use of vignettes and frameworks, we explore the nature of and functioning of a thriving ecosystem.

Governance

Guiding Principles

Governance is a means of ensuring that the system is working as it was intended, and a means of deciding what adjustments should be made when expectations fall short of reality. In the current education paradigm, governance is understood as the policies and processes through which members of a governing body—for example, a local school board—carry out general supervision and decision-making on behalf of the system or community they represent.

Yet, current systems of education governance are ill-fit for learner-centered ecosystems because they are designed for standardization and, therefore, set up a zero-sum game that inherently serves some and not others. As such, they are top-down, compliance-based systems where people at the top dictate what will happen below. Members of governing bodies act based on what they can see from their own vantage points and, beyond seeking re-election, have minimal incentive to remain deeply connected to the youth, families, and community members they represent. As a result, communication is rarely bilateral, and nuanced information about what is working—and for whom—is devalued or lost. Those who have been disempowered by these processes lose trust in the system, leading to bifurcations in the community (For a more in-depth look at the rigid model of current school boards, see Appendix A: An Exercise—Investigating the Principles of our Conventional Education System).

In the paradigm of a learner-centered ecosystem, however, we reframe **governance as a means of ensuring that the system is working through collective learning and transparent, responsive decision-making.** The system

of governance is meant to build trust by providing not only clarity and transparency around decision-making processes but also opportunity for each person to inform or participate in those processes. In this way, the system of governance is designed to help achieve a sense of shared responsibility and mutual accountability among all members of the ecosystem.

Moreover, we imagine the system of governance to be dynamic, with components assembled and disassembled according to the ebb and flow of need for “just-in-time” decisions. Correspondingly, rather than being merely *representative*, as in a static board comprised of a few members whose authority is privileged; it is responsively and continually *enrolling*, pulling in diverse actors whose unique perspectives are critical to the decision at hand.

“

We need to create avenues for communication and conversations that lead to genuine agreements. Agreements are made so that you as a parent or a community member have the capacity to push for change. One of the main agreements is that this remains a two-way street and always touching base. We need a cycle of touchpoints asking, ‘This is what we said. Did we get it right?’ ”



Bernita Bradley
Founder, Engaged Detroit



Through meetings of the Governance, Accountability, and Resources Allocation team, we created the following list of principles for governance:

- **Inclusive:** Creating consistent opportunities for the diverse voices of those impacted by the system to inform decisions made, with intentional work done to include those historically and currently at the margins of the community.
- **Learner-Centered:** Orienting processes to ensure that decisions are informed by and prioritize the goals, circumstances, and aspirations of the young people in the ecosystem.
- **Relational:** Seeking to forge new and deeper relationships among individuals in the ecosystem with different types of expertise and lived experiences in order to broaden collective understanding.
- **Dynamic:** Assembling and disassembling component structures according to the needs of the decisions at hand.
- **Ongoing:** Continually monitoring and revising decisions as needed so that decisions are not indelible but, rather, represent the next right step forward.
- **Transparent:** Illuminating who is directly involved in, or indirectly influencing, decision-making processes; what information is guiding decisions; what meaning is drawn from that information; and what actions are suggested as a result.
- **Protective:** Ensuring individuals are not harmed by the decisions of others.
- **Enrolling:** Providing opportunity for each individual to engage (not just be represented) and helping foster their sense of shared responsibility.

These guiding principles are intended to spark new thinking by those who want to create learner-centered ecosystems in their own communities. We expect governance systems will vary from one ecosystem to the next according to the needs of the communities involved.

For a more concrete understanding of what governance and oversight of a learner-centered ecosystem might look and feel like, see Appendix B. This appendix includes a vignette that stems from a conversation among members of the Ecosystems Working Group. Far from prescriptive, it is offered to help visualize governance designs that better align with the principles of learner-centered ecosystems.

Reflection Questions

- 1 What governance models have you experienced in your work? How did that model impact you?
- 2 In what ways have the governance models you've experienced upheld one or more of the principles listed?
- 3 Imagine a system based on these principles: What would we see?

Accountability

Guiding Principles

Accountability is a means of making sure a commitment is upheld. It implies a shared understanding of the commitment and agreed-upon ways to measure and make sense of progress toward that commitment. Accountability is especially important to ensuring equity within and across the ecosystem.

Like governance systems, accountability systems in the current education paradigm are top-heavy and not well suited for learner-centered ecosystems. Current systems are designed around a definition of performance that is most often externally imposed, rather than collaboratively defined. And instead of fostering a sense of shared ownership and mutual accountability across the levels and facets of the system, current accountability systems leverage the authority concentrated at the top of structural hierarchies to highlight failure and apply pressures to coerce better performance from the rest of the system.

Within a learner-centered ecosystem, however, we reframe **accountability as a way of looking out for the wellness of the ecosystem based on mutual commitments shared across all actors of the ecosystem**. Every actor shares some piece of responsibility for the ecosystem, and each actor is therefore accountable for ensuring they are doing what they can to support the success of the ecosystem.

In this paradigm, accountability operates on the foundation of a shared understanding of what success looks like in a broad sense—not prescriptively, as if some external

entity determines how each person performs, but in broad strokes that communicate shared values and a vision for what a healthy ecosystem would look and feel like. Stakeholders representing diverse perspectives across the ecosystem come together to ask: “What is it we are committing to, together? What is each of our roles in holding up that commitment? And what does each one of us need from each other to be successful?” Then, within this broad frame, success can be defined for each learner, learning environment, community, business, or any other component in the ecosystem, and reciprocal relationships begin to take shape.

Accountability in a learner-centered ecosystem also implies different ways of thinking about data beyond standardized numerical outputs. In order to fully understand progress, the information gathered could be as nuanced as the complexity of the ecosystem itself. Thus, accountability systems are grounded in firsthand accounts as much as possible, reducing the number of inferences or assumptions that are made by external audiences about what is or is not working. And while there may be some standardized measures that provide a more global picture of equity in opportunity across the ecosystem, such measures should carry no larger a footprint than the limited purposes for which they are intended.

Here are our suggested principles to guide the design of accountability systems:

- **Transparent:** Providing visibility into how judgments or determinations are made and the information they are based on.
- **Holistic:** Defining each ecosystem member’s responsibilities to support the success of others and the ecosystem as a whole.
- **Reciprocal:** Meeting the expectations placed upon one group or actor in the ecosystem with corresponding investments in their capacity to carry out those expectations.
- **Learning-oriented:** Holding space for honest accounting of shortcomings in ways that encourage growth and learning and that advance the collective.
- **Grounded:** Relying as much as possible on firsthand accounts of what’s happening, rather than inferences made by outsiders.

Altogether, the various sources of rich information about progress toward shared commitments should be routinely examined by a governance structure that supports collective learning, sense-making, and participatory decision-making. Again, we anticipate that accountability systems will vary from one ecosystem to the next according to the needs of the communities involved.

Reflection Questions

- 1 What accountability models have you experienced in your work? How did those models impact you?
- 2 In what ways have the accountability models you’ve experienced upheld one or more of the principles outlined above?
- 3 Which principles above seem most different from the models you’ve experienced?

Resource Allocation

Guiding Principles

Resource allocation is the means through which investments (money, time, and expertise) are funneled to various parts of a system. It implies a process for determining where resources are needed and ensuring their deployment.

In the current education system, resource allocation is often understood to include all funding earmarked for schools and their personnel coming from federal formulas, local taxes, and other municipal or philanthropic funds. These resources are typically doled out on a per-pupil basis, based on enrollment counts taken the year prior. Sometimes—though not always, and not for all funding streams—limited increases in funding are given based on student demographics or other determinations of need. And because funding is limited, different schools and districts are prone to fighting as they try to maximize their slice of the pie.

In the context of a learner-centered ecosystem, however, resource allocation could be inclusive of the full abundance of resources available throughout an ecosystem, and



could be able to deploy resources in a “just-in-time” way according to the needs of every learner. As such, we reframe **resource allocation as a means for distributing and making smart use of all of the resources and assets being invested in human development in an ecosystem.** This includes but is not limited to the following:

- Federal, state, and local funding for schools
- Funding for community colleges
- Local or municipal spending on education, youth development, preventative healthcare, and afterschool care
- Philanthropic spending on education, youth development, preventative healthcare, and afterschool care
- Spending on community safety and behavioral supports
- Local industry spending on training and employee development

If the ecosystem’s governance system has purview over a bigger pie of resources than what traditionally constitutes school budgets, it is better positioned to understand where to allocate new investments. Governing members can better determine where different entities are investing separately toward the same goals, thereby replacing redundancies that squander resources with partnerships that multiply them. Governance and accountability structures can also better monitor and understand how value is built along the entire value web of inputs and investments. This, in turn, leads toward outcomes that include the health and wellness of young people and the ecosystem as a whole.

We suggest the following principles to guide the design of resource allocation:

- **Transparent:** Enabling any participant in the ecosystem to be able to see what sources of funding are available, where that funding is currently going, and how those decisions are being made.
- **Coordinated:** Pooling investments across different sources in an ecosystem to help streamline services. This includes investments made by not just education agencies but also by health agencies; children, youth, and families; foster care; local, state, and federal government agencies; city and county; and philanthropic sources.

“

If every child and family member knew what funding was already in existence . . . we [can] center the work around creating an open place to say, ‘I want to co-create with my family and other learners a system that really works for us.’ The funding doesn’t just have to be from educational agencies. It could be from healthcare, housing, and different offices from local, state, and federal levels. How do we access those funds over the entirety of a child’s education to develop a really strong learning environment for students and families that is self-governed and much more localized and sustained? ”



Kara Bobroff

Founder, Native American Community Academy, NACA-Inspired Schools Network, and One Generation

- **Equitable:** Channeling resources where they are needed the most.
- **Participatory:** Creating opportunities for all members of an ecosystem to recommend changes to resource allocation through a distributed governance structure.
- **Monitored:** Collecting and sharing robust information—both quantitative and qualitative—that demonstrates how investments in one part of the system are impacting outcomes in that part and other parts of the ecosystem.

While systems of resource allocation will vary from one ecosystem to the next according to the needs of the communities involved, we believe these principles should be thoughtfully reviewed. We urge a return to the mindset of abundance—setting aside the assumptions of a zero-sum game—as you reflect on these principles and consider how they might be applied to your unique ecosystem. See Appendix C for an idea for a technological tool that would support this reimagined view of resource allocation in ecosystems.

Reflection Questions

- 1 What resource allocation models have you experienced in your work? How did those models impact you?
- 2 In what ways have the resource allocation models you've experienced upheld one or more of the principles outlined above?
- 3 Which principles above seem most different from the ones you've experienced?

Tensions and Trade-offs

As we imagined what systems of governance, accountability, and resource allocation might look like in a learner-centered ecosystem, we identified a set of core tensions that will need to be attended to and reconciled within the context of each community's inventive work. These tensions represent both philosophical and potentially structural friction between guiding principles. It will be important to address them head-on in community-wide conversations that take place on the front-end of and throughout an ecosystem design process. Tensions include the following:

- Making change *easy enough* (so that problems are readily noticed and acted upon) and *hard enough* (so that selfish actors can't game it for themselves).
- Honoring *complexity* in the data we collect while needing *simplicity* for clear communication and decision-making.
- Encouraging *responsive* decision-making based on the will of the majority versus *learner-centered* decision-making based on each learner's own desires and needs.
- Balancing a *learning orientation* (with tolerance for failing-forward) with the *urgency of getting it right* (without harming anyone or wasting resources or opportunity in the process).

In addition, we acknowledge that while systems of governance, accountability, and resource allocation should align with values such as equity and collective good, we cannot build systems that expect all people to behave in alignment with those values at all times. We also cannot build systems that are easily corrupted when people act on self-seeking motives.

Instead, these structures should be designed so that even those who try to exploit the system for their own gain are compelled to do so in ways that benefit the ecosystem. Inspiration for how to do this might come from existing examples, including the following: benefit corporation legislation that requires consideration of public benefits, in addition to profits; or incentives that use bonuses, loan forgiveness, or tax breaks to incentivize behaviors that promote equity; and efforts that expand accountability measures and dashboards from a narrow institutional lens to one that looks at ecosystem-wide criteria for success.



Glimmers of the Future

As we imagined what systems of governance, accountability, and resource allocation might look like in a learner-centered ecosystem, we were inspired by many frameworks and examples of systems that exist today and that represent one or more of the guiding principles described throughout this chapter.

We share just a sampling of these “glimmers of the future,” both as potential starting points for communities and as testimony that new ways of being are within reach.

Governance

En’owkin

Quaker Group Discernment

Holacracy

City Neighbors Cooperative Board

Kentucky United We Learn Council

North Dakota Student Cabinet

Cynefin Framework

Arnstein’s Ladder of Citizen Participation

vTaiwan

Accountability

Blameless Reporting

Abolitionist Accountability

Empowerment Evaluation

Logic Models for Program Evaluation

Graduate Profile, New Mexico

Performance Assessment for
Competency Education

Educational Collaborative Network
Questionnaire

Data Equity Framework

Resource Allocation

Solidarity Economy Movement

Participatory Budgeting

Funding Models for Personalized and
Competency-Based Learning

Blended and Braided Funding

Governance

En'owkin

En'owkin is both a philosophy and practice of collective decision-making that stems from the Okanagan Nation. As described by Jeannette Armstrong in "[En'owkin: What It Means to Be a Sustainable Community](#)," the Okanagan people used this concept whenever the community was confronted with a choice. The word itself "elicits the metaphorical image . . . of liquid being absorbed drop by single drop through the head (mind)," and it refers to "coming to understanding through a gentle integrative process." Clear norms guide the process, including a first stage of judgment-free collection of information from those with a diversity of opinions followed by a second stage of challenging the group to "suggest directions mindful of each area of concern put forward."

Each speaker in the process self-identifies with one of four roles, each of which is critical to the process: "youth," who identify innovative possibilities; "fathers," who safeguard the group's security, sustenance, and shelter; "mothers," who are mindful of policy and the workability of systems; and "elders," who preserve connection to ancestry and the land. And, as Armstrong emphasizes, the "point of the process is not to persuade the community that you are right, as in a debate," but to allow each person to be "fully informed" by seeing the viewpoints and concerns of others, and to "choose willingly and intelligently the steps that will create a solution—because it is in your own best interest that all needs are addressed in the community." In this way En'owkin serves to achieve solidarity.

SOURCE

<https://www.ecoliteracy.org/article/enowkin-what-it-means-be-sustainable-community>

Quaker Group Discernment

The Quaker practice of group discernment is an example of consensus decision-making in which the community attempts to collaboratively discern God's will for issues that affect the collective. In "[Principle vs. Preference: The Speed of Quaker Decision-Making](#)," C. Wess Daniels describes the practice and how it affects both the speed and efficacy of decisions. Acknowledging that Quaker decision-making is "deeply counter-cultural for a culture of people who grow up learning to value the practice of voting," he describes how the process changes the emphasis of the decision. While a process like voting is quick to get to a decision, it creates winners and losers who impede collective buy-in and cause friction when carrying out all the actions that follow a decision. On the other hand, Daniels reflects that Quaker group discernment may be slower in the process of bringing everyone into a decision before it is made, but for that very reason it is faster on implementation because the act of deciding was itself a "community building process."

SOURCE

<https://medium.com/nursery-of-truth/principle-vs-preference-the-speed-of-quaker-decision-making-58286864b08d>



Holacracy

Holacracy is a model for flat management and governance currently practiced by businesses across the world ranging from Zappos to Mercedes-Benz. The [Holacracy Constitution](#) outlines holacratic roles, authorities, and “accountabilities” for every person in an organization. The constitution also describes the self-managed governance processes that are initiated whenever any member of the organization identifies a tension that impacts their or another person’s ability to carry out their roles. A governance meeting is called and attended by a strictly defined set of people organized around the specified role(s) or purpose(s) impacted by the decision. Governance meetings follow a [strict protocol](#) through which tensions are explored and, if it is determined they rise to the level of an “objection” (as defined by criteria explicit in the constitution), the objector offers a proposal to resolve the tension. Participants are then asked to respond to the proposal. The phrasing of the request for feedback is important: not “Do you like it?” or “Do you agree?” which can trigger ego-centric responses, but “Does this proposal cause harm?” In this way, the process inclines toward innovation and experimentation. If potential harm is identified, however, the proposal is revised and the process repeats until the group can reach full consensus.

SOURCE

<https://www.holacracy.org/constitution/5>

City Neighbors Cooperative Board

City Neighbors Charter Schools, which operates two K–8 schools and one high school in Baltimore, Maryland, has a cooperative governance model built on a foundation of strong family-school relationships and parental involvement. As illustrated by its [Governance Arch](#), each K–8 school has a board that includes twelve members: the principal, a student representative, a teacher representative, eight parent representatives who each chair a committee, and one parent representative who is a member at large. (The City Neighbors High School Board includes four students, four parents, and four staff members.) The boards strive to reach consensus in their deliberations; in fact, it is written in their bylaws to do so. The schools aim to increase representation and participation by using the board positions as an organizing tool—inviting every parent in the student body to become involved through multiple committee opportunities. Moreover, school leaders have intentionally developed a culture that prioritizes collective good in their decision-making, asking parent representatives to notice when they are speaking from their “parent hat” as opposed to their “board hat.” The effect is a set of community-embedded schools that are parent-driven, where parents “push with” school leadership instead of “push against” as occurs in school boards elsewhere.

SOURCE

https://drive.google.com/file/d/1gxmV6v_XLe4wD2skl749J5KSsL3X7_1b/view

Kentucky United We Learn Council

Tasked by the Kentucky Board of Education to develop and advance a new vision for education in the state, education commissioner Jason Glass created a diverse statewide coalition, the Kentucky Coalition for Advancing Education (KCAE). The process took an unusually intentional approach to inclusion, with its membership composed in equal parts of participants nominated by state education leaders, participants who heard about the effort and applied to join, and participants who were cold-called and invited in. Inclusion extended to an intensive focus on belonging and valuing the expertise of all participants, including all backgrounds and professional positions.

Together, the coalition explored the current state of education in Kentucky through empathy interviews with stakeholders across the state and developed user profiles that communicate the diversity of how stakeholders experience the system. They then worked together to create a shared vision for the future of education in the state, and launched a learning community of “local laboratories of learning” (L3) districts that will develop and test models that advance the shared vision. Since then, with support from a federal grant for innovating assessment systems, the state created a new governing body called the Kentucky United We Learn (KUWL) Council to help channel insights from the L3 innovations into statewide policy and systems change.

Like the original KCAE, the KUWL Council is intentionally diverse and representative of the multitude of perspectives (including educators, families, community members, and students), demographics, and geographies across the state.

SOURCES

<https://education.ky.gov/CommOfEd/Pages/Kentucky-Coalition-for-Advancing-Education.aspx>

<https://education.ky.gov/CommOfEd/Documents/United%20We%20Learn%20Report.pdf>

<https://education.ky.gov/UnitedWeLearn/Pages/United-We-Learn-Council.aspx>

North Dakota Student Cabinet

The North Dakota Department of Public Instruction’s State Superintendent’s Student Cabinet demonstrates the importance of including youth perspective in governance decisions. The Student Cabinet engages youth with diverse perspectives, including those for whom the system is not currently working, and convenes them routinely over an 18-month period. In this way, the youth not only provide just-in-time input on decisions but also are involved in monitoring what happens after decisions are made.

SOURCE

<https://www.youtube.com/watch?v=H2q3egvm8Vk>



Cynefin Framework

Cynefin is a decision-making framework and typology currently employed in multiple sectors across the world to help organizations and agencies make decisions in context. A set of group facilitation methods help members of an organization develop a shared sense of context surrounding the decision and, correspondingly, the most promising actions to take moving forward.

SOURCE

<https://thecynefin.co/about-us/about-cynefin-framework/>

Arnstein's Ladder of Citizen Participation

Arnstein's ladder is a conceptual framework developed by Sherry Arnstein in 1969 to describe the variety of ways in which citizens can be involved in planning and decision-making processes, arranged hierarchically to demonstrate increasing degrees of participation and control by citizens. An adaptation of Arnstein's ladder by Juliet Young is particularly relevant to community-led organizing.

SOURCES

<https://organizingengagement.org/models/ladder-of-citizen-participation/>

https://twitter.com/juliet_young1/status/1384604477697761281

vTaiwan

As described by Taiwan's first digital minister, Audrey Tang, vTaiwan is an online platform supporting civic participation across Taiwan. Any citizen can participate in the platform to share their own ideas or provide feedback on others' ideas. vTaiwan uses a process called quadratic voting to calculate and visualize areas of "rough consensus" where people mostly agree on a way forward. The system is used by the Taiwanese government to gather public input on all petitions, regulations, and budget items up for vote. Citizens can also propose their own ideas on the platform, and if they meet a threshold of agreement, the government is legally bound to explore and respond to the idea. The platform has been used to reach rough consensus on issues ranging from how to regulate Uber to the elimination of plastic straws at bubble tea shops. The latter came from a proposal by a citizen who was just 17 years old at the time.

SOURCE

<https://www.howtocitizen.com/episodes/fast-fair-fun-with-digital-minister-audrey-tang>

Accountability

Blameless Reporting

In 1999, Julie Morath, the newly minted chief operating officer of Children’s Hospital and Clinics in Minneapolis, made patient safety her top priority but took a rather unusual approach. Whereas medical accidents and near-misses were typically handled by identifying who was to blame and shaming or punishing them, Morath built a patient safety initiative with “blameless reporting” at its core. As described in a Harvard Business School [case study](#), blameless reporting allowed medical staff to report accidents and near-misses anonymously through a new patient safety report, encouraged them to provide their own perspective on what happened through “good catch” logs, and invited broad participation in solution-finding efforts like “focused event studies” and “safety action teams.” In doing so, culture shifted from a mentality of blaming individuals for failures to collectively understanding system complexity and eliminating where breakdowns occur in systems and processes. Additionally, Morath revised how the hospital reported medical mistakes to the families involved, favoring greater transparency than the tight-lipped policies of the past. While some participants felt the new system put the hospital at legal risk and made it harder to root out individuals who were falling short, others felt the resulting culture shift made them more invested in patient safety than ever before.

SOURCE

<https://hbr.org/podcast/2019/09/how-a-new-leader-broke-through-a-culture-of-accuse-blame-and-criticize#:~:text=Google%20Podcasts%20%7C%20RSS-,Children's%20Hospital%20%26%20Clinics%20COO%20Julie%20Morath%20sets%20out%20to%20change,for%20the%20act%20of%20reporting>

Abolitionist Accountability

In a talk at the 2020 Assessment for Learning Conference, Robert Harvey, the superintendent of East Harlem Scholars Academies, imagined a fundamental rethinking of accountability in education aimed not toward standardization but toward “freedom from oppression and injustice, for the folk who move, live, and function within the system.” Drawing from his book *Abolitionist Leadership in Schools*, Harvey explores how “[abolitionist accountability](#)” is a communal pursuit that seeks to tell a different set of stories and reports nuance and meaning that exist but are often covered up by big data.

SOURCE

<https://app.participate.com/pages/abolitionist-accountability>



Empowerment Evaluation

Trained psychometrician Susan Lyons imagined what accountability might look like if it were informed by advancements in [empowerment evaluation](#), an emerging practice of program evaluation that is focused on continuous improvement and puts local stakeholders in the driver’s seat. As Lyons noted in her talk at the 2020 Assessment for Learning Conference, applying principles of empowerment evaluation to educational accountability would “involve engaging with communities in defining their goals, priorities, and values for schooling; partnering to provide resources and tools to formatively evaluate progress toward those goals; and ultimately benefiting all students through locally driven, sustainable school program improvements.”

SOURCE

<https://app.participate.com/pages/empowerment-evaluation>

Logic Models for Program Evaluation

In order for learner-centered ecosystems to monitor progress toward shared commitments, accountability system designers thoughtfully align what they measure with the outcomes they are after. Logic models can be used to aid these measurement goals. Several tools have been developed to help a variety of stakeholders design logic models, including a presentation on [Logic Model Building](#) developed by the Learning Accelerator, a [Logic Model Workshop Toolkit](#) created by the Institute of Education Sciences (IES), and IES’s downloadable browser-based application called the [Education Logic Model Application](#).

SOURCES

<https://practices.learningaccelerator.org/artifacts/logic-model-building>

<https://ies.ed.gov/pubsearch/pubsinfo.asp?pubid=REL2015057>

<https://www.youtube.com/watch?v=BrN27HcMm9k>

Graduate Profile, New Mexico

In 2018, after a lawsuit compelling the State of New Mexico to meet its constitutional obligation to provide all students adequate resources to become college and career ready, state policymakers put forward an effort to redesign assessment and accountability systems with ones that honor students’ linguistic and cultural assets. Uniquely, they did not follow a top-down approach to redesign but instead stepped aside to support a [community-engaged approach to creating Graduate Profiles](#) that are locally owned and speak to the unique values of each community.

SOURCE

https://futurefocusededucation.org/wp-content/uploads/2019/01/FFE_White-Paper_fulldraft_print.pdf

Performance Assessment for Competency Education

In 2015, the New Hampshire Department of Education was awarded permission from the U.S. Department of Education to pilot a new accountability model that used performance-based assessments (some common across the state, and some entirely locally designed) in lieu of some state standardized assessments. Known as the Performance Assessment for Competency Education (PACE) initiative, this model sought to transform state assessment and accountability from its top-down, heavy-handed approach to one that prioritizes local capacity-building. To utilize PACE, educators collaborate on designing and scoring performance-based assessments that capture a broader range of the knowledge and skills that matter most.

SOURCE

<https://www.education.nh.gov/who-we-are/division-of-learner-support/bureau-of-instructional-support/performance-assessment-for-competency-education>

Educational Collaborative Network Questionnaire

Jordi Díaz-Gibson and colleagues noted the increasing number of collaborations between education entities and community organizations, both public and private, around pressing issues in education and child well-being. They termed these collaborations “Educational Collaborative Networks” and created a questionnaire to help assess ECN effectiveness. The questionnaire covers five variables of leadership strategies (co-responsibility, transversality, horizontality, collaboration, and projection) and six social capital variables (trust, community connections, commitment with education, participation and diversity, knowledge generation, and collaborative innovation).

SOURCE

<https://www.tandfonline.com/doi/pdf/10.1080/13632434.2013.856296>

Data Equity Framework

Monitoring commitments by collecting and analyzing data may sound like unbiased endeavors, but the decisions that underlie what data to collect, how to collect it, and how to package and report it are deeply vulnerable to personal biases. To help surface these biases, We All Count created the Data Equity Framework, which provides checklists and tools to help data practitioners “identify and understand each place in your work where you are embedding a worldview or prioritizing a lived experience.” As it explains, data projects will never be free from bias, but using the Data Equity Framework can “show our work” to be transparent about where a project makes choices that reflect a particular worldview, and how those choices support rather than weaken desired equity outcomes.

SOURCE

<https://weallcount.com/the-data-process/>



Resource Allocation

Solidarity Economy Movement

As described by the Intercontinental Network for the Promotion of Social Solidarity Economy (RIPESS) in its [Global Vision for a Social Solidarity Economy](#), a solidarity economy is an alternative to capitalism that “is rooted in the practices of participatory democracy and promotes a new vision of the economy, an economy that puts people at the center of the system and values the links rather than the goods.” It exists both as a visionary framework and a set of strategies [practiced in contexts across the globe](#), including family farming associations and cooperatives in Latin America, “agro-pastoral and artisanal cooperatives, savings and credit cooperatives, [and] health insurance mutuals” in Africa, and “short-circuit” producer-consumer associations in Japan. In [Massachusetts](#), a collective of community-based social justice organizations is advancing the solidarity economy concept through a set of initiatives using solidarity economy strategies like building a network of worker-owned cooperatives, organizing tenant buy-outs, generating economic alternatives through social economies, and creating an “ecology of coops” driven by youth and adults from historically disadvantaged communities.

SOURCES

https://www.ripest.org/wp-content/uploads/2017/08/RIPESS_Vision-Global_EN.pdf

<http://webalice.viabloga.com/actualites.shtml>

https://tsne.org/downloads/SEI_SolidarityRising_Final.pdf

Participatory Budgeting

Participatory budgeting is a practice in which people democratically decide how to spend public money. According to the Oakland, California-based [Participatory Budgeting Project](#), the practice involves an annual cycle of civic engagement in a budgeting process, most commonly involving discretionary public funds set aside for this purpose. It originated in Brazil in 1989 in an effort to reduce child mortality and combat poverty and, since then, has spread across the world. Examples in the U.S. include the [Boston Ujima Project](#), in which a capital fund is financed through direct equity investments from neighborhood residents and is democratically governed; and the [Phoenix Union High School District](#), which allocates district-wide funds that are controlled by students through participatory budgeting.

SOURCES

<https://www.participatorybudgeting.org/what-is-pb/>

<https://www.ujimaboston.com/>

<https://www.participatorybudgeting.org/what-happens-when-students-lead-pb/>

Funding Models for Personalized and Competency-Based Learning

Within the realm of school finance, concepts are already being advanced to make funding portable, meaning dollars follow students wherever they enroll, and divisible, meaning students can divide funds among more than one type of learning experience. These and other concepts—including how to make funding decisions that align with values such as equity and competency-based learning—are discussed in the Center for Innovation in Education paper “[Funding Student Success: How to fund personalized, competency-based learning.](#)”

SOURCE

https://docs.wixstatic.com/ugd/fbcfbd_3ab9ed8aef384fbf983f5f24949073d9.pdf

Blended and Braided Funding

Blending and braiding are two strategies for combining revenues from multiple sources to achieve program aims. In blended funding strategies, funding from multiple sources is pooled into one pot from which funds can be allocated as needed. In braided funding strategies, multiple funding sources are used to achieve broad, collective goals, but each funding source remains distinct and is separately accounted for. Toolkits for designing blended and braided approaches have been advanced in several areas of school finance including [early childhood](#), [higher education](#), and using [federal title funds for COVID recovery](#) or [school turnaround](#).

SOURCES

<https://www.ccf.ny.gov/files/7515/7909/7916/BlendBraidGuide.pdf>

https://www.nccommunitycolleges.edu/sites/default/files/basic-page-file-uploads/ccr/bff_0.pdf

<https://www.wested.org/resources/blending-braiding-federal-title-funds/>

<https://csti.wested.org/wp-content/uploads/2018/04/CST-Thought-Leadership-Forum-Brief2-Braiding-Fed-Funds.pdf>



Chapter Three

Assessing and Credentialing of Learning



WRITTEN BY
Maria Worthen

What does assessing and credentialing look like in a learner-centered ecosystem? How do learners curate and tell the stories of their learning? How do they effectively and succinctly communicate the competencies they build?

In the thriving learner-centered ecosystem, we see every child as a full, vibrant human being—and that the world is where they will discover their whole self. Learning, therefore, is recognized as a dynamic process of discovery. This shift to valuing growth of each unique person leads us to define and measure success in new ways. The function of assessment becomes the means by which a learner sets, owns, and understands their trajectory and development toward those success metrics.

In 1994, David Tyack, William Tobin, and Larry Cuban used the term “the grammar of schooling” to describe the underlying blueprint of schooling that organizes and describes what we think of when we think of education (Tyack and Cuban, 1995). The grammar of schooling blueprint includes standardized assessments as tools for sorting learners and credentials connected to tracking, both serving to maintain a dominant culture and reinforcing

social inequities. In order to step away from the grammar of schooling and envision something new, we begin with a mindset shift to a learner-centered worldview, and imagine together the assumptions of a system that is equitable, learner-centered, and community-based.

In an ecosystem, as an alternative to a grammar of schooling, we seek to prioritize a language of learning, embodied in a new way of thinking about and doing assessment. Assessment is a process that allows learners, educators, families, and community members to describe what they are learning, show how they are growing in their understanding and competency, and identify goals for further growth and support.

To prioritize this language of learning in the ecosystem, storytelling becomes a central act of assessment, with learners creating and owning their own narratives of learning, interwoven with the narratives of others' journeys (Bruner, 1991). These narratives provide a more organic way of understanding the health of the ecosystem over time, revealing patterns and behaviors that shape and impact the ecosystem.

Because this mindset shift values stories and authentic growth over time, credentialing becomes an important lever for building trust, reliability, and credibility in the ecosystem (Lave and Wenger, 1991). Credentials serve as

“Not only mutual responsibility but mutual opportunity—everybody in the ecosystem is a learner. That really reframes and actualizes opportunities for scaled learning and people seeing themselves as growing simultaneously, which seems like a high-value proposition to be able to propose to a community.”



Robert Sherman
Consultant to Nonprofits
& Foundations

a means through which learners and others can tell, share, and make sense of each learner's narrative of their own learning, creating markers and milestones within that story.

Therefore, learner-centered ecosystems view assessment and credentialing as functions in service of each learner pursuing their unique learning journey. **Assessment is characterized by a commitment to building understanding and agency for each learner**, and **credentials become tools of communicating levels of competency to oneself and the greater community**. In this chapter, we share guiding principles, tensions and trade-offs, and glimmers of the future, while also posing essential questions that communities might consider in their development of ecosystems.

Assessing Learning

Guiding Principles

When we frame assessment of learning in this way, it becomes characterized by a commitment to building understanding and agency for each learner. Assessment amplifies the learner's voice to tell a nuanced story of their individual journey of growing and learning in community in a way that enables multiple choices and pathways to meaningful work, joy, knowledge, well-being, and self-actualization. Literacy and numeracy are seen as tools for independence and liberation, which are essential for every child to be a contributor to the community and world.

We suggest the following principles to guide the development of assessment structures in ecosystems:

- **Empowering:** Enabling learner agency in the creation or choice of the assessment mechanism.
- **Reciprocal:** Creating natural cycles of feedback and reflection in the child's ongoing learning journey. Learning can catalyze assessment, and assessment can catalyze learning.
- **Inclusive, equitable, and authentic:** Acknowledging of the many ways people learn, absorb information, and demonstrate their learning. Assessments are deliberately oriented as tools to promote equity and justice. Assessments capture intentional learning, knowing, and doing and unintentional learning, knowing, and doing, and thus match the strengths, needs, and aspirations of the learner.



- **Relational:** Supporting the development of strong, healthy relationships and creating new knowledge about learners and the members of the ecosystem. They can be rooted in community ways of knowing and understanding, so that community members are seen as valued contributors to learning and co-creation who aid in building shared plans for assessments that make sense for each unique community.

Following the guidance of these principles, assessment can be woven into the ecosystem at every level.

Individual level

At the individual level, assessment in the ecosystem provides meaningful and positive ways for learners to talk about their learning and share what matters to them about it. There are dispositions needed for assessment to be truly learner-centered: compassion, care, intimacy, and joy become a natural expression of assessment in the ecosystem. Assessment becomes a vehicle that not only is used to guide learning, but also to build skills and experiences for learners to express their own learning journeys, respecting their natural ways of storytelling and using multiple ways of expressing knowledge including the arts, writing, demonstrations, and digital and real-world application. In addition, assessment may be multidimensional and multi-modal: assessment takes the form that makes the most sense to the learner.

A thriving ecosystem takes into account the lifelong learning continuum, with infinite entry/end points that do not assume a linear progression. Assessments can empower learners of all ages and backgrounds, no matter their level or modality of education. When assessments are adaptive and emergent, rather than fixed on rigid expectations, they create a new level of ownership and intimacy between a learner and their learning and offer a new level of usefulness by giving actionable feedback to the learner that promotes improvement and self-reflection.

Consider assessment as part of a learning progression: assessment can happen throughout the process of learning. The time frame and sequence of assessing is aligned with what will catalyze learning and be in support of the learner. It is about empowering the learner along their journey, rather than as a means to compare or promote competition between learners. Additionally, learning happens over time as people

“

The ecosystem needs built-in opportunities to have deep connections and relationships amongst everyone in the community. We are going to need those relationships. We need to have a vast communication system that will allow things to emerge day by day. ”



Tatiana Alba

Learner, Springhouse
Community School, VA

grow, so assessment can check for understanding in the middle of the learning process, or be a tool for demonstrating knowledge, skills, and insights gained over time.

Essentially, assessment is a storytelling tool, and a way for learners to set goals, track, reflect, and communicate on their personal learning journey. Assessment is a meaningful and organic part of the learning process: it helps the learner articulate “Here are the ways that I am growing,” and helps educators and learning facilitators describe “Here are the ways I see you growing.”

Community level

When we view learning in the ecosystem, there are multiple experiences and multiple stakeholders engaged in the process, including learners, peers, mentees, elders, educators, community partners, and family members. Assessment can equip young people and their families with shared language and feedback cycles, as a means to engage the community in a process that demonstrates shared values of storytelling, agency, relevance, collaboration, and creativity. Assessment of learning, for learning, as learning, becomes part of the fabric of the ecosystem. Demonstrations of learning are part of the community’s culture and done in communal spaces, so self-reflection and celebrating learning are community norms. It becomes a reason for gathering, for celebration, for uncovering blind spots, for deepening relationships, for a culture of continual learning.

Assessment is a way to ensure equity in the ecosystem by continually reviewing community goals for access, transparency, and outcomes. It's not just a one-time event, but rather embedded throughout the ecosystem to encourage reflection in a variety of real-world contexts. The goal is to foster interconnectedness and mutual support within the ecosystem and provide tools for learners to reflect on their learning and identify the next steps in their journey. The design of assessment systems will vary depending on the needs of the community.

The ecosystem can offer the opportunity for structures where experts and elders within the larger community can share in the creation of established benchmarks that help the learner and learning teams have a point of reference for when to begin negotiating formal assessments. While we usually think of assessment as something an individual learner engages in, we can also assess groups of learners, communities, and entire ecosystems. For example, a community might engage in an annual equity audit to tell the story of its progress toward a more just ecosystem.

Credentialing of Learning

Guiding Principles

In the past, the industrial model of credentialing of learning was confined by inflexible policies and structures that measured seat time (physically sitting in your seat in a specific building for a prescribed amount of time) and limited credentialing of learning to singular subjects taught in standardized curriculum, given credibility by standardized tests. The conventional way of credentialing learning has led to educational inequities by sorting students and creating inflexible pathways that reduce learner competencies to single measures.

Credentialing of learning is a shorthand means of communicating that someone knows and can do something. “Credential” stems from the Latin word *credere*, meaning to believe or to trust. A credential can instill confidence that its holder is capable of doing certain things. A high school diploma and a college diploma, we are told, means that a person meets minimum requirements to participate in different areas of the workforce. Both a driver's license and a license to practice medicine give us a certain assurance of safety: “This person can drive a car, observing basic traffic laws and safety protocols,” or “This person is sworn to (and

was found competent by their professional peers to) help and do no harm in a medical setting.”

In a thriving ecosystem, credentialing becomes one of the many levers woven into the fabric and culture of the community. Here we explore some of the ways we might consider credentialing when learning can happen everywhere, when there are multiple means of communicating competencies, and when we consider credentialing as a means of bringing us closer to our goals of generating strong outcomes for individuals and communities, including connecting learners to life outcomes.

In this consideration, we offer four principles for credentialing of learning in an ecosystem:

- **Be a means for equity and justice:** Credentials edify and affirm cultures and identities (for example, recognition of knowledge from a learner's own culture). Credentials communicate skills and knowledge to the greater community and thus can build trust and promote healing and justice, rather than be a means of shutting doors of opportunity and marginalizing specific populations.
- **Affirm knowledge, competency, and pathways:** Credentialing communicates to the learner and to the community the competencies of the learner and ensures clarity of use, translatability, portability, and relevance. Credentials enable opportunity, possibility, and choice.
- **Allow for wide variation of design, delivery, and duration:** Credentials can be responsive, adaptive, and emergent. They evolve with the needs of the ecosystem and the individuals in it. The ecosystem is inclusive of efforts to create and validate new credentials. Credentials are responsive to each learner's individual journey.
- **Amplify learner agency:** A credential's purpose and benefit to the learner should be made clear to allow for maximum autonomy of the learner. Learners may initiate the creation and validation of credentials that best reflect their interests or needs. Credentials amplify the learner's voice to tell a nuanced story of their assets and capabilities.

When we imagine a learner-centered ecosystem, the community and world are the playground for learning—meaning where, when, and how credentials show up is more varied, spontaneous, and nuanced.

A thriving ecosystem has the ability to recognize a wide range of credentials that capture and communicate



learning, skills, and knowledge. Presentations of learning and exhibitions where learners can share their learning, get feedback, and show documentation of their work are avenues for credentialing learning and providing notice of accomplishment and progress. Journals, creative expressions, dance, music, film, writing—all can provide avenues for demonstrating that a competency has been developed and demonstrated. In a learner-centered ecosystem, credentialing systems will ensure clarity of use, translatability, portability, and relevance.

Compared to the current state of credentialing, learner-centered ecosystems have a more expansive understanding of what credentials represent both to the person holding that credential and to the broader community. For example, there is often a mismatch between “workforce-ready” credentials like diplomas, and the competencies needed to succeed in a particular job. In a learner-centered ecosystem, employers can collaborate more closely with learners and learning hubs to design relevant credentials that set both learners and employers up for success. These may take the form of industry certifications, micro-credentials, badges, or less formalized recognitions of knowledge and skill. These are just a few examples of how credentialing in the ecosystem can allow for maximum autonomy for learners since they can track, promote, and continue to add to their unique credentials over time.

Credentials tell the story of what a learner can do and knows, and how they might build on the assets of their community. They may mark an important moment in the learner’s journey, or they may provide a reframing of existing knowledge and skills. Credentials can be formal or informal. They represent a celebration of the sharing of knowledge between a learner and their community. Credentials can give meaning to learning experiences and milestones. Their primary benefit is to the learner.

Ways of credentialing that fall outside of employment readiness or safety are equally important. For example, these may include important rites of passage and stature in a community, such as a ceremony recognizing a learner’s mastery of Hula culture, chants, and dance in Hawai`i; or the Jewish bar or bat mitzvah, which acknowledges a young person’s readiness to read sacred texts before the community.

When we consider credentialing of learning in the ecosystem, it is woven throughout the experience of each learner and also impacts the culture of the community

that is engaged. Credentials are intentionally designed to reflect the ecosystem’s values. For example, stakeholders may articulate the ways that credentials have historically been used to marginalize certain groups of people and reinforce disparity in their community or ecosystem, and intentionally design credentialing systems with equity and justice in mind. Thus, it is important to view credentials from marginalized perspectives and consider how we use credentialing as a function that is designed to strengthen connections and create coherence and alignment toward desired outcomes, careers, and pathways.

Tensions and Trade-offs

The following two frameworks on page 38 and page 39 are designed to help us consider some of the challenges we face in shifting the way we think about and engage with assessment and credentialing of learning in the ecosystem.

As ecosystems develop a vision for the functions of assessing and credentialing, they are likely to encounter a number of tensions and trade-offs. Choices will need to be made. Acknowledging and discussing these tensions and trade-offs is important for creating trust, transparency, and—when necessary—consistency and reliability.

“

One of the things we have to put into our system is a way for young people to get connected to their authentic selves—early. How amazing to be in an environment where everyone felt valued. The community is looking for you. Everyone is looking for you in a positive way ... that would be wonderful. ”



Todd Smith
Chief Executive Officer,
Symphony Workforce

Assessment Trade-offs

On one hand...	...on the other hand
In many cases, assessments have historically been designed to shut doors of opportunity and marginalize specific populations.	We can reclaim the term assessment as an integral part of the learner's journey.
Assessments are too often attached to high stakes that are not in the learner's interest.	Not every high-stakes outcome of assessment (e.g., an industry certification) goes against the learner's interest. It may enable pathways to prosperity.
The concept of assessment is often conflated solely with statewide summative assessments and/or other types of standardized tests.	Assessments encompass a wide variety of tools that learners, educators, and community members can use to reflect on their own learning and empower authentic choice making about next steps.
Assessment may be seen as inherently hierarchical.	There are ways of assessing that are egalitarian and empowering.
Definitions matter. It is important to ensure stakeholders are on the same page about what different terms mean to them and how they relate to the vision.	It is hard to create a coherent vision if we cling to established definitions. Stakeholders may need to leave behind some assumptions about what "assessment" means, and reclaim it as a meaningful part of learning.
Assessing learning helps learners, educators, experts, and families make decisions about next steps in the learner's journey. Next steps matter, because learning never ends and assessment is a tool for learners to tell their stories.	The assumption that there must be a next step could make assessments merely transactional, leaving behind the opportunity they create for fostering intimacy and storytelling.
Aligning assessment to a developmental model—essentially right-sizing the assessment to where a learner is in their learning—is responsive to the learner and fosters ease and joy in sharing where they are in their learning journey.	Aligning assessment to pre-set learning milestones can create momentum and raise awareness of when additional support and resources may be needed to help a learner reach their potential, and provide feedback to the ecosystem when ableism and low expectations are present.

“

Assessment and credentialing give us something to reference, [to look] back to, to show growth. Not for anybody else, but for yourself, it is really valuable to show your own personal growth. The emphasis should be for your own reflection and not for other people. I also think that feedback is really important just to grow and progress as humans. We need other people's feedback. Maybe we shouldn't call it credentialing anymore. ”



Olivia Christensen

Graduate, Iowa BIG; Prospect Development Associate,
Greater Twin Cities United Way



Reflection Questions

- 1 Do you remember a time when feedback helped you grow?
- 2 Can you think of more ways to weave assessment into the life of the community? Of individuals?
- 3 What is a credential you've earned that is meaningful to you? What is one that is not useful?



We need participation from all parts of the community. School can no longer be a thing that only matters to parents of K–12 individuals and teachers and administrators and—every once in a while—politicians. It's not a place where we send everyone to be until they are ready to be a part of the real world. ”



Sarojani Mohammed
 Founder + Principal,
 Ed Research Works

Credentialing of Learning Trade-offs

On one hand...	...on the other hand
Credentialing has often been designed to shut doors of opportunity and marginalize specific populations.	Credentials can open doors to opportunity and recognition for skills and knowledge.
A degree or certification does not guarantee that someone has the dispositions and noncognitive skills to thrive as a collaborator.	Even when additional judgment regarding a candidate's skills and dispositions is required, credentials save labor and can mitigate some of the individual bias that goes into deciding on a case-by-case basis whether someone knows and is able to apply a particular competency or standard.
There is value in creating flexible and varied opportunities by which credentials can be developed, demonstrated, and earned.	Some level of standardization in what having a credential means is imperative for it to be a trusted, reliable, and credible mechanism. For example, we want to know that our doctor has the appropriate knowledge, skill, and ethics to improve our health and do no wrong.
We should be mindful that credentials have been used as tools of gatekeeping and oppression.	Credentials can allow us to verify skills and knowledge without bringing individual bias into our judgments of a person's competence.

Glimmers of the Future

There are incredible examples of how learner-centered leaders and others are already reimagining and implementing new ways of assessing and credentialing learning, within the K–12 space and well beyond. That’s why we’ve compiled a list of “glimmers of the future” to inspire new thinking, provide new starting points, and spark transformation.

To note, up until this point in the chapter, we have investigated assessing of learning and credentialing of learning as two distinct structures. While they are often merged in education conversations, we’ve acknowledged it is important to take them apart and understand how they each would operate and often intersect in a learner-centered ecosystem. However, when looking at examples already at play, we felt it was counterproductive to separate them out, as many of these examples provide insight into reimagined ways of structuring both assessment and credentialing of learning.

Assessing and Credentialing of Learning

HÅ

The Learning in Places Project

Iowa BIG

Big Picture Learning

Expanded Learning Information System, Dallas

Mastery Transcript Consortium

VLACS, New Hampshire

Center for Advanced Professional Studies

Green Light Credentials



Assessing and Credentialing of Learning

HĀ

The Hawai`i Department of Education developed HĀ, a culturally-rooted, shared learning framework for the state, to promote the unique context of Hawai`i and to honor the qualities and values of its indigenous language and culture. HĀ's six interdependent outcomes (belonging, responsibility, excellence, aloha, total well-being, and Hawai`i) may be voluntarily adopted by communities, who together decide how to guide learning. This culturally-rooted framework could form the foundation of a learner-centered ecosystem, with case studies providing insights into how it is being adopted in context.

An example of the application of HĀ is the Mele Murals visual storytelling initiative, which brings learners and learning guides together to create large-scale murals that tell the story of Hawai`i and local history. The initiative involves youth in every step of the mural-making process, from securing a wall to collaborating on a design, to creating the mural and celebrating its completion. Community leaders and cultural practitioners meet with youth and share the importance and meaning of the songs and chants. The tangible artifact of the mural, in addition to the learner's reflection on their learning, identity development, habits, and dispositions—providing a rich context for assessment.

According to case study authors Kāheha Kim and Jessica Worchel, “The HĀ framework is allowing not only ‘official’ teachers in the DOE system to educate our keiki, but providing a platform for community to meaningfully engage as well. It has created a shared language that anyone can access and bring their gifts and talents to the collective goal of creating educated, healthy, and joyful lifelong learners who contribute positively to our community and global society.” The Mele Murals initiative is just one example of how HĀ is being adopted in context, offering a model for how culturally-responsive assessments can be integrated into learner-centered ecosystems to provide meaningful, place-based learning opportunities.

SOURCE

<https://www.hawaiipublicschools.org/TeachingAndLearning/StudentLearning/HawaiianEducation/Pages/HA.aspx>

The Learning in Places Project

The Learning in Places Project is a pioneering K–3 science curriculum and school garden-building initiative that provides an example of a new blueprint for the future of assessment. It seeks to foster complex ecological reasoning and decision-making among students by operating within an ecosystemic framework that involves families and community organizations. By providing a suite of family learning tools centered around “wondering walks” and visual learning progressions known as “storylines,” the program creates intimate and empowering learning environments that are deeply connected to place and community.

SOURCE

<http://learninginplaces.org/>

Iowa BIG

Founded in the 2013–2014 school year by the Cedar Rapids and College Community School Districts, Iowa BIG serves nearly 200 students in the Cedar Rapids metro area. Learners at Iowa BIG have a say in what they learn and how they learn it, as they work on real-world projects and collaborate with community partners to make a meaningful impact. This hands-on approach allows students to develop critical thinking, problem-solving, communication, and collaboration skills that are essential in today’s workforce.

Likewise, they have a particular focus on authentic assessment and credentialing. Rather than relying on standardized tests and grades, Iowa BIG uses project-based assessments to evaluate learning. Learners work on projects that are relevant to their interests and passions, and they are evaluated on their ability to meet specific learning objectives and competencies. This approach allows learners to demonstrate their knowledge and skills in meaningful ways, and it provides a more accurate representation of what they are capable of achieving. Additionally, Iowa BIG offers micro-credentials that recognize learners’ achievements in specific skills or areas of interest, giving them a tangible and meaningful credential that can help them stand out in college or career applications.

SOURCE

<https://iowabig.org/>



Big Picture Learning

Big Picture Learning (BPL) hosts a network of over 80 schools in 28 states, and hundreds more around the world in countries like Australia, the Netherlands, Belize, Italy, India, and Canada. These schools look very different in different contexts but hold a shared commitment to the “one student at a time” mantra of BPL. One of the most innovative aspects of BPL is its use of personalized, performance-based assessments and credentials. BPL uses a variety of assessment tools to evaluate learning, including student portfolios, exhibitions of learning, and performance-based assessments. These assessments are aligned with specific learning objectives and competencies, and they are designed to provide a more accurate and meaningful representation of what learners know and can do.

The International Big Picture Learning Credential (IBPLC) is a unique initiative of BPL that creates a customized, comprehensive portrait of each learner’s abilities, providing meaningful information to the wider community. Through IBPLC, students are given significant agency over the way they are represented, with a personalized approach to final-year assessment that recognizes their distinctive learning, achievements, competencies, and potential. The assessment frames used in IBPLC cover six key areas: Knowing how to learn, Empirical reasoning, Quantitative reasoning, Social reasoning, Communication and personal qualities. They are designed to fairly and comprehensively evaluate each learner’s performance.

IBPLC does not rank or scale learners against each other. Instead, achievements are judged based on demonstrations and observations of performance throughout their educational journeys. The resulting Learner Profile is a showcase of a graduate’s attainments, backed up by evidence of their work that is curated in an interactive online portfolio. The Learner Profile is personalized to reflect the richness of students’ real-world experiences, personal qualities, and academic results.

SOURCE

<https://www.bigpicture.org.au/what-international-big-picture-learning-credential>

Expanded Learning Information System, Dallas

Big Thought and Dallas Afterschool have partnered with Southern Methodist Universities (SMU) Center on Research and Evaluation to develop a secure data dashboard called the Expanded Learning Information System (ELIS). ELIS is a platform that consolidates data across systems; in this case, this includes the Dallas Independent School District, Dallas City of Learning, and SMU. The goal is to assess the impact of out-of-school-time programs and create new opportunities for collaboration among providers. Providers can access program data, quality data, observation data, survey data, and aggregate data about the learners they serve through this user-friendly tool.

ELIS provides a shared platform for data collection and analysis, promoting a more holistic and integrated approach for collaboration and data sharing among providers, enabling them to better understand the impact of their programs and improve their services. Such a tool would offer a new way to integrate and make sense of data in assessing learners' development.

In addition, one of the collaborating organizations, Big Thought (an impact nonprofit that designs, curates, and delivers programs built upon hands-on experiential learning to Dallas youth in historically marginalized communities), has defined the Creator Archetype, which it uses to assess and credential learning. The Archetype consists of five domains: social emotional learning, academics and arts, digital fluency, design thinking, and service. The Creator Archetype allows Big Thought to showcase the value of all experiences provided by its over 100 community partners, giving a common language and understanding to everyone involved.

SOURCES

<https://www.elisdfw.org/about-us/>

<https://www.bigthought.org/insights-reports/blog/what-makes-a-great-creator/>



Mastery Transcript Consortium

The Mastery Transcript Consortium has developed a forward-thinking alternative to the conventional high school transcript. Instead of grades and GPA, the mastery transcript emphasizes the learner's competencies and includes a digital portfolio of artifacts of learning that reflect the values of the learning community. This approach tells a story about the learner: who they are, what they have learned, how they have grown, what they love, and who they want to be.

One significant feature of the mastery transcript is that individual schools define and certify the mastery credits, but all transcripts use a consistent layout for easy navigation. The digital-only format allows for a succinct summary of the learner's skills and content and enables deeper exploration through the linked artifacts of learning. Learners have agency in choosing which projects and achievements to feature on their transcript, while the school provides context about the learning environment to further contextualize the learner's achievements.

SOURCE

<https://mastery.org/>

VLACS, New Hampshire

VLACS is a fully online state-wide charter school in New Hampshire that offers customized learning opportunities for learners of all ages, from elementary to adult learners. The school provides a range of courses and programs to help learners earn their diploma and acquire new skills.

VLACS assesses learning through a variety of methods including online quizzes, projects, essays, presentations, and discussions. The assessments are designed to measure mastery of competencies, which are skills or knowledge areas that learners are expected to learn. These competencies are aligned with state and national standards, and learners must demonstrate mastery in order to earn credit towards their diploma or to earn badges for specific skills. The assessments are often project-based, allowing learners to apply their knowledge in real-world situations, and are reviewed and evaluated by experienced educators. Additionally, VLACS uses a competency-based education (CBE) model, which means that learners progress through the material at their own pace and must demonstrate mastery before moving on to the next competency.

One additional unique feature of VLACS is its badge system, which allows learners to earn micro-credentials indicating their proficiency in specific career-related skills. These badges are widely recognized and can be used to demonstrate qualifications on a smaller scale than a full diploma or degree.

SOURCE

<https://vlacs.org/>

Center for Advanced Professional Studies

The Center for Advanced Professional Studies (CAPS) integrates high school, college, and career readiness into a single community. Learners work with professionals on real-world projects, using industry-standard tools and receiving high school and college credit. CAPS is based on five core values, including profession-based learning (Pro-BL), professional skills development, self-discovery and exploration, entrepreneurial mindset, and responsiveness.

CAPS assesses learning through a variety of methods, including project-based assessments, formative assessments, and summative assessments. Learners work on real-world projects with industry professionals, and these projects are evaluated using industry-standard rubrics. Learners receive ongoing feedback from mentors and educators to help them improve their skills and knowledge and are assessed on their professional skills development, including time management, communication, and collaboration skills. The assessment methods used by CAPS focus on developing practical skills and competencies that are relevant to the future workforce.

SOURCE

<https://yourcapsnetwork.org/>

Green Light Credentials

Green Light Credentials is an innovative platform that uses blockchain technology to create and store learner records. It not only captures traditional credentials but also new forms of evidence that can be granted to colleges and employers. Green Light enables learners to keep all their lifelong learning credentials in one place, giving them control over their data and providing them with easy access to their records. It offers a secure, reliable, and verifiable way of tracking and showcasing learners' achievements. For employers, Green Light instantly verifies academic credentials shared by a learner, improving and expediting hiring processes.

SOURCE

<https://greenlightlocker.com/>



Chapter Four

People and People Systems



WRITTEN BY
Adriana Martinez Calvit

What are the essential functions that are needed in an ecosystem?

How can we create varied and interconnected roles for people to play that fulfill those functions in ways that empower, acknowledge, and inspire all involved? What structures and norms would enable an ecosystem and its participants to sustainably collaborate, learn, and grow together?

A learner-centered ecosystem comes from a stance of recognizing all people as full human beings with stories, gifts, passions, vulnerabilities, love, and potential. Its infrastructure and systems are people-centered and aimed at the ultimate goal of supporting learners and families to thrive, learn, and develop in community. Imagining what this might look like and how it might be operationalized requires us to rethink who might contribute to an ecosystem, how they might do so, and what it might look like to enable their work. This starts with a new view on the challenge at hand—from one focused on “human capital” to one focused on people.

Why “People and People Systems”?

The current education system is built on underlying principles that value efficiency, compliance, and standardization, which results in a specific way of relating to the people in it. This approach assumes that teachers and other staff require instruction, discipline, and hierarchy to function. Yet our society also expects schools and the people who work in schools to provide not only academic instruction, but also a broader array of human services that require strong relationships and high levels of agency and skill, from childcare to preventative health supports to nutritional wellness.

This leads to schools and classrooms operating in a climate of scarcity, isolation, and mistrust. Schools are funded inequitably, leading to disparities in the preparation, compensation, development, and growth of the people who work in schools. Teachers dictate the rules of their classrooms, principals dictate the rules of their schools, and school boards and superintendents dictate the rules of their districts. (See Appendix A for more insight into the operational model of school boards.) Sometimes, these people may consult with other community members or plan collaborative projects

with different organizations. But often, they are focused singularly within the scope of their domains, such as educators teaching with their doors closed, and principals focusing on the administrative demands of the system. Such opacity then leads to the scrutinization of education, often seeded in mistrust. We can observe a series of challenges for the people who operate within these education systems:

- **Fragmentation:** Despite their best intentions, people in education find themselves operating in fragmented ways that prevent them from adapting, growing, and realizing their own potential and that of the young learners they serve.
- **Dehumanization:** When people are tasked with addressing all of their communities’ concerns (for example, poverty or trauma) without adequate preparation, support, and appreciation, they find themselves overburdened, alienated, and disenfranchised.
- **Limitations:** Rather than imagining what is possible and maximizing the gifts of people, education systems put in place hierarchical and standardized structures with boundaries that only expand through disruptive forces (e.g., teacher strikes or parent protests).

“

Community is so interconnected, and it’s so interwoven in the space that we’re dreaming. And then I also think about my own personal experiences—my community could see me. My community could see me when I couldn’t see myself—it saw the assets in me.

The community can see the assets in every single person and not look at people as problems to be fixed because everyone’s seen as a valuable contributor in this beautiful ecosystem. When I think about school—like it’s not school—it’s like a community development philosophy . . . It doesn’t even look like a school at all. It just looks like a community. ”



Moneka Stevens

Director of Community Engagement,
Future Focused Education



People and People Systems

Guiding Principles

Every person in the ecosystem plays a role, whether that role is formal or informal and whether or not it is recognized, cultivated, and celebrated. Community-based, learner-centered ecosystems are built by people who fulfill a diverse set of functions—from ensuring adequate nutrition, to helping learners apply their learning to authentic problems, to providing safe and joyful spaces, to storytelling. These include caregivers, healthcare workers, business leaders, neighbors, elders, and many more. Just as we view each learner as a whole person—complex, growing, and an agent of their own learning journey—each member of the ecosystem is seen in the same way.

Given the diversity of people who will contribute to and lead in an ecosystem, we recognize that they will need systems and structures to make their contributions. We envision a set of principles that will guide such a system:

- **Radically inclusive:** Including, valuing, and elevating the wide variety of people—of all ages, sectors, and backgrounds—who can play a role in children’s learning. Every person, including children, adolescents, adults, and elders, has gifts to offer and gifts to receive. We work toward sustainable and community-led outcomes.
- **Relational:** Prioritizing the significance and value of meaningful relationships. Seeing each individual as unique extends to all participants in the ecosystem. Honoring relationships includes a focus on stories and cultures, the land and history, and the need to see each other in our full humanity.
- **Holistic:** Acknowledging the learning cycle of a child is not fixed and includes the full life trajectory of a person. This view is extended to embrace all participants in the ecosystem. We work towards nonexploitative solutions that reconnect us to the earth and to each other.
- **Fluid and responsive:** Including feedback loops to ensure growth and the realization of the potential of individuals and the community they serve. Just as we acknowledge that learners are growing and developing over time, so are the people fulfilling roles in the thriving ecosystem. Before seeking new educational solutions, we look for what is already working at the community level. We honor and uplift traditional, indigenous, and local knowledge and practices.

The current systems were designed to prioritize efficiency and standardization, but we must not forget that learners and individuals alike have a common desire for work that is fulfilling, recognition within their community, and a sense of purpose and belonging. Therefore, it is essential to create systems, structures, and processes that support these fundamental human needs. This is why we refer to “people and people systems,” rather than “human capital” in this chapter. The term “human capital” evokes the industrial model that was developed to build a workforce for the factory age, which is not a suitable model for nurturing human potential.

Research by Deci and Ryan (2000) supports the idea that humans have inherent psychological needs, such as the need for autonomy, competence, and relatedness. These needs must be met to foster well-being, engagement, and motivation. By adopting a “people and people systems” approach, we can create systems that meet these fundamental needs, promote a sense of belonging, and foster human potential.

“

Every person has a story; every story specifies needs; every need can be connected to a gift; every gift can be connected to a person/system; multiple people/systems can be assembled to support the journey. ”



Ka'anohiokalā Kalama-Macomber

Education Specialist,
Office of Hawaiian Education

Using these principles, in the remainder of this chapter, we take a new starting point for where to think about the idea of people systems. Rather than starting with how to organize an assumed set of people, we begin with a framework for thinking about the key functions that would need to be fulfilled by those people in an ecosystem. When we think of the system holistically, what are the functions in a community-based, learner-centered ecosystem?

People and People Systems

Functions Framework

Through a series of conversations exploring the essential work of the ecosystem, the People and People Systems team developed the Functions Framework that spans the next six pages of this report.

Similar to an ecological ecosystem that provides such functions as food, water, shelter, economic livelihood, recreation, and natural beauty, a healthy and diverse learner-centered ecosystem is one that provides abundant and beneficial services to its stakeholders based on the needs and aspirations of the people engaged—beginning with the learners.

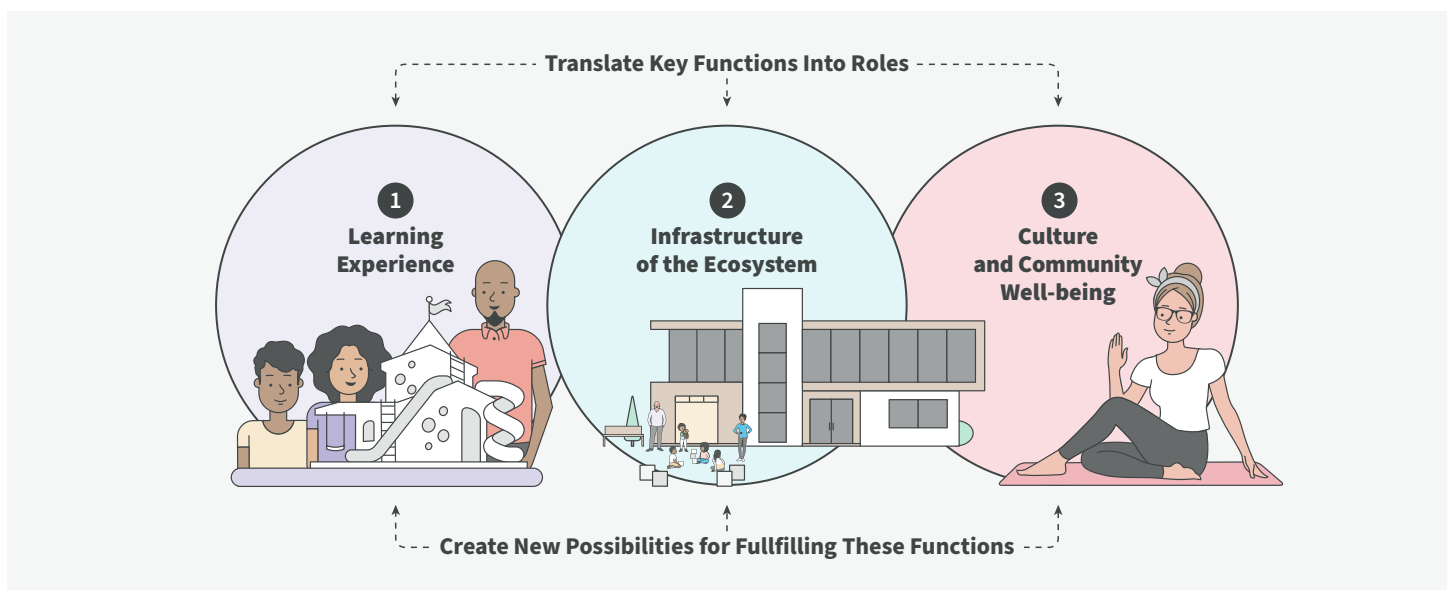
The Functions Framework provides a baseline or template that describes some of the essential functions that are played by people in a community-based, learner-centered ecosystem. These descriptions are meant to be illustrative

of the functions a community's ecosystem might need. The framework is not intended to be prescriptive, exhaustive, or serve as a checklist. It is intended to serve as a general guide with the assumption that users will need to adapt the functions for their context and community.

Further, the Functions Framework does not tell us exactly who will serve these functions or how they will be organized. In fact, any one of these functions could be done by a team or a specific person; likewise, a role or person could simultaneously serve several of the functions listed. The possibilities for the *who* and *how* will vary based on the ecosystem's unique context. An ecosystem's approach means that these key functions do not operate in isolation or in a vacuum. Rather, these functions interact, shift, adapt, and grow dynamically.

The Ecosystems Working Group explored functions of a thriving ecosystem across three domains: the learning experience, infrastructure, and community and culture of well-being. When imagining a thriving, equitable, community-based, learner-centered ecosystem, these functions are interdependent and interconnected. Neglecting one domain can negatively impact the others, and a holistic approach is necessary.

Throughout the domains, we view the work of the ecosystem to be grounded in inclusion and equitable practices. The Functions Framework is not meant to be an exclusive list but instead an opportunity to consider together the functions of a thriving ecosystem across the three domains.



The domains and key functions within thriving ecosystems



1 Learning Experience

Function	Purpose
<p>Learning</p>	<p>At its heart, learning speaks to the development of deep understanding, skills, and abilities; the cultivation of essential dispositions; and the application of knowledge across a wide range of disciplines and contexts. As a function, learning is driven by social, cognitive, and motivational processes that include:</p> <ul style="list-style-type: none"> • Exploring, identifying, and communicating learning interests, passions, curiosities, and the not-yet-known • Setting and pursuing goals for one’s own learning and application, driven by the aspiration of realizing one’s own potential and positively impacting the community • Monitoring and reflecting on one’s own learning and adjusting • Setting, pursuing, and reflecting on the learning process and adjusting as needed <p><i>Reminder:</i> Learning is inherently social and does not occur in isolation or in a vacuum; thus, learning entails a dynamic process that interacts with other functions (for example, mentoring, storytelling, and safeguarding wellness). Often, learning will be in group activities, projects, or individual conversations, but even when a learner is quietly enjoying a book at home, they are engaging in a social act.</p> <p><i>Reminder:</i> Learning is a lifelong process. In conventional education systems, we often exclusively associate the function of learning to students, but in a learner-centered ecosystem, all people in the system are engaged in learning.</p>
<p>Navigating and facilitating learning</p>	<p>Navigating and facilitating learning is a complex dance that requires skill, expertise, and dexterity. It requires navigating all the complexities, minutiae, and unexpected challenges that come with learning, such as unanticipated interruptions, distractions, or mishaps. This is the function that includes “teaching,” and indeed, it relies on the honed skills that educators develop over time through their experiences with learners. Yet it differs in its purpose and how it might be actualized.</p> <p>For example, this function is not limited exclusively to adults who take on the role of “teacher.” Young people or other community members often also serve in this function. Think of the powerful role children play in helping their younger siblings with their learning; they too are engaging in navigating and facilitating learning.</p> <p>As a function, navigating and facilitating learning entails:</p> <ul style="list-style-type: none"> • Navigating in real time the dynamic nature of learning whether it is with a single learner, a small group of learners, or a large group • Helping learners uncover their dreams, set goals, and actualize them • Building from an early age the foundations learners need to develop agency and to nurture their agency as they grow • Advising learners to uncover their strengths, tap into, and actualize their potential • Guiding learners as they design and navigate their learning journey by offering advice, guidance, scaffolding, and support • Developing learners’ self-regulation and metacognition, so they can reflect on their own learning, enact learning strategies, monitor their learning, and adjust as necessary • Creating safe, fun, supportive, and joyful spaces for learning <p>Given the purpose of the ecosystem, these bullets focus on how the function of navigating and facilitating learning supports young learners; however, it is also true that this function has broad applicability to every participant in the ecosystem.</p>

<p>Socializing, playing, and caring</p>	<p>Socializing, playing, and caring constitute functions of friendship. Friendships build affection and trust, both of which are needed for strong relationships in ecosystems. While conventional education systems also depend on friendships, rarely are friendships recognized and acknowledged for the vital function they play in child development. The function of socializing, playing, and caring includes:</p> <ul style="list-style-type: none"> • Providing support, guidance, and listening—both formally and informally • Fostering play, fun, and joy • Providing companionship, camaraderie, and intimacy • Serving as role models • Complementing and encouraging each other’s gifts, interests, and passions • Co-designing and engaging in collaborative learning • Encouraging individual and collective responsibility
<p>Caregiving</p>	<p>Attending to a learner as a full human being requires that the ecosystem address their safety and well-being, including their physical, emotional, and psychological well-being. Caregiving is an essential underlying strength of the ecosystem. Essential adults in a child’s life such as their families, learning facilitators, social service providers, and health providers work to envision and develop forms of engagement that work best for the circumstances of the child and their family situation. They also work with other institutions and service providers to ensure families have access to a strong safety net, enabling them to care for and nurture their children.</p> <p>Caregivers may include counselors that help children heal if they have encountered trauma in their life, medical practitioners who treat children when they are ill, and neighbors who collectively ensure children are safe and in community. The function of caregiving includes:</p> <ul style="list-style-type: none"> • Providing basic necessities in the home and family, including shelter, nutrition, clothing, play, and health • Cultivating positive emotional connections and support, including counseling and special services if needed • Advocating for the learning needs of children and youth in their home and family, including their passions, interests, and areas of growth • Providing social supports and celebrations of the stories from learners’ homes and communities, their past and future • Facilitating healing processes in the face of trauma, whether that trauma be physical, psychological, and/or emotional; also facilitating collective healing when trauma affects a community
<p>Communing with the land and community spaces</p>	<p>A function of the ecosystem is to honor the physical spaces of the community and the people who inhabit those spaces. Many cultures have rich traditions of communing with the land, their natural resources, and their history. This function includes:</p> <ul style="list-style-type: none"> • Learning from the resources, history, and stories the land offers its inhabitants and community. This includes engaging with the local history and culture; participating in community events; and stewarding, protecting, and honoring the stories, history, and potential of the land • Engaging in community and civic structures, such as local government, public institutions, and civic organizations. By participating in these structures, individuals can contribute to decision-making processes and community development. This engagement can also foster a sense of civic responsibility and belonging, leading to a stronger and more resilient community • Creating and maintaining communal spaces and exploring the history and culture of a community, which can lead to a greater sense of well-being and connectedness • Building relationships with the land and nature to develop strong connections and well-being



2 Infrastructure of the Ecosystem

Function	Purpose
Safeguarding wellness and safety	<p>The function of safeguarding wellness and safety is likely met through different roles across various institutions, both formal and informal. This function entails:</p> <ul style="list-style-type: none"> • Establishing a culture of well-being, where all community members continuously check on learners' well-being • Implementing safety checks to protect learners (e.g., background checks and due diligence) • Providing services to support learners' wellness such as housing, nutrition, and those directed at supporting physical, psychological, and emotional health • Making available safe spaces that offer privacy and confidentiality when needed • Offering childcare and family services as needed • Ensuring community safety through practices such as coordinated transportation, up-to-date communication, transparent processes, and feedback loops
Coordinating and connecting	<p>Coordinating and connecting in the ecosystem happens at many levels—between individuals, organizations, and other ecosystems. Coordinating and connecting constitute an important function in any type of system, and in a learner-centered ecosystem, this function ensures the ecosystem can be flexible, responsive, and integrated. Learners and people who support them engage in coordinating and connecting by:</p> <ul style="list-style-type: none"> • “Hacktivating” to create opportunities for learners to hack the system to resolve problems, find solutions, and new pathways to achieve their goals (inspired by Hacktivate ED) • Connecting to community-based learning opportunities such as internships, project-based learning, and working with community mentors • Matchmaking to ensure strong alignment between learners and coaches, mentors, advisors, and community organizations • Navigating a learner's journey and well-being over time with families, advisors, and the community • Customizing support for children, caregivers, and their families, both formally (e.g., connecting families to housing services) and informally (e.g., connecting families to a neighbor that can help with childcare) • Coordinating logistics such as schedules, transportation, materials, recordkeeping, budgeting, resource allocation, and information systems management • Sensing to check and respond to the needs of the community, including facilitating and strengthening networks and relationships within the community (e.g., block parties, community dinners, or home visits) and addressing any miscommunications or misunderstandings that arise
Distributing and receiving knowledge, wisdom, and gifts	<p>Learner-centered ecosystems recognize that wisdom can be found in the most unlikely places across different contexts and environments. Ecosystems also acknowledge that all people, no matter their level of expertise in something, are learners and benefit from seeking and receiving wisdom from others. This function applies to a wide and diverse set of roles and includes:</p> <ul style="list-style-type: none"> • Sharing and applying unique gifts, skills, and wisdom to support a variety of other functions • Offering training, guidance, coaching, and technical assistance to support and grow people within the ecosystem • Seeking to grow by observing, receiving, and applying the gifts of others, including the gifts young learners have to offer • Treating every interaction as an opportunity for a mutually beneficial exchange of gifts

<p>Growing and credentialing</p>	<p>It is essential to support those in the ecosystem, whether young learners or adults, in the growth of their learning, skills, and capacities. This means helping people across various roles maximize their gifts, discover new talents and opportunities, learn from mistakes and failures, and take risks. Likewise, as people grow, it is important for their gifts to be recognized and celebrated by others. Credentials that recognize the growth of people help the community identify the gifts they have to offer. The function of growing and credentialing addresses this need and includes:</p> <ul style="list-style-type: none"> • Cultivating and credentialing advisors, specialists, mentors, coaches, coordinators, and young learners • Supporting and cross-pollinating adults in the ecosystem who take on varied functions by providing coaching, skills building, and opportunities for collective learning • Building on-ramps for community members to build their skills so they can take on roles with functions that best fit their gifts and passions, support learners and the community, and allow them to live a life of significance
<p>Harvesting and replenishing resources</p>	<p>This function is best captured by the metaphor of the duck that seemingly swims calmly in the lake but is paddling with effort below the water. In an ecosystem, resources must be actively sought, harvested, and replenished to address practical and logistical concerns related to the establishment and ongoing support of learning providers, maintenance of community spaces (both physical and virtual), equipment and materials, compensation, and much more. Harvesting and replenishing resources is an important function that entails:</p> <ul style="list-style-type: none"> • Stewardship of the physical (parks and community centers) and virtual (websites, apps, and learning management systems) spaces in the ecosystem • Collaborating with others to identify needed resources (e.g., equipment to play sports, spaces for a project) and to allocate those resources in ways that are optimal for learners and the community • Procuring adequate resources (including people, funds, spaces, technology, and tools) for meeting learner and community needs, as well as supporting the integration and maintenance of those resources once they are found • Adjusting the distribution of resources as needed and responding to changing needs and the evolving nature of the ecosystem • Maintaining robust online information systems and infrastructure to support other functions

3 Culture and Community Well-Being

Function	Purpose
<p>Inviting, welcoming, and orienting</p>	<p>The function of inviting, welcoming, and orienting addresses the need to build a pipeline and pathways into the ecosystem to ensure there are people in roles responsible for ensuring all key functions are being addressed. This function is not limited to just filling roles, but ensuring people are welcomed and supported as they transition into the ecosystem. It includes:</p> <ul style="list-style-type: none"> • Scouting for gifts by identifying people within and beyond the local ecosystem who can fulfill the functions needed in the ecosystem • Orienting new community members to the ecosystem, helping them identify the functions they might take on within the ecosystem • Collaborating with new community members to capture their stories, dreams, and aspirations and collaboratively help them craft a learning plan for the functions they may take • Guiding new community members in making and building formal and informal relationships, friendships, and support networks



<p>Storytelling</p>	<p>Storytelling is a function that permeates all aspects of the ecosystem and becomes a major function in a learner-centered ecosystem. At the individual level, storytelling includes:</p> <ul style="list-style-type: none"> • Making learning visible by providing evidence of learners' current understanding, dispositions, skills, and application of knowledge • Communicating the learner's journey, including their starting points, struggles, achievements, reflections, and plans for their future • Demonstrating evidence that illustrates how the learner is growing and contributing to their community • Providing a foundation to guide learning and identify what may be needed to support learners' overall well-being • Using multiple forms of expression to communicate and demonstrate learning • Establishing and using a common language to enable effective, constructive communication across different institutions and stakeholder groups <p>Storytelling is a function that builds agency by giving learners a voice and tools to help them grow and strengthen their place within their community. Likewise, storytelling is a tool that helps others in the community identify, understand, and connect with learners and the assets they offer.</p> <p>Storytelling is also a community building function. Telling the stories of the community helps learners by:</p> <ul style="list-style-type: none"> • Deepening their understanding and strengthening their bonds to their community • Building learners' identity as members of the community with a shared past, present, and future • Identifying opportunities for learning that are integrated in the community • Providing opportunities for learning to contribute to the growth and development of the community
<p>Story catching (listening, collecting artifacts)</p>	<p>Story catching is the sister function to storytelling. While storytelling captures the process of communicating, story catching is about noticing, observing, listening, and engaging with others to collect these stories. Like storytelling, story catching is a multifaceted function. Learner-centered ecosystems actively seek to capture learners' stories, as well as the stories of their communities. In capturing learners' stories, story catching includes:</p> <ul style="list-style-type: none"> • Observing, recognizing, and documenting evidence of learners' understanding, abilities, capacities, and application of knowledge and skills • Collecting evidence of learning, growth, and well-being • Identifying learners' needs, in partnership with them, to inform the acquisition of adequate support for both their learning and overall well-being <p>In capturing a community's stories, story catching includes:</p> <ul style="list-style-type: none"> • Seeking out and identifying community stories, especially those that are often untold, unheard, and kept at the margins • Connecting with, supporting, and empowering community members to share their stories • Investigating and collecting community stories, artifacts, and evidence
<p>Community coaching</p>	<p>Given their integration into the community, learner-centered ecosystems take on an important function of contributing to the health of the community. Community coaching is a function that attends to the health and strength of the overall community and includes:</p> <ul style="list-style-type: none"> • Identifying and addressing community needs • Facilitating public-private partnerships

<p>Community coaching (cont.)</p>	<ul style="list-style-type: none"> • Encouraging collaboration across the ecosystem to innovate, disrupt, and plant seeds for new possibilities • Establishing informal support groups in which members set goals, encourage and support each other, build friendships, and hold each other accountable • Identifying and creating opportunities for collaboration, celebration, collective learning, and sparking curiosities • Offering ongoing training for grassroots organizing, relational meetings, and communication of collective efforts <p>Naturally, community coaching relies on its sister function, coordinating and connecting (included in the infrastructure domain). Community coaching can be distinguished by its focus on health and strength, whereas connecting and coordinating focuses on bridging and communicating.</p>
<p>Healing, restoration, and renewal</p>	<p>The function of healing fosters recovery, resilience, and resuscitation in the face of trauma and other harm. It creates multiple pathways and resources aimed at healing and renewal that are readily available, accessible, and delivered for communal and personal well-being through:</p> <ul style="list-style-type: none"> • Ongoing inquiry and development of inclusive practices and resources that respond to immediate needs • Ongoing processes to address root causes of inequity for all members of the ecosystem • Multiple offerings for training and practice in restorative practices and ongoing development of self-knowledge and leadership development • Processes rooted in co-creation and transparency, while centering marginalized voices

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Everyone in the ecosystem is multi-modal in the sense that they are learners and they are educators themselves, and that is an essential way of how we think about this. In my experience, I know that if we have a learner-centered approach, we will learn a ton from kids as they follow their passions. ”



Brent McKim

President, National Council of Urban Education Associations & Jefferson County Teachers Association, KY

Reflection Questions

- 1 Imagine participating in an ecosystem. What gifts, knowledge, and skills could you contribute? How might your contributions apply to the functions in this framework?
- 2 If you imagine your own community hosting as a learner-centered ecosystem, what do you see as essential functions that would be needed?
- 3 As you consider each function, ask: Is this function best met through formal or informal mechanisms? Are there concurrent spaces for both formal or informal?
- 4 For any person who is taking on a specific role, how might they prioritize its functions?
- 5 Considering these functions, what would be missing but necessary for an ecosystem in your community?



Translating Functions into Roles

The functions explored in the framework illuminate the learning experiences, infrastructure, and community well-being that we strive to create in a thriving ecosystem. A translation of the functions into roles becomes a standing process of the ecosystem. It includes identifying roles such as advisors, learning facilitators, learning specialists, coordinators, and storytellers who fulfill essential functions and bring reliability, integrity, and transparency to the ecosystem. This new framing of translating functions into roles offers the opportunity to see beyond the idea that each function has to be aligned to a full-time role in a 1:1 ratio. Instead, it is an invitation to consider how each participating member of the ecosystem could fulfill roles based on their interests, skills, and knowledge, while still prioritizing that essential functions are fully met for the ecosystem's operating.

If we can create individual learning journeys for each learner, we can also acknowledge that every person has a variety of gifts and assets to offer the ecosystem. The roles that are often invisible in conventional human capital systems are elevated, seen, and celebrated in an ecosystem. Roles are collectively constructed by the people who take on responsibilities, the people served by those roles, and by the broader community through reciprocal, mutually beneficial processes. All roles and the people who fill them are valued and celebrated. The roles people take on grow, shift, change, and evolve alongside the community and its learners.

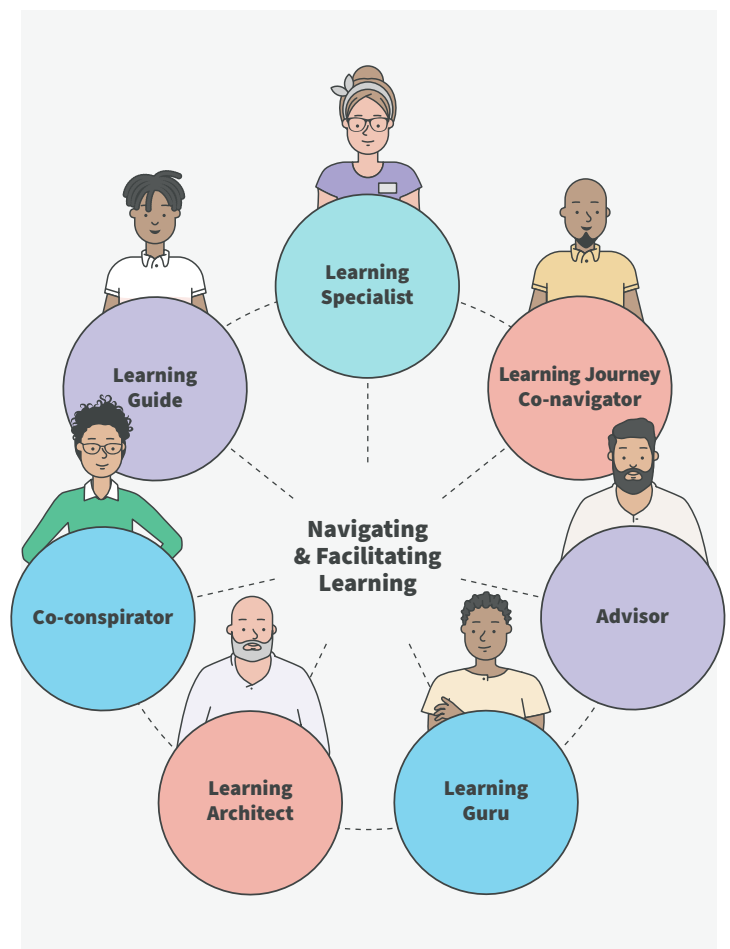
In addition, this is an opportunity to recognize and integrate the vital roles that already exist in the community, such as those that may be found in afterschool programs, faith-based organizations, and caregivers for all ages. It also allows for the emergence of roles yet to be imagined by asking “How can we tap into the people and their gifts to grow and evolve as new ideas and needs emerge?”

When translating key functions into roles, many roles may be needed to fulfill a key function in a learner-centered ecosystem. Moreover, a crucial aspect of ecosystems is the collaboration across layers of operations. For example, **connecting and coordinating** is a key function that requires multiple people in roles across different spaces who are responsible for networking learners with

community organizations (and vice versa); coordinating among learners, learning advisors, caregivers, community organizations; and much more.

When thinking about multiple roles that may be responsible for a set of functions and wondering who can serve in those roles, consider these guiding questions:

- Can a function within the Functions Framework be composed of more discrete roles? If so, who and how might you go about defining these roles?
- What roles do people in your community currently play or could play to fulfill these more discrete functions?
- Can the language we use for the roles in our learner-centered ecosystem reflect the values and ideas that resonate with, inspire, and connect the community? In other words, how can we communicate these roles so that community members can fill these roles with a sense of ownership?



The varied roles that might contribute to navigating and facilitating learning

For example, think about the function **navigating and facilitating learning**. This function is described as guiding and supporting learners as they design and navigate their learning journey. Facilitating learning is an immense endeavor. A large and diverse set of people could be in roles that are responsible for this function. Likewise, these roles will likely vary depending on the unique needs of learners. For example, how might navigating and facilitating learning come to life when working with learners in the earliest stages of development, compared to adolescents? What is needed to fulfill this function might also vary based on the nature of the learning. Helping learners build literacy skills or applying chemistry concepts to improve a local bakery's recipe present different examples of the function of navigating and facilitating learning and would require different skillsets, expertise, and supports.

For further exercises in translating functions into roles, see Appendix D: Functions Vignettes.

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The most exciting part here is having new thought partners to think all of these amazing ideas out loud and with each other and fusing that energy to create something that we don't even know what it's going to be. In our community, there are a lot of folks working on the ground that are just hungry, asking for resources and other people and communities they can connect with to figure out how we can do this collectively. ”



Chemay Morales-James
Founder, My Reflection
Matters Village

Reflection Questions

- 1 What might the function of **navigating and facilitating learning** look like in your ecosystem?
- 2 If you were to develop your own cluster of roles for this function, what would you add, remove, or keep?
- 3 How would you describe those roles?
- 4 How might these roles look different across different contexts?
- 5 What terminology might you use to describe this cluster of functions to community stakeholders?

People and People Systems

Organizing

Given the varied and interconnected ways people will fulfill functions, play roles, and work together within a learner-centered ecosystem, creating structures and norms to organize and enable their work is imperative. These will also necessarily look different than how they do in the conventional education system, as they need to advance collaboration, connection, and fluidity as opposed to fragmentation, standardization, and limitation.

In this section, we consider possible ways of organizing people and people systems. While we imagine that each learner has a unique learning journey, what kinds of teams and collaborations will be needed to meet the needs of every learner across the ecosystem and foster all of their unique learning journeys simultaneously? We might consider a “constellation of constellations” approach, whereby each learner has a cross-functional team of people there to support them and each learner's team interacts and overlaps with those of other learners. This team or constellation approach could then be extrapolated to apply to the entire ecosystem's functioning. This view acknowledges the multiple layers of teams that would be interconnected in an ecosystem.



Following are three possible ways of thinking about how this approach could operate, starting with a close look from the learners' perspective and zooming out to see might work for the community and ecosystem as a whole.

Cross-functional teams for each learner

In an ecosystem, the conventional role of educators as the primary deliverer of content is greatly expanded to include new possibilities of advising, facilitation, coordination, and more. Educators are seen as unique contributors—people with gifts to share. Given this, there is new opportunity for specialization and diversification, such that learners have the teams of people they need to support their growth and development. It is no longer on the shoulders of one educator.

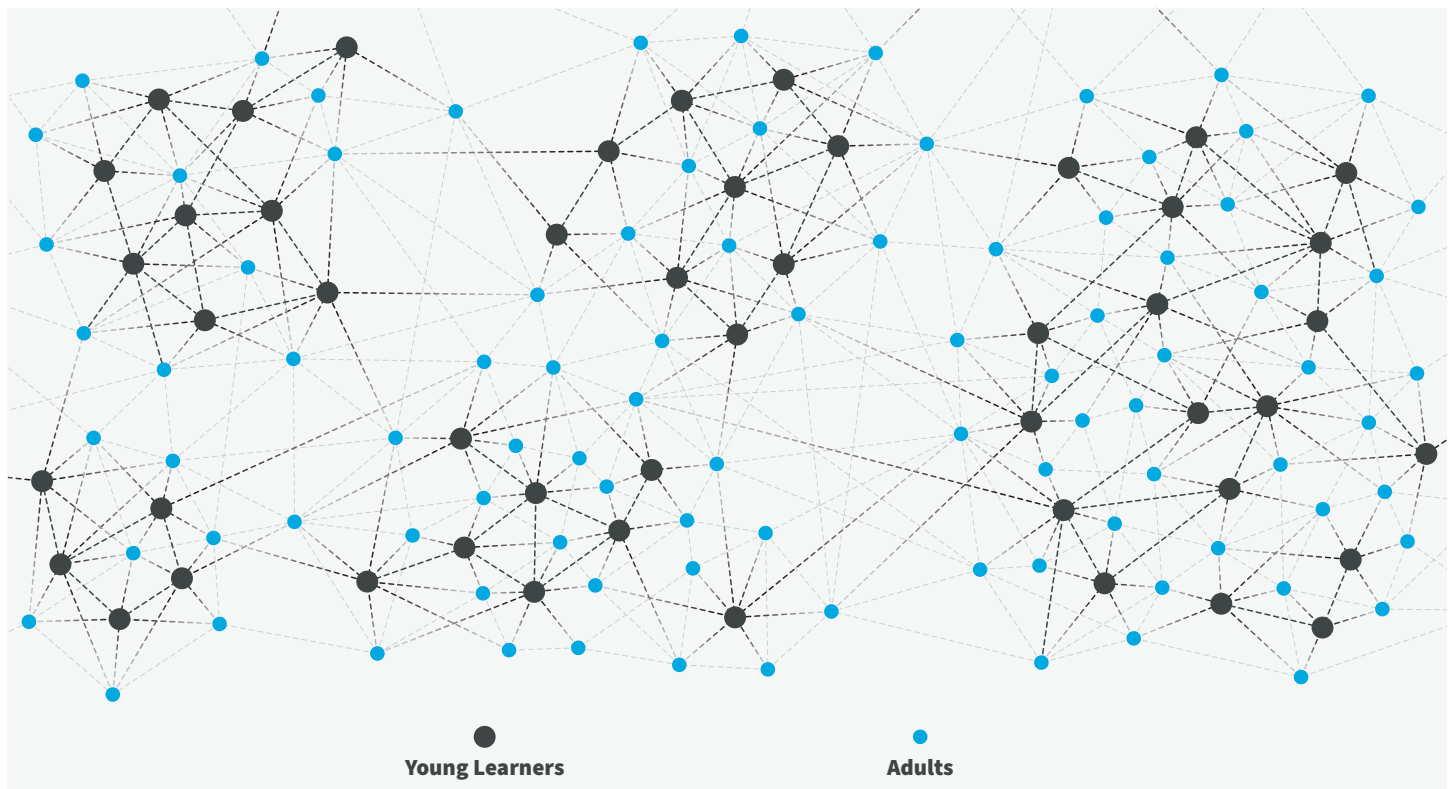
We can imagine that each learner is embedded in a cross-functional team including but not limited to:

- Learning advisors (coach, educator, journey co-navigator)
- Caregivers (parents, guardians, siblings, extended family)

- Social workers and counselors
- Peers and mentors
- Community advisors, elders, and experts
- Network weavers (who identify opportunities for learning experiences)

The makeup of each team is tailored to the learner, their family, and their unique circumstances. Likewise, many of the same people may play similar roles on multiple learners' cross-functional teams.

At very young ages (i.e., infancy through early childhood), the cross-functional team will necessarily play a more active role. However, as the learner grows, “the training wheels come off” and the learner assumes greater responsibility for their learning, while the team shifts to a more supportive role. Thus, the cross-functional team provides scaffolds from an early age to help the learner develop agency and assume ownership of their learning journey. Regardless of where the learner is developmentally, this team operates collaboratively with power and authority distributed equitably among members.



Learners will have the teams of people to support their growth and development—learning advisors, caregivers, social workers, counselors, mentors, community advisors, elders, experts, peers and network weavers—in a constellation of support tailored to them.

Responsibilities of these teams might include:

- Dynamic communication and coordination with learners, caregivers, and the broader community
- Dynamic communication and coordination with different institutions and other people in the ecosystem that can or should provide reciprocal opportunities to engage with learners and the community that deepen (and spread, when possible) impact
- Providing and ensuring access to tools, resources, and supports learners and their families may need for their well-being and to actualize their full potential

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What I wonder, with any family we engage with, is how do we take out the formality and offer a lot more authenticity and connection? The truth is, in reality, it's really hard to do that at the first meeting. You have to build a tiny bit of trust. But there are these little things that can happen that are not overwhelming, but they show an attentiveness and appreciation of families coming in—something that helps us get an idea of how to start together. ”



Eunice Mitchell
National Director,
Big Picture Learning

Peer learning cohorts

Each learner might belong to a group of peers that engage in collaborative learning, play, companionship, and mutual support as a small community. These peer learning cohorts may be characterized by:

- Mixed ages, mixed abilities, and different backgrounds, perspectives, and interests
- Dynamic interaction between learning, friendship, companionship, play, and joy
- Collective responsibility and mutual support for each member—their learning, passions, and well-being
- Fluid and porous boundaries, so a cohort can welcome new members, interact and collaborate with peers from other cohorts, and adjust when their peers may leave to pursue their learning journey

Community-centered cross-sectional teams

Learner-centered ecosystems recognize that learning is community-embedded. To effectively support learners, ecosystems support the overall well-being and vibrancy of their broader community. Ecosystems might have teams in place to address broader community needs, goals, and priorities, particularly as they intersect with the operations of the ecosystem. These teams may operate through participatory processes where community members reflect together, collaboratively find solutions, disrupt and innovate, celebrate and uplift, and build collective responsibility.

Some cross-sectional teams may be long-standing while some may be ad hoc. Standing cross-sectional teams may be responsible for routine day-to-day operations such as the coordination of services across various institutions. On the other hand, ecosystems may need to form ad hoc task forces. For example, an ad hoc task force might be formed to find resources to construct a new community health center or to develop an emergency response to a flood. As a new challenge or issue presents itself, ad hoc structures allow the ecosystem to rally the people that are most appropriate for those unique circumstances.

These cross-sectional teams, whether long-standing or ad hoc, are not merely composed of “representatives.” Instead,



they are actively enrolling diverse community members with different perspectives. They are intentional about seeking out and inviting the voices of those who:

- Have traditionally been at the margins, but have valuable perspectives from diverse social and cultural frames
- Have unique gifts and experiences relevant to the issue addressed by the team
- Can challenge thinking with the goal of encouraging innovative approaches

Reflection Questions

- 1 Whether you are a learner, educator, advisor, parent, business partner, organizer, aunt, or neighbor, imagine the role you might see for yourself in an ecosystem. What sort of team might you be part of? What sort of team might support you?
- 2 What would be important in terms of norms, processes, and agreements for such teams to work together to reach shared goals and outcomes?
- 3 What is missing? What would you add to these ideas?

Tensions and Trade-offs

There still remain several complex questions to be tackled if community-based, learner-centered ecosystems are to ensure that the collective human gifts and institutional capacities of the community are organized to optimize and increase the impact on learners. Here we offer some context for the challenges we face as we work to integrate the human talent and contributions of people and people systems in ways that most effectively support the growth and development of young learners.

Formation and preparation

Reimagining the key functions people play in a learner-centered ecosystem calls for a radical shift in the systems that prepare people who take on these roles and the teams that fulfill these functions. These are not only educator preparation programs, but also the programs that prepare school counselors, psychologists, social workers, and a vast array of roles that are vital in learner-centered ecosystems. A potential path forward may be by drawing inspiration from Grow Your Own (GYO) programs. GYO refer to local efforts to develop internal pipelines into the educator workforce by cultivating interest in young people, offering affordable preparation programs, and developing viable pathways into the teaching profession. GYOs can be reimagined and expanded in the context of community-based, learner-centered ecosystems.

A personalized learning journey for each member of the community who wants to participate would allow for a customized pathway of support, development, and growth. Communities of practice, learning communities, shared interest groups, exploration and invention teams—are all possible structures that would help create a culture of learning for the people and people systems in a thriving ecosystem.

Equitable compensation and rewards

Learner-centered ecosystems recognize that all community members have meaningful roles to play. This approach poses a series of questions related to compensation. Not all roles in an ecosystem are necessarily publicly funded. Some may be funded through the private sector or through grants, while others may be filled by volunteers. At the

same time, it is important to pay attention and ensure that community members are compensated equitably and commensurate with their contributions to the ecosystem. Equitable compensation does not only refer to pay, but also to healthcare, life insurance, vacation, paid time off, and other benefits that professions offer employees so they are able to maintain quality of life.

Healing and restorative justice

Even while we strive to create learning ecosystems that serve as safe havens for learners, we cannot do this by turning a blind eye to broader social injustices and how these may impact participants in the ecosystem, both children and adults. A further complication is that injustice often happens beyond the boundaries of the ecosystems, yet its impacts are deeply felt. Responding to social injustice might begin with equipping learners with the ability to discover their abilities for proactive participation in the community, healing practices, and experiences that build skills, knowledge, and compassion.

Maximizing resources and gifts

Conventional systems are designed to maximize resources by seeking efficiencies and operating with a scarcity mindset. In learner-centered ecosystems, the need of each learner leads the design of the ecosystem. Resources are maximized by accessing and harvesting the untapped potential of all people within ecosystems. However, to do so optimally means addressing practical concerns about the infrastructure underlying people systems. This includes processes such as payroll processing, procurement, budgeting, logistics, forecasting, and information systems. These are further complicated by the need to coordinate and integrate systems across institutions, as well as the coordination of people serving in formal and informal roles. It may be beneficial to begin one step at a time, as these often represent large and complex endeavors. For example, some education systems have developed information sharing systems between varied departments of education, health, labor, and human services.

Working around state and federal constraints

Both federal and state level policies pose constraints. These constraints should not be treated as a stop sign, but rather

as unique problems that need to be addressed through creative solutions. These policies include minimum student-to-teacher ratios, licensure requirements, funding formulas, standardized assessments, and much more. Potential paths forward may be using advocacy for flexibility around these requirements. This may require creating and communicating proof points as tools in this endeavor. Finally, there may be creative solutions for meeting state and federal requirements. For example, learning ecosystems may ensure there is a system for having teachers on record which are reported to the state, but these teachers on record may be complemented by other people who take on the different roles in cross-functional teams.

Systemwide cultural shifts

The vision of community-based, learner-centered ecosystems would necessarily introduce a cultural shock to both people already within the ecosystem and those who are new to the ecosystem. Cultural shock is a natural phenomenon that can and should be addressed. Failing to do so will inevitably lead to resistance and backlash. As a first step, it is important to acknowledge the risks that this vision may pose for some, such as lack of stability and familiarity to create supportive spaces to guide people along the journey. The idea of ecosystems is based on shared envisioning, strong relationships, and structures that allow participants to do their best work. Ecosystems are emergent, grown from the ground up, and should not be presented as a standardized solution. Rather, it is important to provoke and invite a community conversation that can lead to new understandings and decisions for action. Still, the ongoing work of welcoming, educating, and co-creating will need the support and facilitation of a dedicated group of people, investment from the greater community, and an environment for catalyzing invention.

Setting guardrails

Each community will have minimum requirements that the ecosystem must meet for it to fully serve their needs. Understanding these needs and requirements and attending to them ongoingly will be imperative for the ecosystem's viability, so they might be seen as guardrails that guide the creation and choices of the ecosystem. For example, for most communities, ecosystems will



need to attend to the needs of families for reliable childcare and ongoing support for their children. To do this, the ecosystem would seek the balance needed for sustainability and reliability. Knowing what families need and want, and being responsive to those needs (e.g., having multiple pathways for communication and connection, and attending to the health of each child) will build a resilient community that can collaborate to make sure that health and well-being guide decisions and long-term planning.

Reflection Questions

- 1 Have you seen or experienced systems that supported human growth and thriving, while also maintaining levels of stability and reliability necessary for collaboration and effective work?
- 2 How might you think about compensating and acknowledging those who contribute to an ecosystem?
- 3 What would you do to prepare a workforce and community to create and serve in an ecosystem? What promises would you make upfront to them?

Glimmers of the Future

The following examples showcase how organizations are already creating reimagined roles to best support, engage, and develop agency of their learners, families, and communities. These glimmers offer a sample of the many transformational efforts that are emerging across the education sector, in particular. These examples are meant to inspire new thinking and highlight the exciting initiatives currently underway.

People & People Systems

Embark Education, Colorado

Norris School District, Wisconsin

Purple Mai`a Foundation, Hawai`i

Springhouse Community School, Virginia

Thread, Maryland



People & People Systems

Embark Education, Colorado

Embark Education has established a micro middle school that operates within two small businesses located in North Denver. They have created a series of unique educator roles and teams to support their learners and operate at the intersection of business, community, and education:

- **Learning Coaches:** Trained educators who work with learners to develop personalized learning plans based on their individual interests and needs. These coaches help learners set goals, monitor their progress, and provide feedback on their work.
- **Innovation Fellows:** Fellowship that enables teachers to develop and implement innovative teaching practices. The program provides teachers with training, resources, and support to implement new ideas and strategies that can improve learning outcomes.
- **Enterprise Team:** Staff members of the bike and coffee shop who learn with Embark learners and offer their field expertise in areas such as business, marketing, and sales. The Enterprise Team are not K-12 teachers in the conventional sense, though they are integral to the learning and community at Embark Education. Learners regularly work in the shops alongside the Enterprise Team.

Additionally, Embark has recently opened Iterative Space, a design lab and space for educators to explore their ideas and passions. It offers a view of the kind of professional development that recognizes educators as learners with agency, and creates a range of experiences from a residency program to three-day immersive experiences.

SOURCE

<https://www.embarkeducation.org/>

Norris School District, Wisconsin

Norris School District, a small district located in Mukwonago, WI, serves learners in grades K-12 and has a mission to challenge and inspire learners to achieve their full potential in a safe and nurturing learning environment. Norris often receives learners who have been adjudicated, or cannot be placed in general school district schools. They have found a way to connect with every learner, whether they have them for only three short months or over the course of years. They begin by establishing a strong relationship and having every learner create a unique profile. Norris focuses on four key learning dimensions: academic, employability, citizenship, and wellness.

An interdependent Learning Team, called the “Norris Learning Network,” supports each learner's growth. At Norris School District, there are a variety of roles that are vital to their success, including advocates, specialists, liaisons, coaches, support teams, extended learning practitioners, and leadership. The following descriptions capture the unique accountabilities of a handful of these roles, the specialization within them, and how they intersect to support Norris's learners and community. These serve as examples of how Norris has intentionally organized their team of adults to play high-leverage, integrated roles to most impactfully serve their learners.

Advocates provide proactive support for learner engagement in academic pathways across the four dimensions with emphasis on Academic and Employability. The Advocate approaches learner interactions with a trauma-invested lens, helping learners to reflect on where they are in the learning process at the moment, understand their needs, and self advocate so they are getting to their next best place. They act as a facilitator of learning and work closely with Academic Specialists and other members of the Norris Learning Network to provide a multi-levelled system of support for learner success.

Extended Learning Opportunity Practitioners (ELOPs) are volunteer or contracted content experts who engage with learners in anytime, anywhere opportunities to develop their skills, within the context of real-life experiences. They provide expertise in a field that they have mastered, while transferring knowledge from one generation to the next.

Wellness Advocates support learners in developing wellness plans and providing learners opportunity for kinesthetic movement and body breaks as a proactive engagement strategy.

SOURCE

<https://www.norrisacademywi.org/learners-families/learning-experiences.cfm>



Purple Mai`a Foundation, Hawai`i

Purple Mai`a Foundation is a nonprofit organization based in Honolulu, HI, that focuses on educating and empowering young people in computer science and technology. They take a unique approach to education by integrating Hawaiian culture and values into their technology education. This requires that their educators not only have expertise in computer science and technology but also an understanding and appreciation for Hawaiian culture.

Three particularly unique roles stand out at Purple Mai`a Foundation: Culture-Based Curriculum Developer, Lead Community Technologist, and Lead Creative Technologist. In the role of Culture-Based Curriculum Developer, educators work to develop technology-focused curriculum that integrates Hawaiian culture and values such as aloha, kuleana, and `ike. This involves collaborating with other educators, technologists, and cultural practitioners to create engaging curriculum that is relevant to young people in Hawai`i. The technologists are responsible for bringing together community learning and spaces with the most relevant technologies to facilitate observation, relationship building, stewardship, and storytelling. These roles showcase the potential for combining technology education with cultural values to create unique and meaningful learning experiences for young people.

SOURCE

<https://purplemaia.org/>

Springhouse Community School, Virginia

Springhouse Community School provides vitality-centered education to help individuals respond to the ever-changing needs of the world. Springhouse offers a range of programs for both adolescents and adults, including an accredited Day School and a two-year program in regenerative cultural design and practice. Springhouse also offers courses for adults to strengthen their self-awareness and resilience, which are essential components of building a regenerative culture. This model of education and practice, called Sourced Design, is available globally.

To support its diverse programming, Springhouse has created innovative roles for its staff, including the Vitality-Centered Education Lead, Director of Creative Spacemaking, Communications & Community Coordinator, and Cultural Design Support and Outreach. These roles demonstrate the school's holistic and fluid approach to work, which allows each individual to participate in multiple ways.

For example, an administrator or finance manager at Springhouse may also describe their work to include multiple pathways for contribution such as: lead teens in a new song, lead exploration in the woods, guide a course in one of their many areas of interest, or follow up with families about attendance. This approach emphasizes the interconnectedness of roles and the importance of fluidity in adapting to emerging needs of learners and everyone engaged in the community.

SOURCE

<https://springhouse.org/>

Thread, Maryland

Thread is a unique initiative in Baltimore, MD, that connects learners, university and community-based volunteers, and collaborators to “weave a new social fabric.” Thread is seeking to break the cycle of crime, poor educational outcomes, and poor economic results for youth and communities in Baltimore, aiming to replace it with a new cycle of educational attainment, service, and social well-being.

Thread’s approach is to create new, lasting, and extended connections for youth with committed volunteers and collaborators in the community. Starting as freshmen in high school, each “Thread student” is connected with up to five community-based volunteers, who comprise their “extended Thread family.” This team of volunteers collaborate to offer customized support to the learner and their family and stay with them for the remainder of their high school experience and six years after, almost ten years total. This extended family structure might “pack lunches, provide rides to school, offer tutoring, connect [learners] and their families to existing community resources, or coordinate clothing, furniture, or appliance donations.” Each extended family is managed by an experienced “volunteer grandparent.”

Volunteers are trained, mentored, and supported by other more experienced volunteers. Likewise, multiple extended Thread families often build relationships with each other, as they meet when their dedicated Thread students interact.

In addition to the volunteers, Thread has a diverse set of collaborators, representing Baltimore businesses and organizations. These collaborators offer pro bono services, resources, expertise, and opportunities not only to learners but also to volunteers and the organization. Through this model, Thread fosters peer-to-peer support among youth and volunteers, facilitates sharing of resources and practices, and creates strong ties to the larger Baltimore community.

SOURCE

<https://thread.org>

**Conclusion**

Emergence of Ecosystems



When we look back on this time from the distant future, we will think of it as the turning point. Rather than trying to reform and fix an education system that was built for a different era, there emerged an overwhelming and influential call for the transformation of the system itself.

The industrial model of schooling that was built for standardization and compliance could not lead us forward. The growing awareness of the need for change created a shift in the public narrative, and the urgent need for transformation came into the mainstream.

The great challenge we faced was that this transformation could not be prescribed, duplicated, and mandated. We needed a new kind of education infrastructure, one designed for thriving.

That brings us back to today. What will it take to create an environment where each community can build upon their unique assets, diversity, culture, and history to grow ecosystems of learning that are more equitable, community-based, and learner-centered? We can choose to trailblaze a new path, one aimed at bringing to life all of the

wisdom, learnings, and creations of leaders to date through new ways of organizing, supporting, and credentialing learning. This is a new endeavor, and we can make our best bets and move forward. These are our bets:

- 1 Invest where ecosystems are already emerging to create demonstrations of what they can look like and make possible.** Find the champions, intermediaries, and anchoring organizations that bring together workforce development, afterschool alliances, citywide coalitions, childcare providers, and school districts. Identify the constraints and opportunities for expanding their vision into a full demonstration of ecosystems that would inform the education field of new possibilities and impact for education. Invest there.
- 2 Begin with conversations in those communities.** Listen to youth, families, educators, and community leaders. We can hear from them what their hopes, dreams, and commitments are, planting the vision for their own unique, equitable, community-based, learner-centered ecosystem. Listening closely and being responsive is a function of a thriving ecosystem. Their stories and aspirations will set the foundation for the work.

- 3 Pilot and create alternative structures of governance, assessment, and people systems.** Design structures to showcase the infrastructure that both has spreadable solutions within it, while still being unique to each community. It is these structures that can enable and enliven ecosystems within communities and, if proven effective, will replace those of the current system. If we are to design a system that is fluid, responsive, and living, rather than bureaucratic, standardized, and driven by compliance, we need to grow this system organically with the intent to show what is possible.

Our goal is that this exploration of providing an equitable, learner-centered education for all children in the United States has helped to clarify your own stand for what is possible. Our hope is to ignite (or reignite) your passion for the kind of transformation we need for our children, our families, our communities, and our society.

This vision for transformation gives us the opportunity to create stronger communities and deeper connections. We can together make this time a turning point in the purpose of public education.

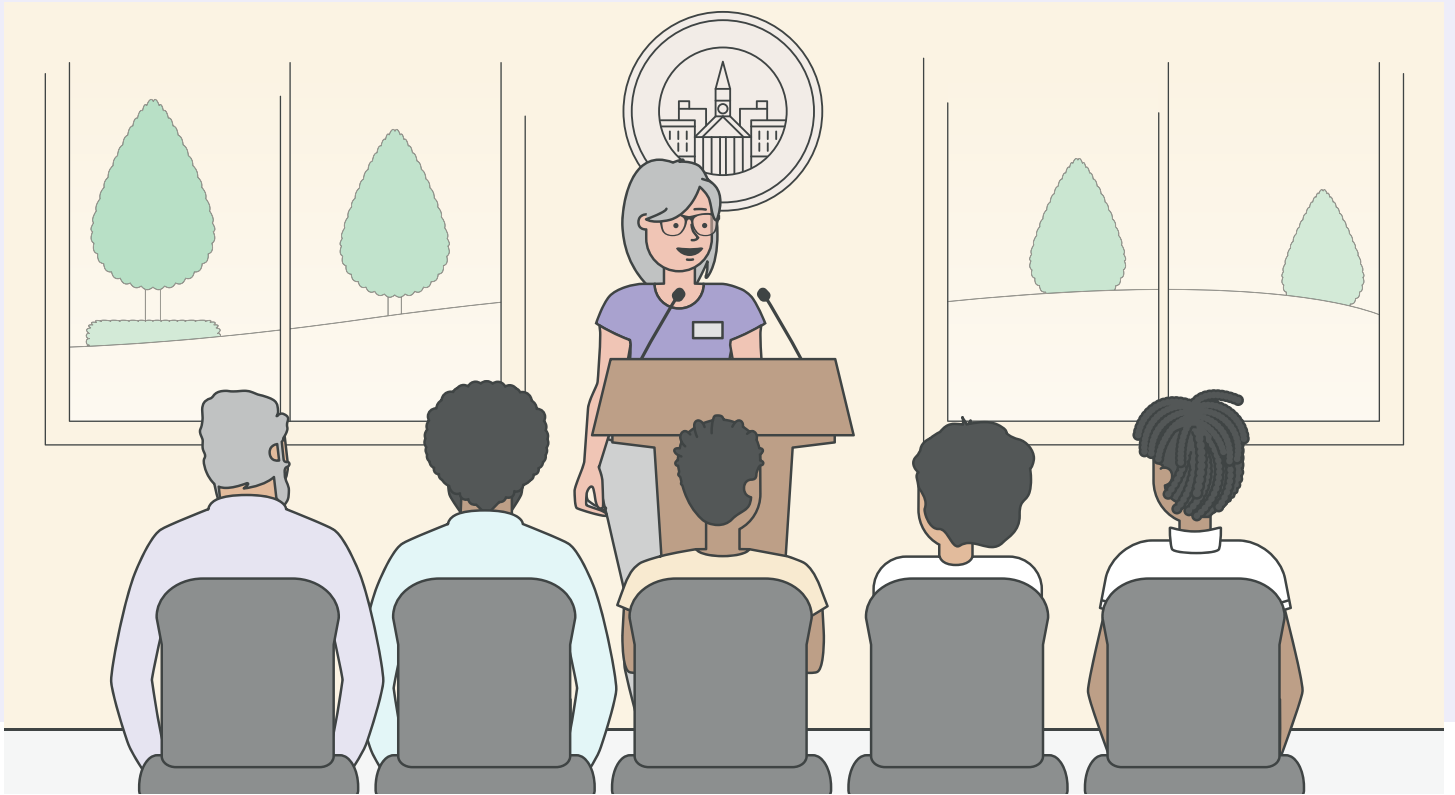


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In these appendices, we invite you to explore different ways to apply the ideas and frameworks offered in this guidebook. From considering how the current education system operates to imagining how different people might contribute within an ecosystem, these are offered as starting points with which to play.

An Exercise: Investigating the Principles of our Conventional Education System



The Ecosystems Working Group was brought together to imagine and generate guidance for the creation of new infrastructure that would enable the growth and development of learner-centered ecosystems. In this work, it was often useful to illuminate and consider the kinds of assumptions, principles, and norms that set the foundation of the current education system and its structures.

Rather than being an exercise in identifying what not to emulate, this is an exercise in understanding the impacts of such principles on how the system operates today. It reveals how any single principle shapes, constrains, and generates choices for those within the system, inviting those inventing a new infrastructure to attend to the impact (intended or otherwise) of the principles they may choose.

In this appendix, the Governance, Accountability, and Resource Allocation team has applied this thought exercise to the operations of the current school board structure.



An Example: Current School Board Operations

By Jennifer Davis Poon

As we consider what it would look and feel like to operate a governance structure aligned with our ecosystem’s principles, we recognize that the predominant governance model for education systems today—the local school board—is poorly aligned.

School boards prioritize order and control. Consider the following excerpts from the National School Board Association’s *Key Work of School Boards* section on “Public Participation” (emphasis added):

“The board’s *priority* is to conduct an *orderly* and *efficient* session.”

“While board meetings are public meetings, *no individual has a ‘right’ to speak.*”

“Firm board procedures are essential for board hearings and meetings when *angry citizens descend upon the board.*”

“Local governing bodies may establish and enforce rules and regulations for individual conduct at public meetings. To require otherwise would be to permit any person to *destroy the effectiveness of local government* by monopolizing its time at public meetings and disrupt the business that could be conducted.”

Order and decorum are indeed important to ensuring that all voices are able to be heard, but strict rules of order can also be used to silence, rather than hear, what those in power don’t want to hear. The result is order at the expense of true democratic participation by the very people school board members represent.

Aligned with the principles of order and control, school boards deliberate and make decisions using parliamentary procedures, such as Robert’s Rules of Order, that rely on majority rule (i.e., a proposal will pass if more than half of the voters vote in favor of it). While in theory majority rule has advantages such as efficiency, decisiveness, and neutrality, it also can create competition, be vulnerable to exploitation, and absolve voters of ownership or ongoing commitment to the decision (see “Majority Rule: Principles and Criticisms” sidebar). These effects work against the participatory, trust-building principles of learner-centered ecosystem governance.

Majority Rule: Principles and Criticisms

Principles

- **Deliberative:** Debate is systematically encouraged.
- **Neutral:** Each side gets equal opportunity to present their case, and each option is held to the same threshold of earning more than half the votes.
- **Anonymous:** Each vote is treated identically no matter who cast it
- **Efficient:** A single winner is quickly selected.
- **Decisive:** Decisions can be made even when there is widespread disagreement.

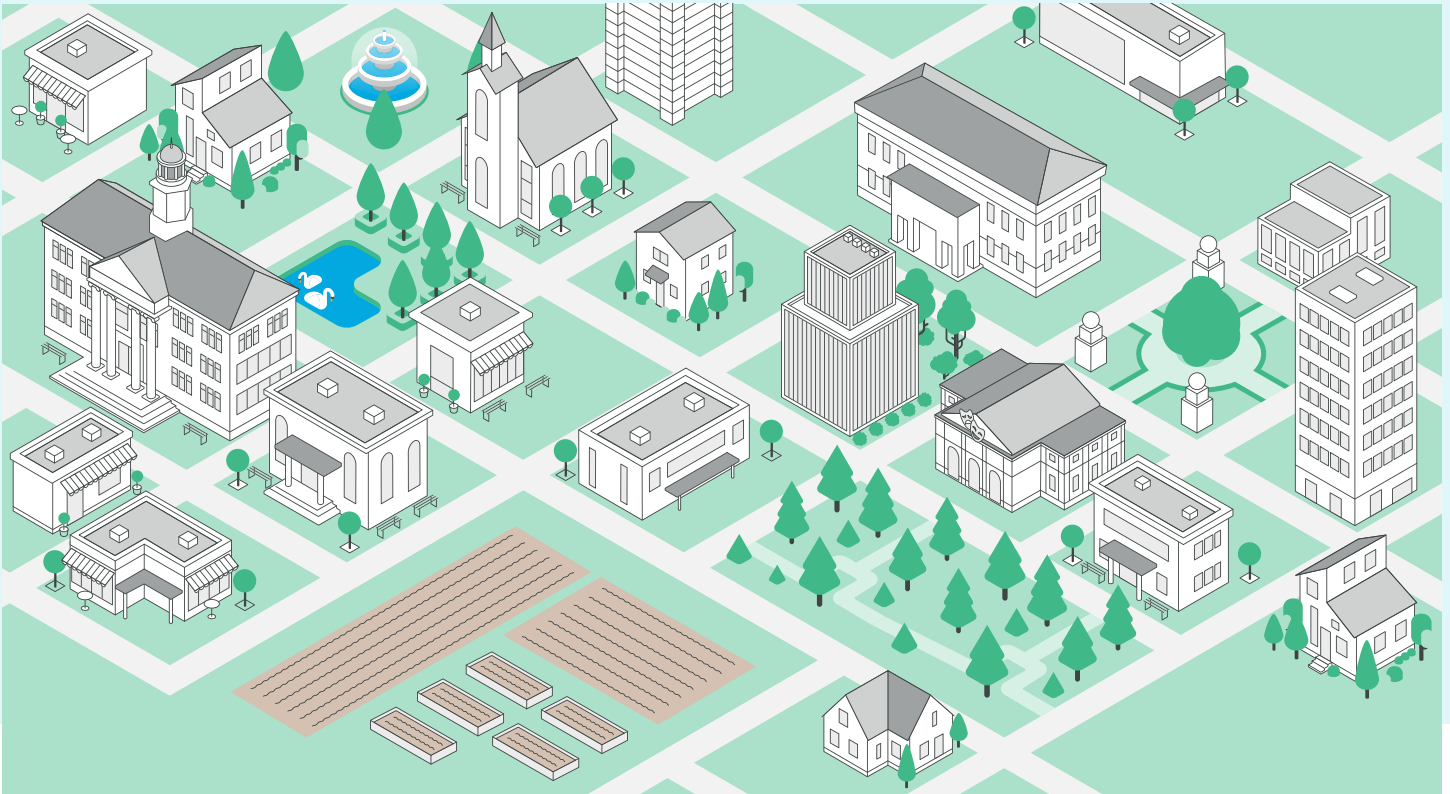
Criticisms

- **Competitive:** Creates clear dichotomy of winners and losers, ignoring alternative outcomes like compromise.
- **Enables exploitation:** Winners can exclusively pursue their own interests and ignore or oppress minority opinions (“tyranny of the majority”).
- **Lack of ownership:** Voters may feel less commitment to a decision even if they voted for it. Those who didn’t vote for it may continue to actively work against it.
- **Inequitable:** Some participants may be unequally affected or disadvantaged by the decision, or may be unequally responsible for implementing the decision.

Reflection Questions

- 1 How else do you see these underlying principles of current school boards show up in the current education system? What impacts do they have?
- 2 If you consider other foundational structures within the conventional education system, what do you notice about their underlying principles? Are there places that actually document these principles?
- 3 What would it mean to invent a system of governance with a new set of principles at its core, like those offered in Chapter 2 (Inclusive, Learner-Centered, Relational, Dynamic, Ongoing, Transparent, Protective, Enrolling)? What criticisms or tensions might emerge? In Appendix B, the Ecosystems Working Group offers a vignette that imagines this alternative.

An Exercise: Imagining an Alternative Governance System



This vignette stems from a conversation among members of the Governance, Accountability, and Resource Allocation team of the Ecosystems Working Group. We began with a scenario inspired by real-life events and then, in search of an alternative to today's school board governance model, we turned to counter-examples of collective or consensus-based decision-making that exist in the world today.

Through a jigsaw methodology, we explored three models—En'owkin, Quaker group discernment, and holacracy—and considered how the component structures, processes, or underlying values of these examples might be applied in a governance structure for a learner-centered ecosystem.¹

Far from prescriptive, this vignette is intended to spark ideas for governance designs that better align with the principles of learner-centered ecosystems. Jennifer Davis Poon served as the lead author of this vignette.



Governance in Action

Considering a Proposal in Harperstown

Scenario: Lacking Green Spaces in Harperstown

David moved to Harperstown a year ago. It has taken him a while to get used to the change, but he's beginning to feel comfortable and now has a few people he can connect with. He's always loved gardening and helps out at his neighborhood's community garden. At one of the garden meetings, he was talking with his neighbor Malinda, who happens to be a child wellness specialist. Malinda wished there were more green spaces around. More trees and green spaces, she told him, really improve the air quality and the health of children. They are also great spaces for playing and learning. There are two parks in the neighborhoods, but they're not accessible to the children who don't live in those neighborhoods. David asked why they didn't try a tree planting campaign, but Malinda explained that they had partnered with a national nonprofit a few years ago to do just that, but many residents rejected the idea when volunteers knocked on their doors offering to plant trees in their neighborhood. This left David perplexed, and he felt there could be more to the story. He asked Malinda whether it would be a good idea to talk to those neighbors to understand what happened.²

David is sitting with his neighbor Malinda, preparing a proposal to construct a new green learning space on their side of Harperstown. David, a learner who recently moved to the area, finds comfort in nature. He is concerned that there aren't more trees or parks that are accessible to families on his side of town. Malinda is a child wellness specialist whose functions in the ecosystem include **safeguarding wellness and safety**. She believes more green spaces would improve the overall health of families in the area and would provide excellent spaces for play and hands-on learning.

David's learning advisor, Jason, joins them. Jason's key functions include **navigating & facilitating learning** in support of David and others' learning, as well as **story catching**, meaning he is listening and collecting artifacts of David's growth as he participates in this effort.

Together, David, Malinda, and Jason craft a proposal to convert an undeveloped stretch of land into a multi-use park and outdoor learning space. And because Harperstown has recent history of a failed tree-planting campaign, they will take steps to ensure that all viewpoints will be heard and learned from as they plan to convene the Harperstown Ecosystem Governance System (HEGS) around their proposal.

As Malinda explains to David, the HEGS is not a static governing body organized around a set of people, like a typical board of representatives. Rather, the HEGS is a flat structure for self-governance organized around the work being done in the learner-centered ecosystem. As such, all of the individuals that contribute to Harperstown's learner-centered ecosystem are likely to be involved in a HEGS process at one point or another. Malinda has participated in several, but this will be David's first opportunity.

Malinda continues in her tutorial: a comprehensive HEGS Charter identifies distinct areas of work called "somas," she tells David, meaning "bodies," organized around specific goals or purposes that, together, contribute to shared goals for the success and wellness of the Harperstown learner-centered ecosystem. Individuals may take membership in one or more somas according to how the individual is contributing to the ecosystem at a given time. For example, Malinda is a member of the Child Wellness soma, which is accountable for elevating the physical, emotional, and developmental care of all children in the Harperstown ecosystem. As a younger learner, David's involvement in somas is more in flux, but he has recently gotten involved in meetings with the Family Nutrition soma.

Somas have authority to carry out activities and make decisions within their work domains, which they do through regular tactical meetings. But when decisions are large enough that they implicate several somas or when tensions arise that suggest one or more somas should carry out their work differently, a HEGS governance meeting is convened.

Indeed, David and Malinda's proposal for a multi-use park implicates multiple somas that deliberate together: Child Wellness, Land Use, Construction, Facilities Management, Facilities Maintenance, Peaceful Homesteads, Transportation Flow, and Learning Opportunities, to name a few. To help facilitate a meeting with members of these somas and the broader community, Malinda and David approach the HEGS Clerk, a position that is held by a highly-trained individual who is elected by the community and who facilitates HEGS governance meetings as their sole contribution to the ecosystem.

The Clerk sets a meeting date and location and works with others whose key functions include **inviting, welcoming, and orienting** to encourage members of the impacted somas to participate. They also issue an open invitation to anyone who might feel affected by the proposal,

and conduct targeted outreach to individuals whose voices have been historically left out or who may feel uncomfortable attending for reasons of mistrust. Finally, to support all those who would participate but are unable to physically attend on the date and time of the meeting, the Clerk prepares the town's civic participation platform, vHarperstown,³ to integrate participation by those attending physically, virtually, and asynchronously.

During the meeting, David and Malinda present their concerns and then share their proposal for the multi-use park. After a brief round of clarifying questions, David and Malinda step back to allow space for everyone else to react. Every person who wants to offer a reaction is given space to do, and there is no discussion, side chatter, or attempt to convince anyone else. This is a phase for listening.

When providing a reaction, participants are encouraged to identify and speak from the vantage point of the Harperstown core value(s) or promise(s) that they are protecting through their comments. Those core values or promises are

- security,
- sustainability,
- innovation, and
- legacy.

By being explicit about which core values or promises animate their reactions, participants are better able to sift past differences in details and uncover common motivations and understanding.

Once everyone attending in-person and virtually has had an opportunity to offer a reaction, the meeting is paused for the rest of the day to allow anyone else to add reactions asynchronously through vHarperstown.

The next morning, after hearing reactions from all who want to offer them, David and Malinda have an opportunity to revise their proposal. Once revised, they present it back to the group for a second round of refinement through objections.

When inviting objections, the Clerk poses the question to the participants, "Will this proposal create harm?" The question is phrased this way for two important reasons. First, it bypasses ego-driven responses of liking or disliking of a proposal, instead compelling objectors to articulate concrete reasons why the proposal would negatively

impact them, their soma, or the ecosystem. Additionally, the question signals a disposition toward innovation and experimentation: unless we know a proposal is worse than what we have now, we'll try it. This also helps skirt the trap of groupthink.⁴

Some participants do raise objections. Two long-time residents of Harperstown voice concerns that Harperstown wouldn't be able to properly care for the park's upkeep, eventually causing harm by exposing children to dilapidated playground equipment, destroying nearby properties with invasive weeds, and damaging underground pipes due to uncontrolled tree roots. They point to dying trees nearby their houses as evidence of the town's broken promises. Other participants raise objections related to traffic and budgetary concerns.

Once all objections are gathered, the Clerk moves through the objections one by one and asks David, Malinda, and anyone else with an idea to contribute, to reconcile the objection by further iterating on their proposal in ways that satisfy both the objection and the needs that brought David and Malinda to create their proposal in the first place.

At last, David, Malinda, and the entire group arrive at a proposal that will satisfy their underlying concerns about the lack of green spaces on their side of the town. It looks different than the proposal they walked in with: the park will be a little smaller than they originally imagined in order to reduce the burden of upkeep, but because it will now be jointly planned with the Learning Opportunities soma to house two nearby Home Bases, park developers will be able to leverage the town budget for learning space design in order to bring in and maintain top-of-the-line equipment. Importantly for those two long-time residents, the budget approved for the park will also include set-aside funding for an arborist to maintain the new park, while also removing and replacing dead or diseased trees in the area.

The meeting took a total of eight hours over two days: three hours the first day to present the proposal and garner reactions; an overnight pause to allow anyone else to register reactions asynchronously through vHarperstown; and five hours on the second day for David and Malinda to revise their proposal, collect objections, and work with the group to integrate each objection into a new proposal that everyone can stand behind.

But while the process took much longer than merely seeking a show-of-hands vote, it generated a plan that was



much stronger than what David and Malinda had conceived on their own. More significantly, the process forged a sense of solidarity around the plan and shared commitment to carrying it forward, with new roles and responsibilities clearly defined for each person, and each soma, impacted by the plan. Rather than splintering the group through a divisive vote, relationships formed and solidified.

And David has learned a lot. He will spend the next several weeks **story catching** with his learning advisor, Jason, in order to consolidate and communicate the knowledge and skills he has gained. Together with David's family, he and Jason will begin charting his next series of learning objectives as he joins the Land Use and Construction somas to oversee park development in the months ahead.

Epilogue

A governance process like HEGS (or the examples of En'owkin, Quaker group discernment, and holacracy that inspired it) requires commitment and ongoing investment.

Importantly, such a process exists within a community culture that appreciates the interconnectedness of all people. While human nature may compel individuals to act toward self-preservation and individual gain, communities simultaneously uphold the belief that the whole is bigger than the sum of its parts; or that we are only as strong as our weakest link; or, as Jeanette Armstrong writes, that the “community-mind can be developed as a way to magnify the creativity of an individual mind and thus increase an individual's overall potential.”⁵

Further, a community or ecosystem will not succeed at a process like HEGS unless it promotes a culture of seeing past differences and recognizing that, in the words of Valarie Kaur, a stranger is just “a part of me I do not yet know.”⁶

Materially, a consensus-based decision-making process like HEGS requires the investment of time (since the process takes much longer than simply casting a vote) and resources. These resources might include a well-trained neutral facilitator (the Clerk in the vignette) and physical and technological spaces that support democratic participation and discourse. In our study of these kinds of systems, failure rates seem highest when groups or organizations poorly facilitate governance meetings,

causing them to perpetuate misunderstandings and preexisting power hierarchies; or when there is insufficient investment in spaces and technologies to manage them, causing groups to spend more time in governance meetings than on actions that deliver on their goals.

But systems like the HEGS example also create efficiencies and produce value in ways that are particularly relevant in the case of a learner-centered ecosystem. They create solidarity and commitment to a decision—the coveted buy-in that often eludes more hierarchical governance systems. In fact, lacking widespread commitment to a decision, one can argue that other models of governance take *more* time to get to successful implementation, if they ever reach it at all.

Moreover, systems like the HEGS example are designed to create trusting relationships between individuals, and between individuals and governance itself. Such relationships are paramount if every learner and member of the ecosystem is to be seen, known, supported, and have agency over their learning and future.

Reflection Questions

- 1 What do you notice about how intergenerational interactions impacted this process? What difference did that make?
- 2 This vignette emphasizes the role of the Clerk. What skillsets would be essential for someone in that role? What other full-time, part-time, or volunteer positions might be necessary for this kind of decision-making process to operate effectively?
- 3 Imagine your local community took this approach to governance and decision-making on significant matters, what would that look like? What benefits would it have? What concerns would you have?

An Exercise: Imagining Infrastructure Solutions



The Ecosystems Working Group created sets of design principles as an offer to guide the invention of learner-centered infrastructure in the realms of governance, accountability, resource allocation, assessment, credentialing of learning, and people systems. The next phase of work is that of imagining, piloting, and testing new tools, structures, technologies,

and platforms that align with these principles and work for real communities, generating spreadable solutions that can be utilized and adapted across varied contexts.

In this appendix, two members of the Governance, Accountability, and Resource Allocation team generated a new possibility for how resource allocation could enable young people to dynamically access resources as they move through their learning journey, accessing varied learning opportunities and experiences within their communities.

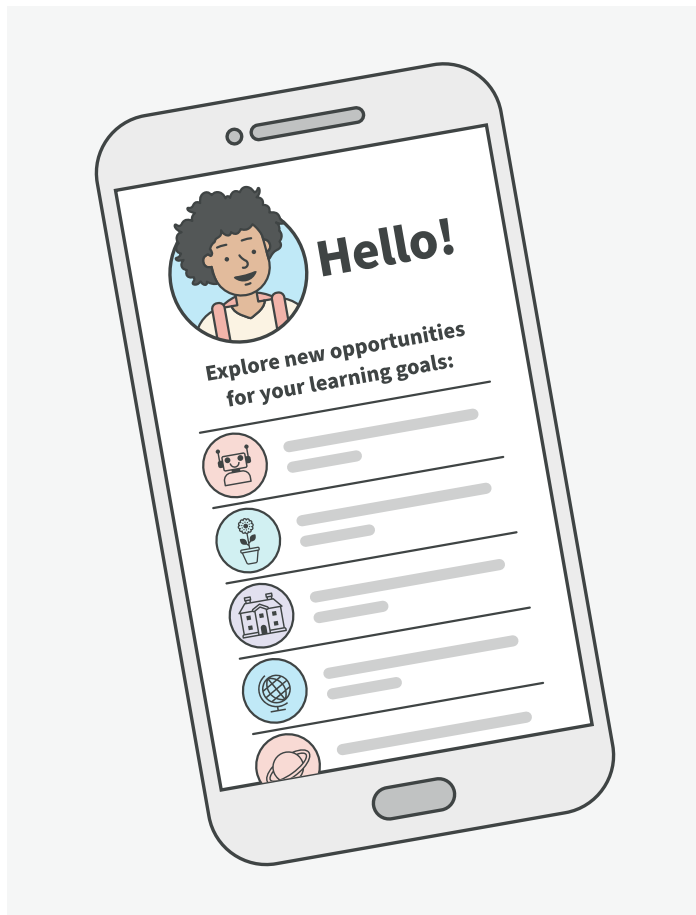


Connecting Resource Flows: There's an app for that

By Jennifer Davis Poon & Todd Smith

Challenge: Allocating resources according to need

From a financial perspective, the current education system in America lacks efficiency. Attempts to measure productivity and return on investment consistently demonstrate no relationship between the amount of education spending and learner outcomes. The very design of funding formulas treats every student the same, as merely a warm body regardless of unique needs and interests. The educational institutions that receive these funds serve up essentially identical programming to every warm body regardless of its relevance to their long-term aspirations.



Now imagine instead a learner-centered ecosystem in which each young learner embarks on their own learning journey, leading toward their long-term aspirations for their career, civic participation, and who they want to become as a person. Imagine that their educational experience is not one of passive receipt of one-size-fits-all programming but rather one of active engagement in learning experiences, which may span multiple digital and physical locations in their community, tailored to their short-term needs and relevant and valuable to their long-term trajectory.

Imagine the financial efficiencies possible in such a targeted system of learning. Instead of rote funding formulas and standard programming, suppose learners could dynamically tap into funds in order to access whichever learning opportunities are needed and relevant to them at a given time.

Further, imagine that those funds came from a “bigger pie” than today’s narrow view of education finance and included all of the resources and assets being invested in human development in an ecosystem, such as community college funds; municipal or philanthropic spending on education, youth development, or afterschool care; spending on preventative healthcare; corrections and rehabilitation budgets; and local industry spending on training and employee development. So many independent sources of funding might seem impossible to track, let alone smartly allocate learner by learner according to their unique learning needs and plans. But what if there were an app for that?

Solution: There's an app for that

Imagine an “Opportunity App” that animates and streamlines resource allocation across the learner-centered ecosystem. First, suppose the entire learner-centered ecosystem undertook a detailed asset-mapping exercise to catalog existing capital. This would include all funding streams, grant programs, and investments being made in promoting the learning, development, and holistic well-being of individuals (young and old) in the ecosystem. It would also include nonfinancial investments like physical facilities and free digital platforms, as well as people-powered investments such as pro-bono service providers, mentors, volunteers, graduate students, and individuals completing service hours.

Now imagine algorithms powered by artificial intelligence that comb this back-end data and match available opportunities with individuals who need them according to their current learning and developmental goals. Suppose that learners routinely log into the app and, together with their family and learning advisor, browse and select learning opportunities to pursue now, six months from now, or even years from now. A touch of a button sets a chain of actions in motion that coordinate and make available the resources needed for each learning opportunity.

Suppose the back-end information came not from a one-off audit but was continually crowdsourced, with managers and promoters of those programs and investments able to input and steward their own data. Suppose they could indicate what they want in return from their investments and log on to see their impact in real time. Further imagine that the app can run algorithms that identify redundancies where investments can be combined or reallocated to produce savings, or gaps where not enough resources are invested to meet community needs. Suppose it can flag these kinds of redundancies or gaps for the ecosystem governance system to address.

Lastly, imagine it is not only young learners who use this app, but that the user base steadily grows to support adult learning and workforce development comprehensively. No app like this exists today, but the technology does. It just takes members of an ecosystem to bring it to life.

Reflection Questions

- 1 How do you see the guiding principles of resource allocation (Transparent, Coordinated, Equitable, Participatory, Monitored) show up in this idea for an “Opportunity App”?
- 2 If you consider the tensions and tradeoffs highlighted in chapters 2–4, are there other technological solutions that might help to address or alleviate them?
- 3 From engaging with this guide, what challenge are you called to most? What solution might you imagine?



Appendix D

An Exercise: Visualizing Key Functions



The following eight vignettes are intended to be used as exercises to help users of this guide visualize what a key function may look like in a community-based, learner-centered-ecosystem. Each vignette focuses on a specific key function; however, the reader will also observe that other functions may be evident in the stories. This is because

no key function truly operates in isolation. They interact with each other across various domains, levels of operations, and spaces.

The primary purpose of these vignettes is to provide clarity and inspiration about how select key functions could be actualized and may look in real life. They are not comprehensive, nor do they capture the full span of possibilities for a key function.

These vignettes were a result of the synthesis of the work of the People and People Systems team. Adriana Martinez Calvit served as the lead author.

Vignette #1

Key Function: Navigating and facilitating learning

Jose the literacy advisor

Jose works from one of his ecosystem's home bases and is part of several cross-functional teams for the learners in that home base. He specializes in primary education, so he is more involved in supporting younger learners; however, as his learners grow up, he stays involved in their cross-functional team as a mentor. As a literacy advisor, Jose works individually with the learners he supports. He helps them set goals and milestones related to their literacy journey and provides them individualized support in areas where learners need additional help. He collaborates with each learner's learning coach to document the learner's progress in literacy. As part of this work, he collects artifacts, formative assessments, and learners' self-assessments, which the learning coach captures in the learner's learning plan. Jose collaborates with other learning advisors (e.g., arts, STEM, social studies) and young learners to develop interdisciplinary learning projects.

Helping children discover a love for reading is Jose's passion. He is most excited when learners who struggle with reading make breakthroughs and find joy upon discovering the different worlds that the written word offers. Sometimes, Jose gets frustrated because his learners are digitally savvy, and he is not. He is working with his mentor to improve his technological literacy so that he can become more comfortable with using technology tools to carry out his key functions. An important area of focus for Jose is developing creative ways to integrate technology to support his learners. He has found that some of his mentees have been helpful. One of his mentees connected him to a local blogger and the three of them brainstormed projects, including one where learners might blog stories on topics of their choice to strengthen their literacy skills.

Reflection Questions

- 1 What are some of the key functions that Jose is fulfilling in his role as a literacy advisor?
- 2 Imagine when Jose first started working as a literacy advisor. What might his story have looked like when he first started? What might have been different? What might be enduring still?
- 3 Think about where Jose might be five years from now. Have his key functions changed? How would you write his story?




Vignette #2

Key Function: Learning

Chedaya engages in learning

Ten-year-old Chedaya engages in learning in many different forms. At her home base, she works with her learning advisor, Joon, to develop a learning plan through which she sets her learning goals and makes decisions about her learning experiences. She engages at the YMCA, where she co-facilitates learning for younger learners and practices her communication skills. She also loves going to the park to learn about nature and insects—especially ants!

Several times a week, Chedaya talks with Joon about where she is progressing or where she needs help. For example, Chedaya loves writing stories about ants. Joon and Chedaya check-in with her literacy advisor, Jose, who helps both of them realize that Chedaya is a very strong writer. These conversations help Chedaya realize how much she is growing and improving. Now, Joon wants Chedaya to apply her passion for insects to learn about biology and start to engage in scientific inquiry. She doesn't think that is as exciting as writing stories. Joon tells Chedaya that this will ultimately help her become a better writer, so Chedaya decides to give it a chance.

Note: This vignette was based on the story of Chedaya as featured in Education Reimagined's The Big Idea series.⁷

Reflection Questions

- 1 In addition to learning, what other functions do you see Chedaya fulfilling?
- 2 Imagine the role that Chedaya's family plays in her learning journey and in the ecosystem more broadly. In addition to Joon, what other teams of people might support their engagement?
- 3 This vignette focuses on the experience of Chedaya. If you could write a vignette for her learning advisor, Joon, what would that look like?



Vignette #3

Key Function: Storytelling

Chedaya tells stories

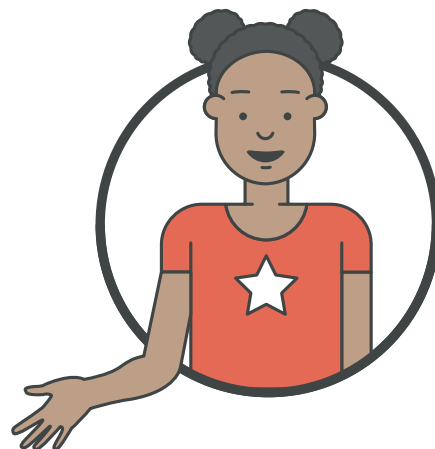
Ten-year-old Chedaya is very creative and loves telling stories about the different topics that fascinate her. Chedaya is writing a story about ants that she is publishing in a series of blogs. Jose is Chedaya's literacy advisor. He started working with Chedaya about two years ago.

Chedaya, Jose, and a local blogger, Aminesh, are all collaborating on the project together. Aminesh uses his blog to showcase learners' interests and passions to the broader community. Often, he will give them tips about creative writing. For example, he told Chedaya that describing details really helps the story come alive. Jose sees this as an opportunity to help Chedaya write more complex sentences.

Chedaya has also been learning about insects as part of her science learning. She has been working with her advisor and staff at the park to investigate questions like: What characteristics do ants share with other insects? How are ants similar or different from other insects? What are the unique behaviors of ants? Chedaya thinks these questions will help her come up with lots of information that she can use to improve the use of descriptions in her story. She can't wait to write her next story and see what others think.

Reflection Questions

- 1 How do you imagine Aminesh got connected with the ecosystem and Chedaya? What structures might be in place to find, invite, and support community volunteers to share their gifts with the ecosystem?
- 2 Think about the staff at the park where Chedaya is learning about insects. What functions might they be fulfilling and what roles might they have?
- 3 Imagine Chedaya when she is an adult. What impact did these learning experiences and connections have on her aspirations and plans for her future?




Vignette #4

Key Function: Story catching

Zahara the assessment specialist

Zahara is an assessment specialist in social emotional learning. She knows how to recognize when learners demonstrate growth in critical thinking. For example, from observing learners when they engage in dialogue on an issue (e.g. a socio-scientific issue), she can identify when learners make arguments, reasoning, and evidence to back their claims. She can identify when learners progress from basic understanding and reflections to more nuanced and sophisticated forms of understanding and communicating their own arguments.

This is a unique gift Zahara uses when she collaborates with learners and their learning advisors to help them understand where they are in their learning progression, where they need to grow, and how they might go about those next steps.

With Zahara's help, learners and advisors are able to carefully build a storybook of their learning journey that documents their skills and abilities and where they need to go next, as well as identifying where they might pursue and earn a credential in their learning portfolio.

Reflection Questions

- 1 What does this vignette make you notice about the role of stories in an ecosystem?
- 2 What kind of structures of communication and support would be needed to make sure Zahara's unique gifts as an assessment specialist contribute to the learners and community?
- 3 Think about the training Zahara received to become an assessment specialist. Where might she have received that training? What sort of experiences and credentials might it have required?



Vignette #5

Key Function: Playing, socializing, and caring

Cat's creative friends

Seventeen-year-old Cat has many passions. She loves crafting—anything from making herb-infused candles to personalizing Christmas ornaments for her friends and family. She's also a skilled photographer and prolific artist. She identifies as many things—creator, sister, immigrant, and connector—but her main passion is her art. Her artwork is inspired by her family's heritage and immigrant background. When she paints, Cat brings to life personal stories with bright colors and Mexican motifs.

Cat spends a lot of her time with her friends who are like-minded creatives at a local Learning Hub housed in an art studio. Her friend Ariel is a photographer, and Julia makes jewelry. Javi paints, although his style differs from Cat's. This group of friends were connected with each other three years ago by Cat's advisor, Larry, when Cat was looking for peers with whom she could share her passion.

Even though they have different artistic styles, they give each other constructive feedback on their work. But more importantly, they support each other and spend time creating art together. Together, Cat, Ariel, Julia, and Javi go to art exhibits and organize events like pop-up shows and festivals. They visit each other often, and occasionally host paint or drawing sessions. In these sessions, they share their visions for their art, ask questions, and make suggestions. What color palette goes well with this concept? How is Cat's artistic style evolving? Sometimes Cat struggles with her confidence, but her friends always help her see her strength as an artist who channels her Mexican heritage and personal stories through her art.

Reflection Questions

- 1 This vignette features one way that Cat has found friendships within the ecosystem others who have a shared passion. What other groups of learners might she engage with?
- 2 What roles might Cat, Ariel, Julia, and Javi's advisors play in acknowledging, documenting, and where appropriate, credentialing the competencies they are developing together?
- 3 Imagine these learners are interested in taking a ceramics course offered by a local art studio. How might they work with their advisors to do so as part of their learning journeys?




Vignette #6

Key Function: Distributing and receiving gifts

Lucy the new math specialist

Lucy was a math major in college and was recruited to her ecosystem as a math specialist for young adolescents (approximately ages 13 through 15). Lucy is from Boston and has recently moved to Arizona in a community with several generations of immigrants. As part of her orientation, she (along with young learners and a learning coach) developed a learning plan for her new role. In her plan, she's committed to visiting the families of the learners in her home base and shadowing them in their work. Her goal is to notice how math is practiced formally and informally in the community that is welcoming her.

She observes that several mothers, grandmothers, and aunts are seamstresses who are experts in measurement, designing patterns, and making calculations based on the needs of their clients. One of the families also invites her over to dinner and over the conversation, Lucy asks about the meal. Here she learns that the recipes were handed down through generations, and they use produce from the neighborhood's community garden.

When Lucy meets with her learning coach, LaTonya, she shares these observations, and they brainstorm possible projects and lesson plans using geography, statistics, and algebra that involve seamstress projects and the community garden.

She also meets with the learners who are part of her welcoming team. She shares with them her observations and the ideas she brainstormed. The learners give her feedback and also provide additional ideas. One learner, Fuyi, loves fashion, so he thinks they can work together on creating a lesson plan. Another learner, Shaun, thinks that the project on the community garden should involve the broader community. He encourages Lucy to talk with other community members who could collaborate on the project. He mentions that although Lucy specializes in older learners, the younger children in the neighborhood love working in the community garden, so she might think about ways to integrate them into these projects. So, Lucy makes a list of other people to talk

to, including the early childhood learning specialist and the young learners, their families, and their learning coaches. Finally, she meets with the home base's wellness coach, Rob, to consider how they might collaborate in the work.

Note: This vignette was inspired by ethnographic educational research by Luis Moll, Norma Gonzalez, Deborah Neff, and Cathy Amanti on learners' and families' funds of knowledge⁸ and by Gloria Ladson-Billings' research on culturally sustaining pedagogy.⁹

Reflection Questions

- 1 What does this vignette make you notice about the structures and practices in place to welcome and orient new educators to the ecosystem? What might be missing?
- 2 Imagine Lucy fifteen years from now, as a veteran specialist. What role might she be playing to support new ecosystem participants?
- 3 This is the story of Lucy. If you think about Rob, the wellness coach, what story might you tell?



Vignette #7

Key Function: Connecting and coordinating

Sophia the counselor

Sophia is an adolescent counselor who recently attended a national conference on adolescent development, attended by leaders from schools, districts, and ecosystems. At the event, she learned something rather curious that kept nagging her when she came back home. She had attended a session on adolescent sleep debt because she thought it was an odd idea and wanted to learn more. In the session, she learned that as adolescents go through drastic and rapid physiological and psychological changes, their sleep-wake cycles get disrupted.

The research showed that early school start times, usually between 7 and 8 in the morning, were not optimal for adolescent learning because young people function best, physically and cognitively, later in the day and in the evenings. This was not surprising to Sophia. She had often heard people complain that the conventional school schedule did not make sense for teens. Unfortunately, because adolescents tend to stay awake later due to changes in their sleep-wake cycle but are forced to wake up at early hours, they accumulate sleep debt, leading many to worry that school schedules cause students to become disengaged in learning, especially in their morning classes. She had seen anecdotal examples in her community's ecosystem of teenagers altering their days to better match their sleep needs, but this was not a topic she'd heard much conversation about.

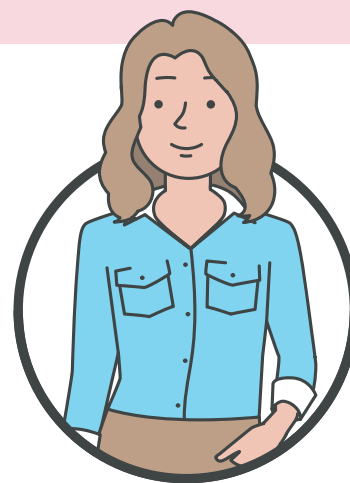
So, while the data made sense, what surprised Sophia was that many school districts had attempted to change school schedules to address this concern but failed, mostly because of pushback from the community. Community members protested because changing schedules would disrupt traffic patterns. Parents complained that schedule changes meant their adolescent children would not be home to babysit younger siblings. Bus drivers complained that if they had different routes for elementary schools and secondary schools there would not be enough buses or drivers.

Sophia decided that she needed to consider adolescent sleep-debt with the learners and the families she supported more intentionally. She wanted to make sure that

adolescent learners, their families, and cross-functional teams took this into account when planning their schedules. Fortunately, in her learner-centered ecosystem, she felt it might be easier to collaborate across different stakeholders. She also wanted to connect with other counselors who worked with adolescent learners as well. Based on what she learned, she made a checklist of people to connect with and questions she wanted to ask.

Reflection Questions

- 1 What kind of structures and processes might enable Sophia to pursue this line of inquiry in her ecosystem and how would it require her to collaborate and work across teams?
- 2 Think about how learners at different ages and developmental levels might engage in an ecosystem. What might be in place to support their unique developmental needs, while still enabling engagement across developmental stages?
- 3 This vignette reveals one way that ecosystem participants might engage and learn outside of their community and ecosystem. What other kinds of similar connections and experiences might those in the ecosystem pursue?





Vignette #8

Key Function: Harvesting and replenishing resources

Jamie's community workshops

Jamie found himself facing the type of problem that is good to have, but still a little worrisome. This month, he was trying out a new project that came from an impromptu brainstorming session with folks at a soccer game. Each week, he planned to invite a family member of one of the children in his home base to do a community learning workshop.

The first week, Yvonne's dad, Antoine, hosted a carpentry workshop, and it was a great success. Young children learned about shapes, middle grade learners practiced algebra, and older learners explored how physics concepts inform the design of tables and chairs.

The following week, Gabriel's grandmother, Yvette, hosted a pie-baking workshop.

Suddenly, all the families of the children in his home base wanted to participate, and before he knew it, Jamie had depleted his budget for the quarter. For the workshops to be a success, he needed to ensure there were enough materials and supplies so that everyone could participate and engage in meaningful learning.

He reached out to Michele, his regional coordinator, to find a solution. Together they worked on a plan to adjust budgeting, but it was not enough to cover the additional expenses. Michele suggested that his home base put together a proposal to see if some local businesses would be willing to sponsor the program or donate materials.

Note: This vignette was inspired by Gloria Ladson-Billings' research on culturally sustaining pedagogy.¹⁰

Reflection Questions

- 1 Think about the work that happened between the impromptu brainstorm session and the first community learning workshop. What might those efforts have been? Who else might have been involved to help Jamie get the idea off the ground?
- 2 What does this vignette reveal about how ecosystems might leverage and integrate multiple sources of funding and resources?
- 3 Imagine the role that Michele plays as regional coordinator. What would her story look like? What other roles might operate at the regional level to support multiple ecosystems?



Notes to Appendices

- 1 For an overview of the jigsaw methodology used, access the document “Jigsaw Activity: Create a New Prototype for Governance” at https://docs.google.com/presentation/d/1LSn5sJnShCPaz8yAq45EOfYouJQ_8SAlbrbcX8hfOE/edit#slide=id.p.
- 2 This scenario was inspired by tree planting efforts in Detroit that were chronicled in a *New York Times* article and a study by the University of Vermont. See Steph Yin, “Free Trees? No Thanks,” *New York Times*, January 7, 2019, <https://www.nytimes.com/2019/01/07/science/detroit-trees-health.html>; and “Study Explains Why Thousands of Detroit Residents Rejected City’s Tree Planting Efforts,” University of Vermont, January 7, 2019, <https://phys.org/news/2019-01-thousands-detroit-residents-city-tree.html>.
- 3 vHarperstown is inspired by vTaiwan, the online platform supporting public participation in Taiwan, which is highlighted in *Glimmers of the Future: Governance*. See Audrey Tang, “Fast, Fair, Fun (with Digital Minister Audrey Tang),” interview with Baratunde Thurston, *How to Citizen with Baratunde* (podcast), Season 3, Episode 6, <https://www.howtocitizen.com/episodes/fast-fairfun-with-digital-minister-audrey-tang>.
- 4 See Jennifer Mueller, Sarah Harvey, and Alec Levenson, “How to Steer Clear of Groupthink,” *Harvard Business Review*, March 7, 2022, <https://hbr.org/2022/03/how-to-steer-clear-of-groupthink>.
- 5 Jeannette Armstrong, “En’owkin: What It Means to be a Sustainable Community,” Center for Ecoliteracy, October 25, 2009, <https://www.ecoliteracy.org/article/enowkin-what-it-means-be-sustainable-community>.
- 6 Valarie Kaur is an activist and author of *See No Stranger: A Memoir and Manifesto of Revolutionary Love* (London: One World, 2021), <https://valariekaur.com/see-no-stranger/>.
- 7 “Explore What’s Possible,” The Big Idea, Education Reimagined, November 15, 2022, <https://thebigidea.education-reimagined.org/explore-whats-possible/>.
- 8 Luis C. Moll, Cathy Amanti, Deborah Neff, and Norma Gonzalez, “Funds of Knowledge for Teaching: Using a Qualitative Approach to Connect Homes and Classrooms,” *Theory into Practice* 31, no. 2 (1992): 132–141.
- 9 Gloria Ladson-Billings, “But That’s Just Good Teaching! The Case for Culturally Relevant Pedagogy,” *Theory into Practice* 34, no. 3 (1995): 159–165.
- 10 Ladson-Billings.

References

- Bruner, Jerome. 1991. “The Narrative Construction of Reality.” *Critical Inquiry* 18(1), 1–21.
- Deci, Edward L., and Richard M. Ryan. 2000. “The ‘What’ and ‘Why’ of Goal Pursuits: Human Needs and the Self-Determination of Behavior.” *Psychological Inquiry* 11(4), 227–268.
- Education Reimagined. 2021. “A Practitioner’s Lexicon.” http://educationreimagined.org/wp-content/uploads/2021/06/Expanded-Lexicon-2021_FINAL.pdf.
- Lave, Jean, and Etienne Wenger. 1991. *Situated Learning: Legitimate Peripheral Participation*. Cambridge, UK: Cambridge University Press.
- Tyack, David B., and Larry Cuban. 1995. *Tinkering toward Utopia: A Century of Public School Reform*. Cambridge, Mass.: Harvard University Press.

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