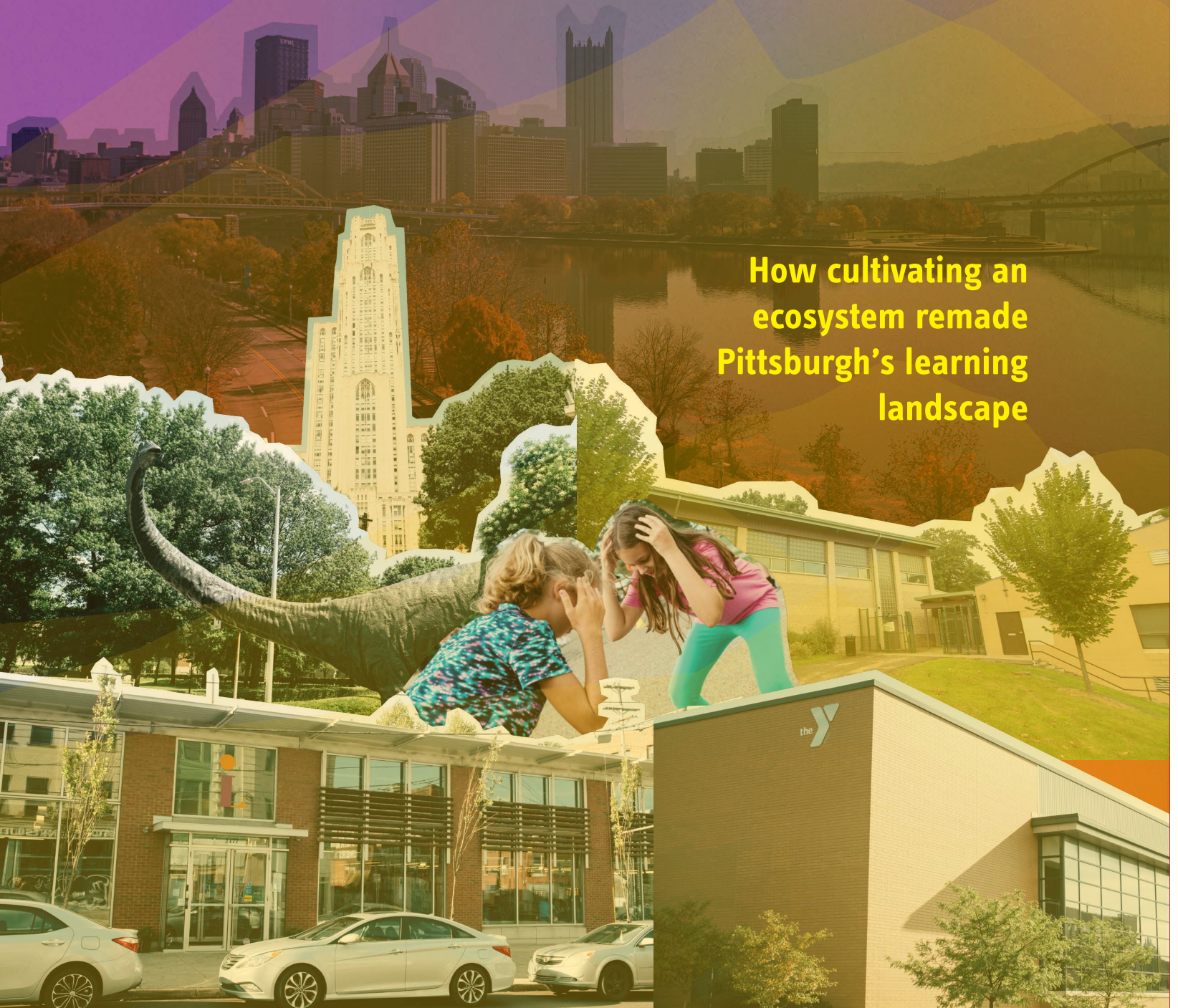


Shift

How cultivating an ecosystem remade Pittsburgh's learning landscape



You live in a learning ecosystem.



Part inspirational metaphor, part conceptual framework, part real phenomenon, a learning ecosystem is the complex web of people, places, and forces that shape our learning experiences.

Every community contains elements of a learning ecosystem: schools, of course, but also childcare centers and preschools, museums and libraries, community centers and public parks, afterschool clubs and summer programs, internships and mentorships, and countless everyday encounters with the unexpected.



Schools have long been the most pivotal component of our learning ecosystems. And while schools are—and will continue to be—essential, they are not alone. Families routinely look for and find enriching, meaningful, and fulfilling learning experiences outside of school.

The learning ecosystem is not a replacement for schools. Instead, it's a “both/and” vision—one that embraces all that schools can be by tending to the vital lifelines that link schools to the rest of life.





Learning ecosystems may be found anywhere, but it takes careful stewardship to help them thrive. In cities and suburbs, small towns and rural villages, communities are beginning to recognize the people, places, resources, and experiences that help young people learn as part of a complex and dynamic web of relationships. These communities are taking steps to cultivate their learning ecosystems to better serve children and youth.

Explore more about learning ecosystems

- *Ecosystems for the Future of Learning*, History Co:Lab & Education Reimagined
- *An Evolutionary Framework for Flourishing Learning Ecosystems*, NetEdu Project
- *Designing Learning Ecosystems*, WISE
- *Local Learning Ecosystems: Emerging Models*, Innovation Unit
- *Too Essential to Fail*, Knowledge to Power Catalysts
- *Investing in Community Learning Ecosystems*, Gregg Behr, Federation of American Scientists Day One Project
- *Unpacking the Learning Ecosystems Framework*, Marijke Hecht and Kevin Crowley, University of Pittsburgh School of Education



In *Too Essential to Fail*, a 2024 paper by Karen Pittman and Merita Irby commissioned by Education Reimagined, the authors make a powerful case for learning ecosystems while also acknowledging the staggering difficulty of transformational change.

“Instead of thinking of learning as an individual outcome, learning must be recognized as a process that exists because of the interactions between any and all ecosystem actors,” they write.

“The question is how to find a believable first step toward this shift in thinking that can help reduce the resistance.”

Shifting our thinking can shift our reality. By broadening our view of education to include the entire learning ecosystem, we can unlock the limitless potential for learning inherent in our communities.

We can shift how the adults that power the learning ecosystem interact

We can shift how organizations and institutions tackle problems

We can shift how systems are structured

We can shift how families engage in education

We can shift how children and youth experience learning

In Pittsburgh, unlocking the potential of the learning ecosystem is **Shifting**

how organizations tackle problems

how systems are structured

In a world where change is the only constant, approaching the education system as a learning ecosystem has helped Pittsburgh adapt and evolve.

how adults interact

how children and youth experience learning

how families engage in education

Educators **Shift** from colleagues → neighbors

A thriving learning ecosystem is a source of energy for teachers of every kind. It creates conditions for educators to connect, learn from each other, and unlock powerful possibilities together.



Everybody knows everybody.

Educators in Pittsburgh rub shoulders with technologists, teaching artists, museum staff, and municipal leaders. They grow their networks, build their knowledge, expand their perspectives, and restore their energy. They know each other as colleagues and as friends.

Social connections plant the seeds for collaboration.



News travels faster.

Teachers exchange insights at more than 36 peer-led professional learning efforts across the region. Partnerships with Agency by Design, Digital Promise, World of Work, Common Sense Media, Code.org, and more than 20 others enrich teacher practice.

A cadence of events builds relationships and fosters trust.



Everyone has access to the best and brightest ideas.

When Pennsylvania adopts a new set of science standards, educators in the Pittsburgh region respond immediately, forming a cohort to not only implement the standards, but to transform the way science is taught across the state.

What were once audacious combinations begin to feel like a new normal.

Teachers meet up at their own playground.

transformED is where teachers in the Pittsburgh region meet, play, and learn. At hands-on workshops and during unstructured “playtime,” educators practice new instructional methods, try out technology, and learn alongside peers and experts.



They return to their classrooms with an appetite for learning together.

Intentionally cultivating the learning ecosystem shifts how adults in Pittsburgh interact.

Today, educators are neighbors. They connect and collaborate to put the region’s resources to work for young people.

Organizations **Shift** from competitors → collaborators

Learning ecosystems encourage unlikely and uncommon partnerships. Different organizations bring their resources to bear for everyone's benefit.

Schools tap into community strengths.

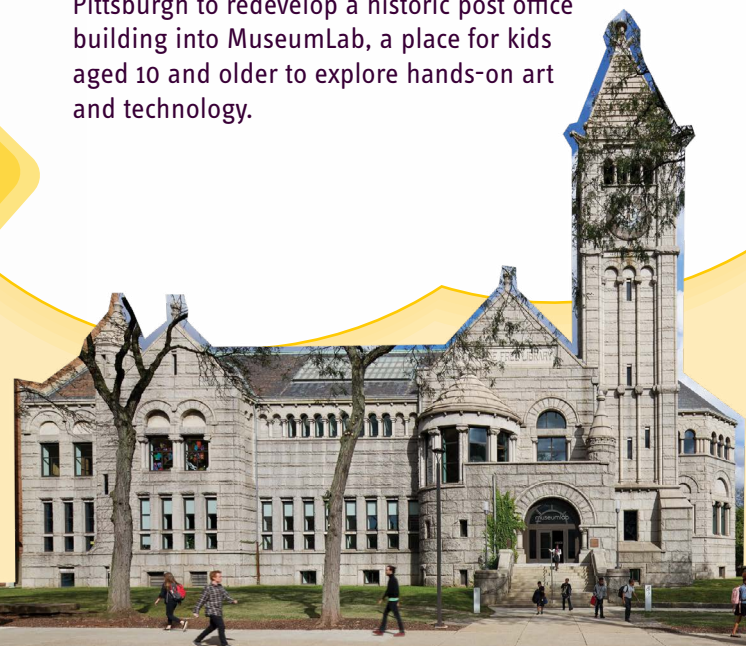
Pittsburgh Public Schools partners with early childhood specialists Hatch to prioritize play. Attack Theatre and the Western PA School for the Deaf collaborate with the University of Pittsburgh to develop wearable speakers so deaf students can feel the music. STEM Coding Lab provides computer science instruction in schools that wouldn't otherwise offer it.

As partnerships prove impactful, collaboration becomes the norm.



A middle school can open inside a museum.

When Manchester Academic Charter School needs a space for its growing student population, it teams up with the Children's Museum of Pittsburgh to redevelop a historic post office building into MuseumLab, a place for kids aged 10 and older to explore hands-on art and technology.



A school district can breathe new life into a hospital.

Seeing the natural overlap between education and health care as two essentials every community needs, Allegheny Health Network and Northgate School District reimagine a shuttered suburban hospital as a place for health, wellness, learning, and innovation.

The power of partnership scales up to shape new learning environments.



A partnership can invent the future of school.

Seneca Valley School District envisions a school building that can spark wonder and curiosity, so they partner with the Children's Museum of Pittsburgh and CannonDesign to build Ehrman Crest Elementary, which TIME Magazine calls "the future of educational institutions."

Breaking down silos and building bridges reveal that collaboration is a superpower.



Unlikely partnerships give rise to unexpected opportunities.

By cultivating its learning ecosystem, Pittsburgh shifts how organizations tackle problems.

Schools, museums, libraries, and other centers of learning across the region are collaborators. Learning is everyone's business, and no one goes it alone.

Systems **Shift** from static → dynamic



Learning ecosystems are dynamic by definition, with countless interactions among diverse components. A thriving ecosystem adapts and evolves to meet the needs of today's learners.

Good ideas spread from one to many.

School leaders regularly connect across southwestern Pennsylvania. They hop on the phone to talk shop, arrange site visits, and problem-solve in places like the Forum for Western Pennsylvania Superintendents and the Western Pennsylvania Learning 2025 Alliance.

Abundant ideas scatter and take root like seeds.

Bright ideas germinate, grow, and propagate.

Schools across the region share ideas to personalize learning. California Area School District creates an individualized learning plan for each student. South Allegheny School District provides students daily "flex" periods for personalized experiences. The regional Personalized Learning Working Group facilitates the exchange of these ideas and many more.

Evidence builds, word spreads, and authorities take notice.

Small streams lead to bigger rivers.

Inspired in part by the catalytic funding strategies used to cultivate innovation in Pittsburgh's learning ecosystem, Pennsylvania launches PAsmart, investing more than \$60 million statewide to support K-12 computer science and STEM education.

New resources are available to speed the ecosystem's evolution.



Local ideas gain public support.

Launched as a local festival in Pittsburgh, Remake Learning Days now engages hundreds of thousands of families annually across the globe. Recognizing the power of the festival to expand access to learning, the Pennsylvania Department of Education commits funding to support the festival statewide.

Ideas that were once on the fringes become mainstream, and are supported by policy.



The learning ecosystem mindset shifts how education systems in the Pittsburgh region are structured.

New ideas are welcome, sharing is encouraged, and resources abound to support continual evolution.

Families **Shift** from involved → engaged



Learning shows up in everyday life.

Word games appear in public bus shelters. Sensory playgrounds soothe patients in a children's hospital. An interactive tree sculpture engages kids and families strolling through the park.

Moments like these start popping up all over.

In a thriving learning ecosystem, parents and families don't just know about the resources available to their kids—they help determine what those resources can do.



A walk to the store can be like a walk through a museum.

What if moments like these were concentrated in a single neighborhood and connected as a continual experience? You'd have something like the Hazelwood Play Trail, a dozen playful sites located within a half-mile walking radius centered on the local library.

As communities harness their assets, the city throws a party to celebrate learning.



A regional holiday gives families firsthand experience.

For a few days each spring, Pittsburgh becomes the site of the world's largest open house for learning. During Remake Learning Days, families experience what learning ecosystems make possible—in schools and community centers, museums and libraries, parks and pediatricians' offices, grocery stores and laundromats.

Families see what's possible, and parents step up to help make it happen.

Families and schools work together as partners.

Parents as Allies, a community of 28 school districts across western Pennsylvania, is trying out small hacks to unlock powerful alliances between educators and parents: teachers texting with families, tech-support hotlines for parents, and low-stakes social events to build trusting relationships.

Schools, families, and communities adopt new ways of learning together.



Cultivating Pittsburgh's learning ecosystem shifts how families engage with learning.

Learning is no longer confined within the four walls of a school classroom. Instead, it's a never-ending festival of discovery and curiosity—and it happens everywhere.



Children **Shift** from students → learners



A learning ecosystem, like its natural counterpart, includes everything it needs to support, sustain, and expand learning. Its inhabitants—learners—don't have to travel far to find what they need to reach their full potential.

A visionary imagines a new kind of neighborhood.

What's important in a neighborhood? What do children need to feel safe? To know what they're capable of learning? Fred Rogers asked these questions in Pittsburgh, where he created *Mister Rogers' Neighborhood*—a program guided by equal measures of science and humanity.

Fred's method sparks an enduring sensibility.



Communities rebuild trust and expectations for great learning.

When a retired teacher is elected mayor of Butler, Pennsylvania, the city and school district launch the Butler Compact for Children, a commitment to work hand-in-hand to transform the town into a destination for childhood opportunity.

The "Neighborhood of Make-Believe" becomes a reality.

Modern-day "Fredes" build real-life neighborhoods of learning.

Assemble, a community space for art and technology, opens new doors to learning for kids and families in the neighborhood of Garfield. The Oasis Project builds a makerspace and plants an urban farm, enriching the lives of kids in Homewood. The Carnegie Library of Pittsburgh helps tweens and teens learn out loud through hands-on projects, game design, music production, and more.

Neighborliness makes its way from the community to the school.

The lines between "in school" and "out-of-school" blur.

On any given day, students in Duquesne City Schools fly drones, craft African masks, produce short films, design mobile apps, or have one of a dozen other deep learning experiences. By partnering with out-of-school learning providers, the school district broadens students' horizons for learning.

If this mindset can work for a school, maybe it can scale up to an entire community.

Nurturing the learning ecosystem in every neighborhood shifts how children and youth experience learning.

In the Pittsburgh region, children are never far from a potentially transformative learning experience.



These **Shifts** in Pittsburgh have **not gone unnoticed.**

Since 2007, the Pittsburgh region has emerged as the most talked-about learning ecosystem in the world. Celebrated by thought leaders, studied by scholars, recognized by heads of state, and cited as inspiration by communities across the globe, Pittsburgh is where the world looks for proof that learning ecosystems make a difference.



Through two decades of stewardship, Remake Learning has earned international praise as a model learning ecosystem.

“A national model for bringing a wide range of community organizations with different visions and assets together to share and collaborate, creating opportunities that can transform the experience of learning for students that need it most.”

- Education Reimagined, the History Co:Lab, and the Carnegie Foundation for the Advancement of Teaching, 2023

“A prime example of a local and regional learning ecosystem.”

- Aurora Institute, 2020

“Remake Learning’s model inspires learning ecosystems around the globe.”

- HunderED, 2023

Nearly 30 awards and recognitions.

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Publications, citations, and commentary shaping the discourse about learning ecosystems.

8 research articles by Pittsburgh scholars

126 academic journal citations

600+ media mentions

EducationWeek®

CNN

Forbes

The Atlantic

TIME

THE WALL STREET JOURNAL.

Educators, communities, and families have been shaping Pittsburgh's learning landscape for generations, working and building together as part of an informal (and often unacknowledged) regional resource based on relationships.

In 2007, a small group of people began to recognize and cultivate the Pittsburgh region's learning ecosystem. As the ecosystem's importance became more evident, they set out to build an infrastructure that could support and sustain it.

As that small group of people grew, they called themselves Remake Learning. They worked together to develop methods and mindsets for navigating some of the most critical questions that face ecosystems' stewards.

Learn more about how Pittsburgh went from seeing its ecosystem to cultivating it.

The tools to use, the platforms to build, and the resources required

The people who need to be included and the sectors that need to be represented

The partnerships to forge, where to find them, and how to leverage them

The ideas, hopes, strengths, and needs of learners and their families

The challenges of continually learning and evolving together as an ecosystem



The Remake Learning Playbook

A pioneering field guide to learning innovation networks

- Uncover the structure of the network that stewards the Pittsburgh learning ecosystem.
- Discover the five strategies Remake Learning uses to help the ecosystem thrive.
- Explore 11 in-depth case studies of the ecosystemic mindset in effect.



The Pittsburgh Principles

Lessons learned from 15 years of ecosystem stewardship

- Unpack big ideas behind the ecosystem framework.
- Find practical advice based on real-world experience.
- Learn about other learning ecosystems emerging across the globe.

Find these resources and get in touch at ecosystem.remakelarning.org

Around the world, people are searching for a new paradigm for education: One that's as dynamic and diverse as the world we live in. One that meets the needs of learners today. And one that equips every young person to thrive tomorrow.

Shift is about what happened when people in the greater Pittsburgh region started to envision their community as a learning ecosystem—and took steps to nurture and sustain it.

Shift

Credits

A Root + All project

Design by Little Kelpie

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