# The Pittsburgh Principles

Lessons Learned from 15 Years Stewarding a Learning Ecosystem

















A shift is underway in how the world looks at learning. In cities and suburbs, small towns and rural villages, communities are beginning to see all the people, places, resources, and experiences that help young people learn as part of a learning ecosystem.

A group of middle schoolers work with a conservation agency to restore a local wetland habitat as a capstone project for their biology class. An art teacher learns to code at a hackathon hosted by a local tech company, then brings those skills back to her students with a lesson on interaction design. A high school senior earns school credit and gains professional experience apprenticing with an IT technician. A small business owner becomes a mentor to an aspiring teen entrepreneur. A city council establishes a parallel youth advisory council.

Scenes like these show what's possible when we recognize all of a community's assets and resources as part of the learning ecosystem that supports learners on their journey to the future. The elements of effective learning ecosystems can be found in every community. By connecting and supporting them, we can transform learning.

# What Is a Learning Ecosystem?

The National Research Council defines a learning ecosystem as "the dynamic interaction among individual learners, diverse settings where learning occurs, and the community and culture in which they are embedded."

On a theoretical level, a learning ecosystem is a way of understanding learning as something that happens across a wide variety of times, places, and contexts. A learning ecosystem is a metaphor for all the people, places, and experiences that contribute to lifewide, lifelong learning.

On a practical level, a learning ecosystem includes the schools and early learning centers, museums and libraries, community centers and public parks, afterschool and summer programs, internships and mentorships, and everyday encounters where learning happens in a community.

Looking ahead to a future of challenges unprecedented in both complexity and novelty, it's easy to see why learning ecosystems have been gaining global attention. Where prevailing systems of education emphasize school alone, learning ecosystems see school as one important node in a complex web of learning experiences. Where traditional in-school and out-of-school divisions isolate teachers, librarians, mentors, and other educators from one another, learning ecosystems connect and coordinate the many caring adults who help young people learn. And where conventional ideas about education are the result of a mix of history and happenstance, learning ecosystems evolve with intention, aiming to solve problems and shift paradigms.

These inherent qualities make learning ecosystems a powerful way to transform how communities structure and support learning experiences for young people.



# Why Learning Ecosystems?

In recent years, communities around the world have rediscovered the collective potential of learning ecosystems and have taken steps to support and enhance their impact on young people. In the US, support is growing at the federal and state level. In 2022, the Strengthening STEM Ecosystems Act provided funding for ecosystems that bring business, education, and community organizations together to collectively inspire and engage millions in STEM education and job training. The state government of Pennsylvania has provided multiple rounds of funding for ecosystems since 2018 through PAsmart. Around the world, scholars have documented dozens of learning ecosystems from Dublin and Singapore to Medellín and Christchurch. The World Innovation Summit for Education (WISE) has recognized learning ecosystems as a way to shift the purpose of education to a more holistic conception of human thriving.

Faced with the wicked problems of today and the unknowable complexities of tomorrow, it's easy to see why the learning ecosystem concept has gained global attention. Rather than prescribing specific interventions, learning ecosystems focus on the context in which those interventions take place. Instead of asking "How can we change this practice?" or "How can we improve this metric?", learning ecosystems encourage us to ask "How can we arrange our community's resources to best support learning?"

By building networks of relationships, ecosystems connect learners to a broader network of support.

By recognizing that learning happens everywhere, ecosystems validate diverse learning experiences.

By blending local wisdom and global expertise, ecosystems drive more equitable innovation.

Most of all, by making learning everyone's concern, ecosystems spur our collective imagination about what learning could be.



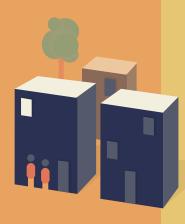
# **Lessons from Pittsburgh**

In 2007, people in the US city of Pittsburgh started gathering to discuss the future of learning. The group included teachers and researchers, designers and roboticists, philanthropists and artists. They recognized that the ways children were learning were changing rapidly and, in the face of that, they had to rethink how education worked in the region. Though they didn't know it at the time, they were taking up stewardship of the Pittsburgh learning ecosystem.

Ecosystem stewards connect and support the naturally occurring elements of a learning ecosystem—the people, places, and programs—to improve the overall health and vibrancy of the learning ecosystem as a whole. Stewards do this by facilitating multifaceted approaches to learning delivery, implementing shared ownership and leadership structures, and designing a purposeful plan for the further development of the ecosystem.

For the past 15 years, Remake Learning has led the stewardship of the Pittsburgh learning ecosystem. Remake Learning is a peer network of educators and innovators working together to share best practices, collaborate on new ideas, participate in professional learning, and catalyze engaging, relevant, and equitable learning experiences for young people. Today, thanks in part to the efforts of Remake Learning, the Pittsburgh region is widely cited as a leading example of a learning ecosystem.

A learning ecosystem is the complex web of resources and relationships that create experiences and interactions that contribute to learning.



# Sharing Our Stewardship Principles

This booklet shares the principles that have guided Remake Learning's stewardship of the Pittsburgh learning ecosystem. We offer these insights as a complement to the important work being done by researchers studying learning ecosystems around the world.

These principles come from 15 years of practical experience stewarding a learning ecosystem. Like the ecosystem itself, these principles have evolved over time and, no doubt, will continue to change as we learn more.

The Pittsburgh Principles are for ecosystem stewards looking for inspiration and ideas for starting, strengthening, or sustaining learning ecosystems in their own communities.

Each principle includes:

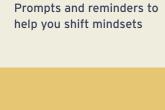
ECOSYSTEMIC THINKING Citations from researchers, experts, and thought leaders PRACTICALLY SPEAKING How to put the principle into practice

LANDSCAPE SCAN Inspiration from learning ecosystems emerging around the world **PROOF POINTS** 

Examples of the principle's impact on the Pittsburgh learning ecosystem

remakex learning





**GOOD STEWARDSHIP** 



# Learning Ecosystems in Pittsburgh

Pittsburgh is home to several interconnected and overlapping learning ecosystems, from naturally occuring neighborhood networks to strategic regional initiatives.

While their focus, structure, and activities are highly variable, each ecosystem contributes to the broader shared effort to remake learning in the region. To name just a few known ecosystems:

- Pittsburgh Regional STE(A)M
   Learning Ecosystem:
   30+ organizations developing
   STE(A)M learning pathways across
   a five-county region
- Creative Learning Ecosystem:
   250+ organizations and programs delivering arts and culture learning experiences
- CSforPGH: 30+ organizations increasing access to computer science learning opportunities for students of color, students in rural areas, and girls
- Allegheny County Literacy
   Ecosystem: 11 organizations working
   in partnership to build a "literacy
   paradise" for learners in grades K-3
- Pittsburgh Learning Collaborative: 70+ organizations responding to emergent and long-term barriers to equitable learning



# Remake Learning

Remake Learning is a free, peer network for educators and innovators in the greater Pittsburgh region. Since 2007, Remake Learning has worked to make it easier for people to connect and collaborate, share best practices, try new ideas, hone their skills, and secure funding to provide more engaging, relevant, and equitable learning experiences.

Serving more than 1,200 members across 10 counties, Remake Learning supports and sustains the learning ecosystem in Pittsburgh through five core stewardship strategies:

- Convene: We bring people together to share best practices, form new ideas, and collaborate.
- Coordinate: We localize global expertise by organizing working groups and special projects.
- Catalyze: We fund new learning programs and practices, with a focus on equitable innovation.
- Celebrate: We promote and advocate for learning innovation and host Remake Learning Days.
- Communicate: We share local wisdom, unpack expert knowledge, and tell stories of impact.

Learn more and get connected at

remakelearning.org



The Pittsburgh Principles 5 Remake Learning



Learning ecosystems thrive on relationships. To grow a learning ecosystem, you need to cultivate relationships. Start with the people right next door.

Pittsburgh's own Fred Rogers put it best: "In every neighborhood, all across our country, there are good people insisting on a good start for the young, and doing something about it."

The people of your ecosystem are all around you. Educators and mentors, business owners and local leaders, parents and families, scholars and designers. Each community is home to a diverse network of people who care about learning and have something to contribute. It's your job to find them and help them find each other.

# Trust in Relationships

"The role of trust is a critical aspect when building new relationships. Research shows that when authenticity and empathy are present, trust increases."

- Learning Ecosystems, Global Education Futures

#### PRACTICALLY SPEAKING

# Create Conditions for Collaboration

Building relationships doesn't come easily. It requires constant, sustained effort over many years to find people and organize moments for them to connect and collaborate.

In Pittsburgh, ecosystem stewards and partners host a mix of regular open gatherings and specially designed events that bring together unlikely collaborators to share best practices, generate new ideas, and build trust. Each engagement invites contribution, fosters collaboration, and sets up the next opportunity. Many of the innovations that characterize our ecosystem started at just such a convening.



# LANDSCAPE SCAN: Doncaster, UK

During the pandemic, teachers and parents in Doncaster, UK formed a learning ecosystem to stay connected. Now, it's blooming into something much more transformative. Flip to page 23 for more >>

#### **PROOF POINTS**

## Common Ground

In 2021, building upon years of joint professional learning for in-school and out-of-school educators, Remake Learning launched Common Ground to connect school curriculum directors even more deliberately with after-school program directors. Together, these educators mapped the gaps and overlaps in their respective learning environments, then paired up to develop new models for collaboration that addressed pandemic-related learning loss.

## **GOOD STEWARDSHIP**

# **Breakfast Matters**

Learning ecosystems are a social phenomenon. Don't be afraid to use professional time—and a professional approach—to create social spaces where real authentic relationships can form. From coffee klatches to happy hours, create an atmosphere of camaraderie, tend to social dynamics, and turn strangers into collaborators, even friends.

Learning ecosystems predate our efforts to define and develop them. Chances are, your community is already home to one. Learn from and lift up what's already working.

In many ways, learning ecosystems embody the proverb "it takes a village to raise a child." Learning is happening everywhere, all the time. The trouble is that only a small fraction of that learning is recognized and validated.

Instead of starting an ecosystem from scratch, pause and reflect on who is already teaching and leading with young people in your community. Find them, learn from them, connect them to resources, and validate the learning experiences they create for young people.



# Respecting the Wisdom All Around Us

"As we respect the fabric of communities and help foster collaboration within them, we should also pursue justice by embracing broader definitions of where learning can happen and what learning can look like."

- Gregg Behr and Valerie Kinloch, Remake Learning

#### **PROOF POINTS**

# Remake Learning Days

Started in 2016, Remake Learning
Days is an annual festival that exposes
families to the remarkable range of
learning opportunities available in their
local communities. Local organizers
host free events everywhere from
schools, museums, and libraries, to
grocery stores, laundromats, and
barbershops.

#### PRACTICALLY SPEAKING

# Find the Everyday Learning Heroes

Illuminating learning that is rarely seen is one of the most important activities of an ecosystem steward. The more positive attention you can draw to the remarkable learning happening every day in your ecosystem, the more that learning will be supported and validated.

In Pittsburgh, we celebrate the best of our community's educators, innovators, and young people, both to shine an inspirational spotlight, and to create opportunities for them to contribute their wisdom, experience, and skill to crafting what comes next for all learners in our region.

#### **GOOD STEWARDSHIP**

# **Bend Toward Justice**

Learning ecosystems can drive equity and prosperity, but only if you are intentional about it. By working alongside those who have historically been excluded or underserved, you can uplift the voices, strength, and potential of learners facing injustice.



# LANDSCAPE SCAN: Tucson, USA

CommunityShare inspires everyday people to see themselves as educators and mentors, then creates opportunities to connect those people with teachers and students to create real-world learning experiences.

Flip to page 23 for more >>



Learners today are ready for things to change.

We adults are the ones who need to make a profound shift in mindset.

It's natural for discussions about the future of learning to focus on young people. But in many ways, they're already living in—and creating—the future. It's we, the adults, who need to catch up.

If you're serious about making ecosystemic change, you need to reach the grown ups—the educators, leaders, decision makers, and influencers at every level—who fund, design, create, and provide learning experiences for young people.

# **Building a Broad Base**

"An ecosystem draws in energy and contributions from a broad base of leadership, including educators, advocates, policymakers, philanthropy, government and civic voices."

- Michelle Cahill, National Center for Civic Innovation

#### PRACTICALLY SPEAKING

# **Engage Leaders**

Leadership matters. Leaders can enable or obstruct the shifts in mindsets and methods that are needed to grow and sustain ecosystemic learning. That's why it's so essential to engage leaders at all levels—from the C-suite and the boardroom to the principal's office and the classroom—as partners.

In Pittsburgh, we organize and coordinate working groups, advisory panels, and leadership councils to set shared priorities, take on collaborative projects, and foster institutional change. These structures enable individuals to do what they do best while fueling collaboration, innovation, and cross-pollination.

#### **PROOF POINTS**

# Remake Learning Council

In 2014, Remake Learning convened a council of distinguished leaders in education, government, business and the civic sector. By providing strategic recommendations, recruiting partners, and expanding investment in the regional ecosystem, these regional leaders multiply the organic vibrancy of the ecosystem.

#### **GOOD STEWARDSHIP**

# Parents as Allies

Big ideas like Learning Ecosystems can easily evaporate into the ether if we don't build understanding and demand for what learning ecosystems promise. Think of parents, families, and caregivers as learning allies and design meaningful ways to engage them in everything you do.



# LANDSCAPE SCAN: Kansas City, USA

Real World Learning assembled a network of grownups representing major employers, higher education, and workforce development to provide learners with immersive learning experiences that prepare them for work, school, and life. Flip to page 23 for more >>

# Visionaries and early adopters aren't enough.

To take ecosystemic learning to scale, we need everyone to get involved. Bring innovation into the everyday.

Many people often feel constrained by the norms of their profession, their employer, or their community. They feel they don't have "permission" to try something different. Whether these constraints are real or imagined, they can hold people back.

The challenge facing ecosystem stewards is to create a culture where everyone, not just the early adopters, feels empowered to rethink teaching and learning.



# A Collaborative Climate

"[Weavers] need to facilitate a supportive and collaborative climate among all ecosystem actors, oriented to rethink and disrupt existing practices within the system, enhancing learning opportunities for all."

- The SchoolWeavers Tool

## PRACTICALLY SPEAKING

# Reduce the Risk

Despite our best efforts to defang failure, most of us still live in fear that our big idea won't pan out.

In Pittsburgh, we provide people with tools, resources, and-most importantly-a sense that they have permission to try, fail, learn, and try again. Repeated grant funding opportunities, low stakes ideation and pitch events, accessible design workshops, and explicit invitations to imagine what the future of learning could be all help create a culture where people feel permitted to take chances and pursue hunches.



# LANDSCAPE SCAN: Dakar, Senegal

ImagiNation Afrika is sparking creativity and innovation among ordinary parents and teachers through a network of learning hubs and pop-in programs. Flip to page 24 for more >>

#### **PROOF POINTS**

## **Moonshot Grants**

Since 2021, Remake Learning has offered Moonshot Grants, which encourage schools, museums, libraries, community organizations, and others to take chances and press ahead with their most daring ideas. So far, grantees have used Moonshot funds to launch personalized learning pilots, rethink maker education for students with disabilities, use horticulture and gaming to support mental health, and so much more.

#### **GOOD STEWARDSHIP**

# Say Yes

Be prepared to learn by trial and error. Focus on experimentation instead of results. Get comfortable with pilot programs that never reach escape velocity. Model the kind of bravery you wish to cultivate in your ecosystem.

There are many possible futures ahead of us.

Instead of wagering everything on "the next big thing," make lots of little bets that could add up to big change.

The scale of change that learning ecosystems portend is immense. That kind of change doesn't happen in one grand sweeping moment. It appears slowly in the cumulative impacts of many small efforts. Through experimentation and iteration, individual breakthroughs add up to major shifts.

Betting on the future is risky, but that shouldn't prevent you from taking chances. Use the dynamism of learning ecosystems to spread out the risk, make incremental progress, and learn from failures.





# Flexible Funding

"It is very clear that for the most part, catalytic funding from sources outside the formal public-funded education system has been vital to the development of the learning ecosystem...Where other sources are available...the learning ecosystem innovation is much more likely to find experimental and developmental space."

- Local Learning Ecosystems: Emerging Models, WISE

## PRACTICALLY SPEAKING

# Equip Educators to Innovate

Catalytic funding-small grants for pilot programs and experimental experiences-have been instrumental in the development of the learning ecosystem in Pittsburgh.

In particular, grants to educators, made directly or through intermediaries, have been a mainstay of our strategy since the beginning. Open funding calls spur disruptive innovations that can be tested, refined, and scaled. Structured requests for proposals direct educators' attention to critical issues. Challenge grants encourage cross-sector collaboration, bringing new ideas into classrooms and out-of-school learning spaces.

#### **PROOF POINTS**

# **Ignite Grants**

In 2020, Remake Learning invited individual teachers, artists, mentors, and other caring adults to pitch ideas for the small efforts that could ignite big change. Educators used Ignite Grants to modernize facilities, explore issues of racial and social justice, build deeper mentoring relationships, and introduce more students to science, robotics, and engineering in culturally relevant ways.

#### **GOOD STEWARDSHIP**

# Complement Local Excellence with Global Expertise

If local excellence is a strength, then local excellence complemented by global expertise is a superpower.

Learning scientists are making breakthroughs in understanding how learning works. Futurists are using current realities and emerging trends to forecast the scenarios we might soon face.



# LANDSCAPE SCAN: Chattanooga, USA

The Teacherpreneur program provides small grants to teachers to launch ideas that can impact their classroom, school, or community. Flip to page 23 for more >>



Stories help us make sense of change. Start crafting a narrative that makes sense of your learning ecosystem. Learning ecosystems are complex. That complexity can be a barrier to shifting mindsets and building will for change. One way to work through that barrier is to invest deeply in storytelling: translating abstract explanations into human narratives that show, rather than tell, us what learning ecosystems are.

Finding, capturing, and telling real stories of real people in your learning ecosystem-educators, learners, families, partners-will reveal the simple, compelling reality hidden behind the complexity.

# The Importance of Mythmaking

"The role of unifying narratives...is to shape our collective understanding of the world and our place within it...Part of the work therefore of co-creating learning ecosystems is to create new narratives that center the personal, place and planetary purposes."

- Learning Ecosystems, Global Education Futures

#### PRACTICALLY SPEAKING

# Capture the Look and Feel

Storytelling is about capturing not just the facts, but the feelings, too. Learning is joyful. Each moment of learning is a triumph that inspires hope for the future. These are the kinds of stories that make people lean in and want to get involved.

In Pittsburgh, we began documenting our ecosystem-creating a record of people, places, and moments-long before we had a coherent story to tell. Through careful and consistent attention, we've created a new story of learning in our region.



#### **PROOF POINTS**

# Remake Learning Playbook

In 2015, Remake Learning produced a field guide to building innovation networks for teaching and learning. In addition to outlining the network's strategy, the Remake Learning Playbook also told the story of our region's evolution as a learning ecosystem.

## **GOOD STEWARDSHIP**

# Whose Story? Whose Voice?

By amplifying voices that often go unheard, storytelling has the potential to disrupt dominant narratives and dismantle barriers to opportunity. Ask yourself: whose story is being told and who is telling that story?

# LANDSCAPE SCAN: Bangalore, India

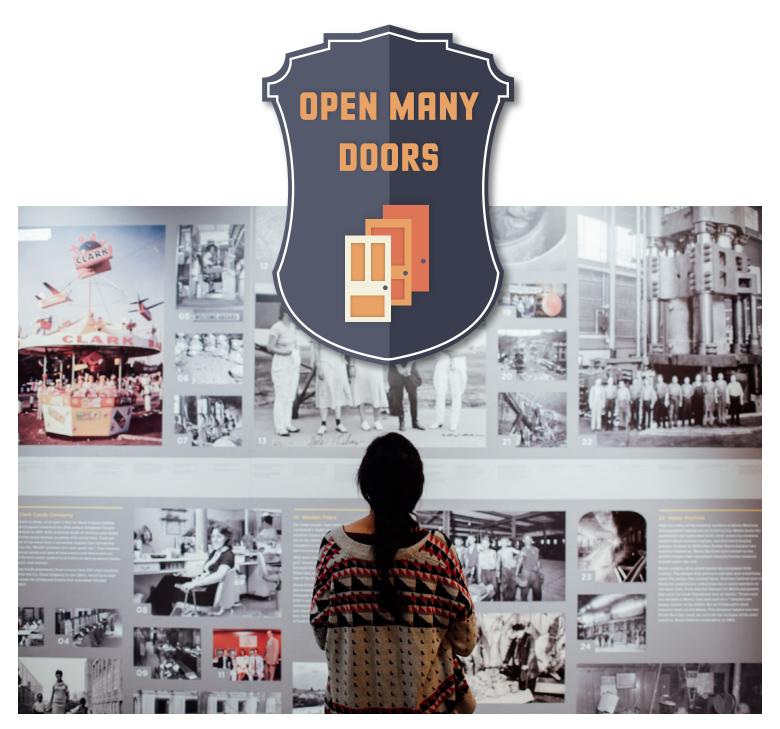
Dream a Dream partners with state governments across India to deliver innovative learning experiences to tens of thousands of young people. While their method is based on a detailed theory of change, the stories they tell focus on the impact they have on individual learners and communities. Flip to page 24 for more >>

# There are many paths to and through an ecosystem.

Make it as easy as possible for people to find a path that works for them-or help them blaze a new one.

A thriving learning ecosystem is characterized by diversity. People come to this work from different backgrounds and bring different perspectives, interests, and capacities. Everyone has something to contribute and their combined potential is what makes ecosystems so exciting.

Effective ecosystem stewards work tirelessly to open doors and build on-ramps that engage a wide range of partners.



# Find Your Routes

"People find different routes into learning: some through connections and collaborations on STEM, others through computer science, or through 'maker learning', to name a few... This is seen to be a strength in that it allows for inclusivity, and matches the work people are most passionate about and most likely in which to invest 'time, talent and treasure'."

- Local Learning Ecosystems: Emerging Models, WISE

#### PRACTICALLY SPEAKING

# **Empower Intermediaries**

Like the natural ecosystems that inspire them, learning ecosystems have no center. Instead of building a central hub, partner with trusted intermediaries to scale your stewardship and reach the many critical habitats of your ecosystem.

To reach teachers, we partner with professional development providers and education service agencies. To reach out-of-school educators, we partner with library networks and nonprofit consortia. To reach businesses, we partner with startup incubators and trade associations. To reach beyond the city limits, we partner with state intermediaries serving rural schools. To reach marginalized groups, we partner with the organizations already committed to and embedded in those communities.

## **PROOF POINTS**

# Equitable Outreach

An open door doesn't necessarily lead to an inclusive space. Every ecosystem will have to reckon with inequities. In Pittsburgh, we focus outreach and engagement on five populations: learners of color, learners in rural areas, learners in poverty, learners with disabilities, and girls in STEM.

#### **GOOD STEWARDSHIP**

# Lean into Self-Interest

A variety of interests drive people to engage in a learning ecosystem. Stewardship means accepting those differences, creating space for them to coexist, and supporting healthy competition. In the end, you may find that people expand and even change their interests.

# LANDSCAPE SCAN: Kuopio, Finland

Kuopio Cultural Pathways connects schools with cultural institutions to create learning pathways for students. Each school has its own Culture Courier who helps the partnering cultural institutions integrate their offerings into the pathways. Flip to page 23 for more >>



Ecosystems can't be controlled. Accepting the dynamism and complexity inherent to ecosystems is a crucial part of effective stewardship.

Like the natural ecosystems that inspire them, learning ecosystems are in constant flux. There is no center. There is no balance. There is no normal. Migrations, disturbances, weather patterns—all these factors affecting natural ecosystems have analogues in learning ecosystems.

To manage the many variables affecting ecosystem health—and to stay relevant amidst constant change—stewards must build flexible frameworks that are adaptable by design.

# **Embrace Complexity**

"The reason [challenges] persist is because learning ecosystems are complex...they are dynamic, nonlinear, and unpredictable; they are continually undergoing changes that amount to more than the sum of their parts. Therefore, we cannot expect, as we might with a complicated problem, to come up with a set of instructions to solve educational problems and expect them to remain solved, nor can we easily replicate these efforts across space and time effectively."

- Unpacking the Learning Ecosystems Framework, Marijke Hecht & Kevin Crowley

## PRACTICALLY SPEAKING

# Finesse Your Framework

Just because learning ecosystems can be messy, doesn't mean that your stewardship ought to be. Pittsburgh would not have evolved to its present point without serious attention paid to establishing and continually updating our framework for managing the learning ecosystem emerging in our region.

Frameworks abound. In Pittsburgh, we assembled ours by drawing on bits and pieces of many others: Education Innovation Clusters, Collective Impact, and Mozilla Hive Learning Networks to name a few. Today, we look to the UNESCO-NetEdu Learning Ecosystem Tool, the WISE Designing Learning Ecosystems Playbook, and the OECD Handbook for Innovative Learning Environments among others.

#### **PROOF POINTS**

# Revising Our Mission, Vision, and Values

In 2017, Remake Learning engaged more than 100 people in a year-long process to revise the mission, vision, and values that guide our ecosystem stewardship. The process reoriented our approach toward equity and recognizing justice as an essential element in learning innovation.

#### **GOOD STEWARDSHIP**

# The Forest and the Trees

Tempting as it may be, designing and delivering your own learning programs will distract you from supporting the ecosystem as a whole. Being a steward means enabling learning, not providing it. Focus on improving conditions and empowering educators in the ecosystem.



# LANDSCAPE SCAN: Chicago, USA

Chicago Learning Exchange merged parallel and complementary efforts that had been working for years to connect and support the city's out-of-school learning ecosystem.

Flip to page 23 for more >>

#### Kansas City, USA

Real World Learning connects schools, colleges, and employers to help learners gain work experience, college credit, and industry credentials.

kauffman.org/real-world-learning

#### Kuopio, Finland

Kuopio Cultural Pathways integrate schools with libraries, museums, galleries, and music venues to create learning paths that students "trek" to enrich their cultural and social development.

kuopio.fi/gl/kulttuuripalvelut



Pittsburgh is not alone, far from it. Around the world, learning ecosystems are emerging wherever people are coming together to rethink where, how, and why learning happens.

Melbourne, Australia

ECOSYSTEMS AROUND THE WORLD

## Melbourne, Australia

Learning Creates Australia is creating a unified and equitable learning recognition system that values who young people are, what they know, and what they can do.

learningcreates.org.au

## Christchurch, NZ

Ako Ōtautahi Learning City Christchurch finds and connects existing learning opportunities to make them more visible and accessible for all regardless of background or identity.

learningcitychristchurch.nz



Chicago, USA

Sarasota, USA

Tucson, USA

The Chicago Learning Exchange connects and supports an array of out-of-school people, programs, and organizations.

chicagolx.org

#### Chattanooga, USA

The PEF Innovation Hub offers teachers support, time, and space to incubate and launch big ideas that impact their students, school, and community.

pefinnovationhub.org

## Bogota, CO

OpEPA expands access to learning in nature through an "ecobus" fleet of traveling science and nature study centers parked at schools throughout Colombia.

opepa.org

#### Doncaster, UK

Team Doncaster is pooling the learning assets of schools, universities, and vocational programs to better meet local needs.

teamdoncaster.org.uk

#### Barcelona, ES

Kuopio, Finland

Doha, Qatar

O St. Petersburg, Russia

EDUCACIÓ360 is an alliance of municipalities and partners committed to making high quality out-of-school learning opportunities available to all children and young people in Catalonia.

educacio360.cat

#### Dakar, Senegal

Bangalore, Indi

Singapore

ImagiNation Afrika creates learning spaces where children themselves are active learners and producers of new knowledge that are valuable through play.

#### Bangalore, India

Dream a Dream partners with states to provide the right infrastructure for children to flourish by connecting schools, community centers, and social groups serving children.

dreamadream.org

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## **CREDITS**

A Root + All project

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Around the world, the learning ecosystem concept is gaining attention as a transformative framework for how communities can structure and support learning for young people. Since 2007, Remake Learning has been weaving together the learning resources and assets of Pittsburgh, USA to develop a regional learning ecosystem where all learners thrive. The Pittsburgh Principles shares core ideas, key mindsets, and design elements that have made that work possible.

#### **LEARN MORE**



Remake Learning Playbook

A field guide to building innovation networks for learning



Remaking Tomorrow

Ideas and inspiration for learning in a post-pandemic future



Reframed

Tools for completing the picture of learning together



Revised. Redefined. Remade.

Envisioning the future of learning in greater Pittsburgh and beyond



Space to Learn

Sharing ideas and inspiration for transforming learning spaces



Still Hiring Humans

Forecasting the future of work in greater Pittsburgh and beyond