Learning Ecosystems

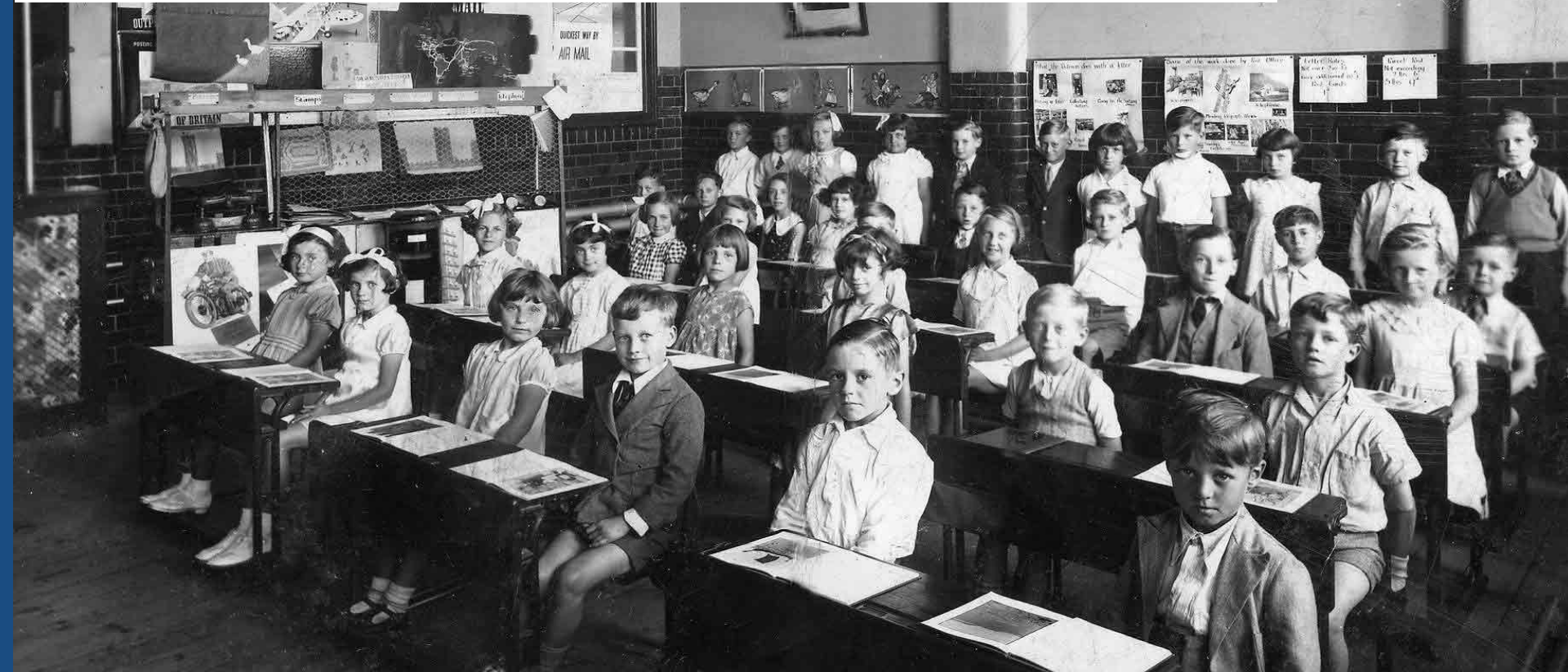*"Education has to become everyone's business, and the more connected, intertwined and interdependent societies become, the greater the opportunity to leverage our collective efforts"*
– WISE, 2019.

Transcend

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Schooling as it was originally designed promoted an inequitable, one-size-fits-all approach to learning.
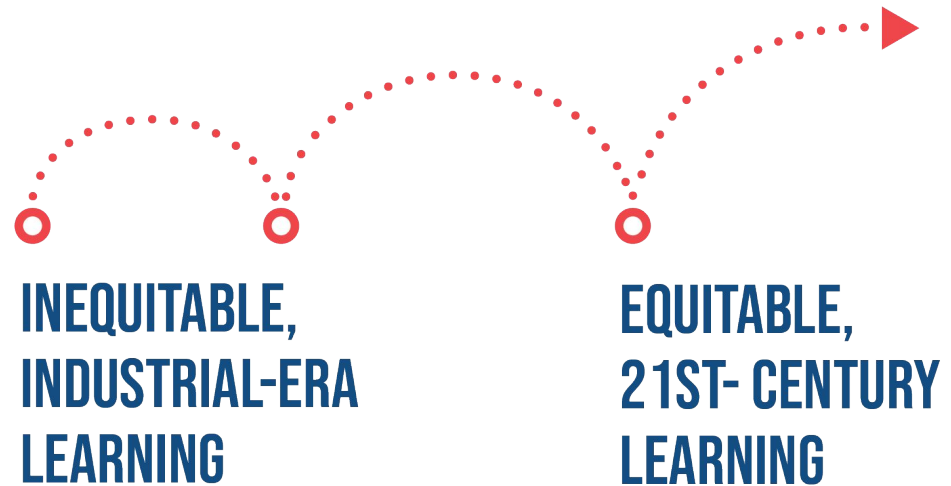
And still today, not much has changed.

Learning ecosystems offer a different approach to teaching and learning.

A learning ecosystem is an innovative design where students learn from their communities through hands-on, real world experiences.

INEQUITABLE, INDUSTRIAL-ERA LEARNING

EQUITABLE, 21ST- CENTURY LEARNING

Learning Ecosystems Defined

A learning ecosystem is **the intentional collaboration between community stakeholders across various learning sites to provide learner-centered experiences that support broad outcomes.**

Learning is supported by many.

- Community members
- Schools & school systems
- Local organizations
- Businesses
- Policy & advocacy orgs
- Research & evaluation orgs
- Technical assistance providers
- Investors & foundations

It can happen almost anywhere.

Home Base

Field Sites

Learning Sites

It targets a broad range of skills.

21st-century skills

Technical & professional skills

Personal wellbeing & engagement in community

And all experiences are centered around learners.

| Learner Centered | Equitable | Modular | Dynamic |

Learning is supported by many—the PK-12 educational ecosystem consists of diverse stakeholders who interact with one another in a specific context.

Policy & advocacy

Investors & funders

Local orgs & businesses

Schools & systems

Community members

In the natural sciences, "ecosystem" describes the interaction between organisms and their environment. The National Park Service relies on Traditional Ecological Knowledge and Native Sciences for a more holistic definition of Ecosystem: "The ongoing accumulation of knowledge, practice, and belief about *relationships between living beings*…between people, plants, animals, natural phenomena, landscapes, and timing of events… It encompasses the world view of a people, which includes ecology, spirituality, human and animal relationships, and more."

In education, an ecosystem can consist of various stakeholders, often a part of the same local community. In a PK-12 ecosystem, stakeholders can consist of[1]:

- Community members
- Schools and school systems
- Local organizations and businesses
- Policy and advocacy orgs
- Research & evaluation orgs
- Technical assistance providers
- Investors and foundations
- And more!

[1] I.L. Scott, 2022 at Harvard University.

In a learning ecosystem, learning can happen almost anywhere—"sites" or spaces often fall within three types[2,3]:

Home Base

A central, safe space for young people to build stable, years-long relationships with a cohort of peers and adults.

Home bases could be located just about anywhere in the community, and different ones might cater to specific learner interests, needs, and/or circumstances—but young people attend a consistent home base.

Learning Sites

Spaces that facilitate deep learning and inquiry where young people do lots of their learning.

Learning hubs can be any community spaces. A child might spend time in various learning hubs throughout the day or week depending on what interest, competency, or pathways they are pursuing at any given time.

Field Sites

Spaces where learners meet and work with community mentors through such opportunities as internships, jobs, field projects, or service learning.

The list of possible field sites is nearly endless—banks, pharmacies, retirement homes, nonprofits, graphic design studios, and more.

3. Learning ecosystems target a broad range of outcomes[2,6]—research on similar approaches to teaching and learning show the following impact:

Collective Outcomes

- **Diverse Perspectives:** The use of community partners provides teachers and students with diverse viewpoints, access to resources, facilities, and financial support (Powers, 2004)
- **Citizenship:** Service learning improves students' conception of citizenship (Chi, 2000).
- **A Sense of Community:** Community-based learning improves perceptions of members of the community toward each other (Henness, 2001).
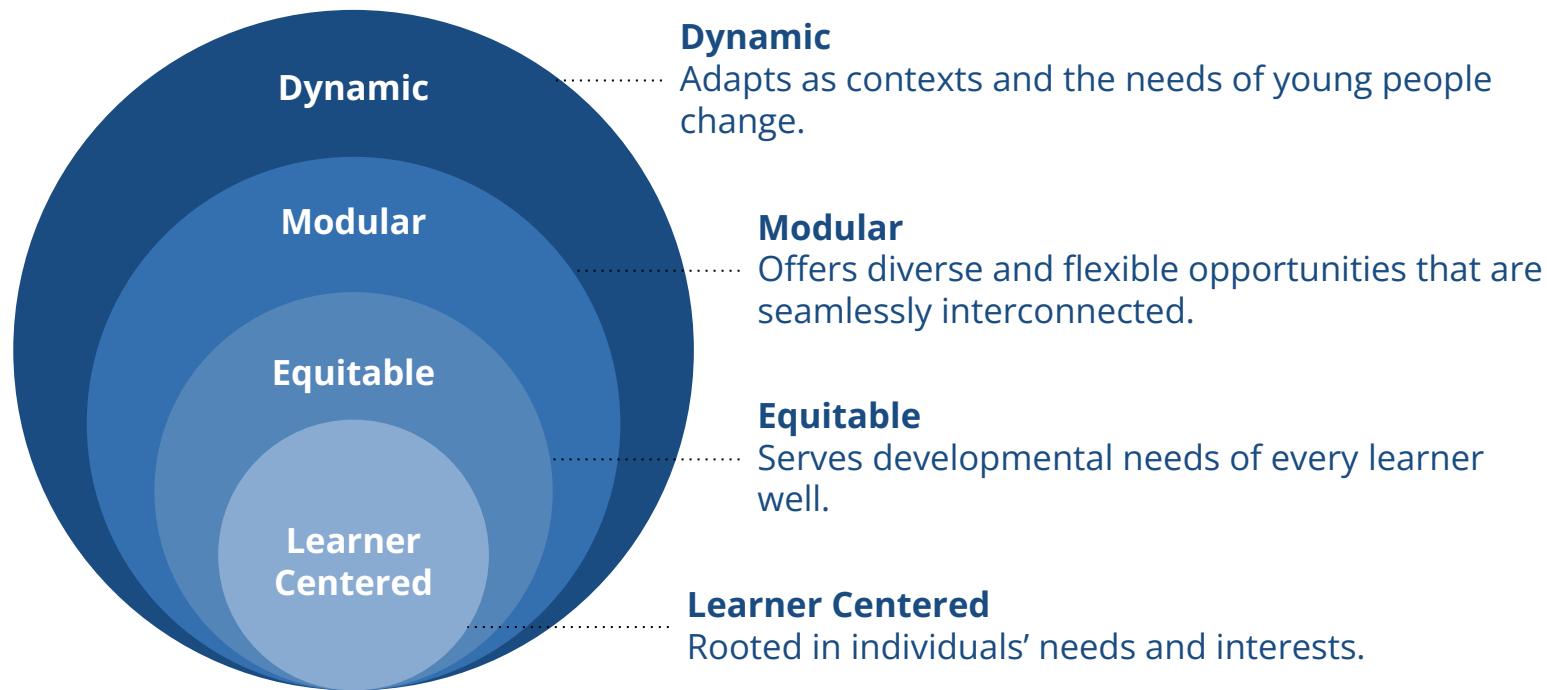
Personal Outcomes

- **Wellbeing & Happiness:** Making personal, real-life connections to work in school keeps students motivated through difficult tasks, increases their confidence, and makes students feel more connected to their schooling (Byrd, 2014).
- **Academic Skills:** Student achievement and engagement can improve when students learn through rigorous projects, problem-based learning, and authentic student work (Harvard, 2022; PBL Works, 2022).
- **Real-World Skills:** Working with community partners increases the likelihood that students develop real-world skills (Powers, 2004).
- **Collaboration:** Service-learning projects and engagement in the community can increase young people's ability to collaborate, interest in civic engagement, and core and applied knowledge (Sabat et al., 2015).

And, learning ecosystems tend to share certain guiding principles centered around learners[4,5]:

Dynamic

Modular

Equitable

Learner Centered

Dynamic
Adapts as contexts and the needs of young people change.

Modular
Offers diverse and flexible opportunities that are seamlessly interconnected.

Equitable
Serves developmental needs of every learner well.

Learner Centered
Rooted in individuals' needs and interests.

Learning ecosystems take the following leaps toward 21st-century, equitable student experiences[2,3,6]:

Inequitable Industrial-Era	Equitable, 21st-Century	Some ways that learning ecosystems take each Leap:
Unequal Expectations & Opportunities	High Expectations with Unlimited Opportunities	All young people have access to learning resources and experiences—at home and in the school and local community, and families are supported in navigating the new world of learning experiences.
Isolation	Connection & Community	Young people collaborate across stakeholders, form strong bonds of trust with their peers and teachers, and participate in a collective purpose that matters to the community.
Rote Activities	Rigorous Learning	Learning experiences develop all facets of learning (mental, social, physical) through real-world and applied learning experiences.
Irrelevance	Relevance	Young people explore and develop personal interests and passions.
Inflexible Systems	Customization	Learning experiences are highly personalized and depends on the pathways learners have chosen. They often make decisions on what and how they are learning.
Passive Compliance	Active Self-Direction	Young people are equipped to take control over their learning and make decisions that best serve them.
Siloed Schooling	Anytime, Anywhere Learning	Young people learn in new ways and from diverse sources from their community, including formal and informal learning institutions—the world is their playground for learning.

A learning ecosystem is **a transformational and inventive design that will require critical shifts away from traditional ways of leading, teaching, and learning**[4,5,6]:

Decentralized and distributed leadership
System and school leaders need to reposition themselves as connectors and stewards of learning—not the sole provider

Open and diverse network of stakeholders
Communities are seen as the local experts they are—who have unique services that can offer students diverse perspectives and learning.

Cross-stakeholder alignment on key commitments and priorities
All community stakeholders must want and champion the same or aligned learner outcomes

[4] Adapted from KnowledgeWorks, 2018
[5] Adapted from WISE, 2019
[6] Adapted from Global Education Impact, 2018.

Every adult in an ecosystem can play a critical role in young people's learning and development—these are the role types most commonly found in learning ecosystems:

School-based Instructors & Staff

Staff and faculty that directly support students with their academic progress and monitoring. These can act as teachers, mentors, and advisors and offer students critical feedback as-needed.

Field Experts & Specialists

Experts are often professionals working in the career fields students are interested in—they content specialists and mentor students during projects or internships.

Community Advocates

Active members of the community who champion young people— either directly through services or indirectly through support and advocacy.

To make this work, **learning ecosystems rely on well-structured systems:**

System Elements	Requirements
Curriculum, Instruction, & Assessments Consider specifications related to EL Learning, project-based learning, and work-based learning	• Pathways must promote personalization, voice, and choice in learning. • Instruction is differentiated based on pathway or task as well as learner needs. • Assessments benefit from being authentic to the task or learning environment. • Credentialing systems adapt to new forms of measurements of achievement.
Community Partnerships Consider alignment to organizations that deliver sustainability and social justice programming as well as relevance to student interest	• Have access to a diverse range of expertise and stakeholders in a nearby, local community. • All stakeholders feel a collective ownership over young people's learning. • Community and regional spaces of learning align to collective and personal learning outcomes. • Communication systems promote inter- and intrapersonal collaboration amongst staff and faculty.
Schedule & Use of Time Consider alignment to personalization as well as curricular and work-based learning needs	• Schedules are unique to each young person's path. • Benefits from longer learning blocks to accommodate transportation and makerspaces. • Student transportation to and from learning spaces are effective, efficient, and prioritize keeping students safe.
Adult Roles, Hiring, & Learning Consider professional development and hiring competencies for all adults, faculty and staff	• Hiring and onboarding processes seek talent that are aligned with school's core priorities. • Clarity in roles and responsibilities exist at every site in the learning ecosystem. • Adults have systems to seek support and collaborate with one another. • Adult professional development is differentiated and tailored to the needs of young people and adults.

Curriculum, Instruction, & Assessments

Requirements...	To get there, you'll need:
Learning is organized into pathways.	- Guided pathways with a coherent curriculum around academic and career skill development. - Rigorous learning objectives that are aligned to education and industry standards. - Alignment between EL Education's core curriculum, school facilities, and community partner programming.
Learning is highly personalized and accounts for student voice and choice.	- To plan for specific ways that learners make decisions about what and how they learn. - Personalized learning plans where students can learn and show mastery through the modalities and pacing structures that best fit their needs.
Instruction is differentiated based on pathway or task as well as learner needs.	- Instructional strategies aligned to both expeditionary learning and community partner programming at different learning sites. - Differentiation techniques that work across learning sites and community partner programming. - Instructional strategies around best practice related to: expeditionary learning, project-based learning, and work-based learning.
Assessments are aligned to the task or learning environment.	- Meaningful assessments that are representative of relevant industry and academic standards. - Alignment between community partner programming and EL Education's expeditionary learning assessments.
Credentialing systems adapt to new forms of measurements of achievement.	- Pathways, courses, projects, and tasks are appropriately credentialed to support students post-secondary journeys, especially as students begin working with community partners. - Learning management system allows all stakeholders (such as an employer, or community organization member) to interact with assessment tools and data while maintaining student privacy.

[7] Adapted from Getting Smart and GPS Education Partners (####)

Community Partnerships

Requirements…	To get there, you'll need:
Have access to a diverse range of expertise and stakeholders in a nearby, local community.	• Routine scans of industry around Brooklyn for potential partner organizations. • Data around in-demand jobs and types of skills required for these jobs to better inform the design of pathways, programs, and curriculum.
All stakeholders are aligned on shared goal and feel a collective ownership over young people's learning.	• Clear and ambitious goals that are closely aligned to industry and student interests. • A set of co-constructed commitments around collaboration to ensure all stakeholders are equitably working toward goals. • Open door policy for community partners and members to observe student progress and outcomes.
Communication systems promotel collaboration across staff and faculty.	• A transparent communications plan that ensures all stakeholders are aware of goals, commitments, progress, and systems for continual improvement. • Protected time and space for all Launch staff and community partners to engage and align on progress toward set goals.

8 Adapted from Education First (####)

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Schedule & Use of Time

Requirements...	To get there, you'll need:
Schedules are unique to each young person's path.	- Students have opportunities for flexible learning time and get a voice and choice in the design of their schedules. - Make routine and protected time for students to explore their passions. - Teachers and industry staff give input into the school schedule and have ample time to collaborate around instruction and participate in professional development to support personalized learning.
Schedule benefits from longer uninterrupted learning blocks to accommodate projects and transportation.	- Pathways have compatible schedules that offer students enough time to complete projects or engage in internships or extended learning activities. - Transportation is not a barrier, so systems are in place to minimize time to- and from field site or learning sites.

[9] Adapted from Unlocking Time (Accessed 2023).

Adult Hiring, Roles, & Learning

Requirements...	To get there, you'll need:
Hiring and onboarding processes seek talent that are aligned with school's core priorities.	- Hiring protocols are aligned to pathway and academic needs. - Protocols exist for community partner and school-based staff. - Recruitment protocols promote inclusive practices that ensure diversity in staff hiring and prioritize candidates with similar lived experiences to students and whose identities are proximate to the communities being served.
Clarity in roles and responsibilities exist at every site in the learning ecosystem.	- Roles are created based on discrete responsibilities across the school and larger ecosystem. - Job descriptions for every role are accurate and all-encompassing
Adults have systems to seek support and collaborate with one another.	- Rigorous professional development is offered for industry partner and school-based faculty and staff. - All instructional staff participate in professional development on strategies related to intellectual preparation, EL Education's expeditionary learning, building a positive class culture, and more.
Adult professional development is differentiated and tailored to the needs of young people and adults.	- The professional development schedule includes learning opportunities for all staff and differentiated strands based on pathways and individual student needs. - Staff are trained on differentiation strategies for students, as well as supporting students with diverse needs.