LearnerStudio

Bringing the Future into Focus

From The Mirage Of Standardization To
The Promise Of Future-Readiness

JANUARY 2026 V1

Foreword

Three years ago, the conversation about the future of learning felt different. It was quieter. When we spoke about the need for a fundamental redesign of our public systems, it was met with polite interest, but rarely urgency. We were talking about what was perceived to be "nice-to-have innovation" on the margins.

Today, instead of silence we hear an emergent chorus – from young people and their families, to educators and employers – that the industrial model of schooling is no longer just tired; it is obsolete. But acknowledging the problem is the easy part. The hard work is defining and creating what comes next.

The acceleration we all feel as the *Age of AI* arrives has stripped away the luxury of time. It has forced us to confront a reality that is changing faster than our systems can adapt. It compels us to stop tweaking at the edges and ask a singular, focusing question: **What do young people need to be inspired and prepared to flourish in the Age of AI – as individuals, in careers, and for democracy?**

That question is too big and important for any single organization to answer fully. It requires a collective effort of sense-making. That is why we created this anthology. We reached out to thinkers, doers, and leaders who inspire us – voices from across the spectrum of education, technology, and policy – and asked them to look around the corner with us. We asked each to tackle a specific piece of the puzzle, from how we might better measure human potential to how we might structure the "school day."

The result is not a single manifesto of uniform thought. Do we see powerful convergence on design principles and the overall direction of travel? Yes. Do we agree with every strategy or conclusion in the pages that follow? No. And that is exactly the point. If we want to build a modernized, flexible, robust and relevant architecture for learning, we cannot stay in comfortable silos. We have to be willing to wrestle with different perspectives. We have to debate, diverge, and find the common threads that will let us weave a new way forward. This anthology is an exercise in that productive friction. It is an invitation to stop admiring the problem and start engineering a solution.

We are indebted to the contributing authors who stepped forward to share their visions. This is a living project; as the landscape shifts, we will add new voices and new chapters.

The introduction that follows lays out our high-level vision – a "watercolor" of what we call "Horizon 3 future-ready learning" and the strategic pillars it includes. The insightful, diverse essays that follow provide more sharp lines and bold colors as provocations.

We are done waiting for permission to change. The window for re-architecture is open. Let's get to work.

Kim Smith

January 2026

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I. Introduction

A Window for Re-Architecture

We stand at an inflection point. The world is changing with a speed and complexity that our current systems were never designed to handle. To meet this moment, we don't just need to reform our public learning systems; we need to re-architect them. We need a new public learning architecture that recasts *what* we learn, *how* and *where* we learn, and *how* we support learning. The goal we all seek is to ensure that every young person can flourish in life, career, and democracy in the age of AI – for their individual good and for the common good.

The Present Reality

The call for change is not abstract. We are living through multiple disruptions. Sweeping forces – the accelerating pace of artificial intelligence, the shifting demands for personalization and relevance from new generations, and the complexity of a period of intense polarization – are reshaping the modern human experience. These forces are not on the horizon; they are here. And they have forced open a window for systemic, foundational change.

The industrial model of schooling served its purpose for a different era. But its rigid, efficiency-based structures are now a hurdle to what learners, families, and employers know we need. Learners are asking for more real-world, relevant learning. Families want more than a ranking or a test score; they want their children to be prepared for the real world. Employers are requiring modernized knowledge and durable skills for the Age of AI. From all sides, we hear a call for a new system adapted to our current reality that inspires and prepares young people for the realities of life – as individuals, as professionals, and as citizens.

The New North Star

Given these powerful disruptions, we need a new north star: **Human flourishing in the age of AI**. Change is inevitable. The structures of today will not be the structures of tomorrow. The question is whether *we will* let that change happen to us, or whether we will shape it with purpose. We have the opportunity to be the architects of our own future, but it requires us to proactively lean into that opportunity and responsibility now.
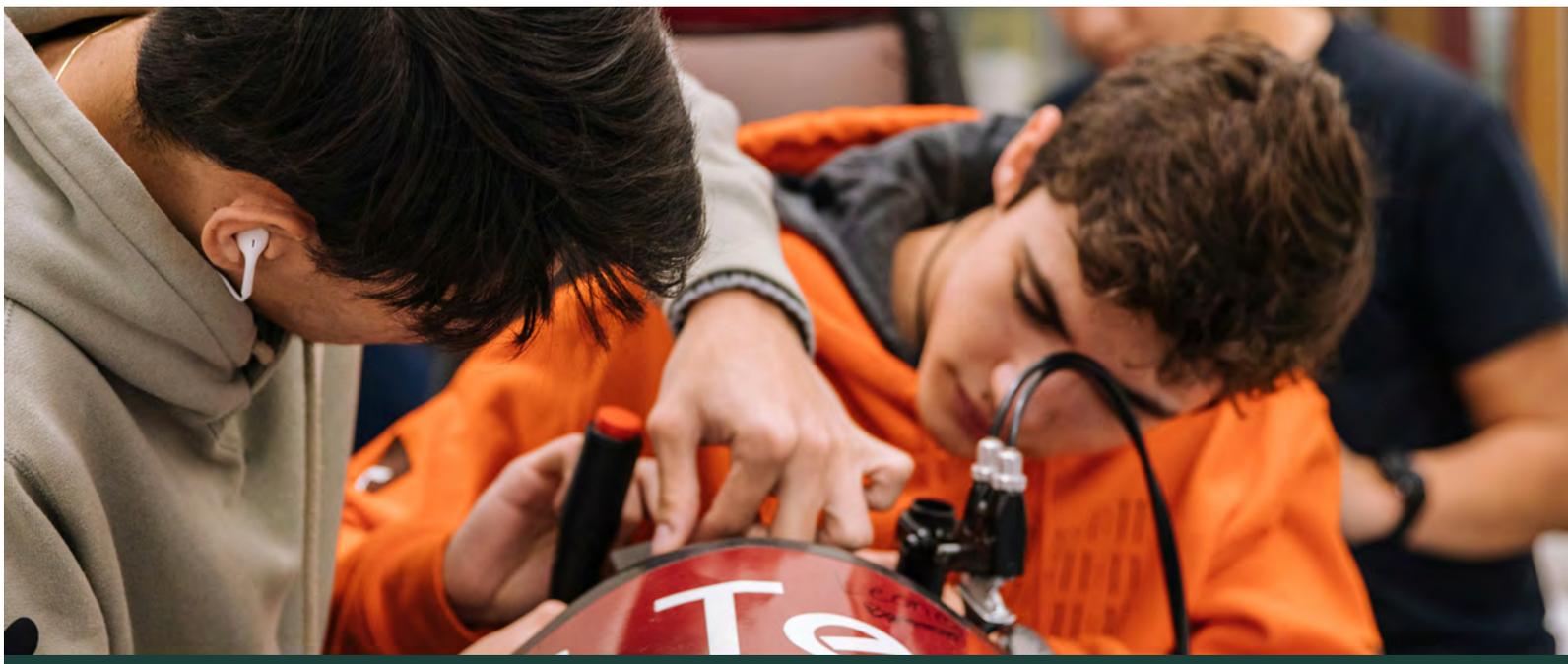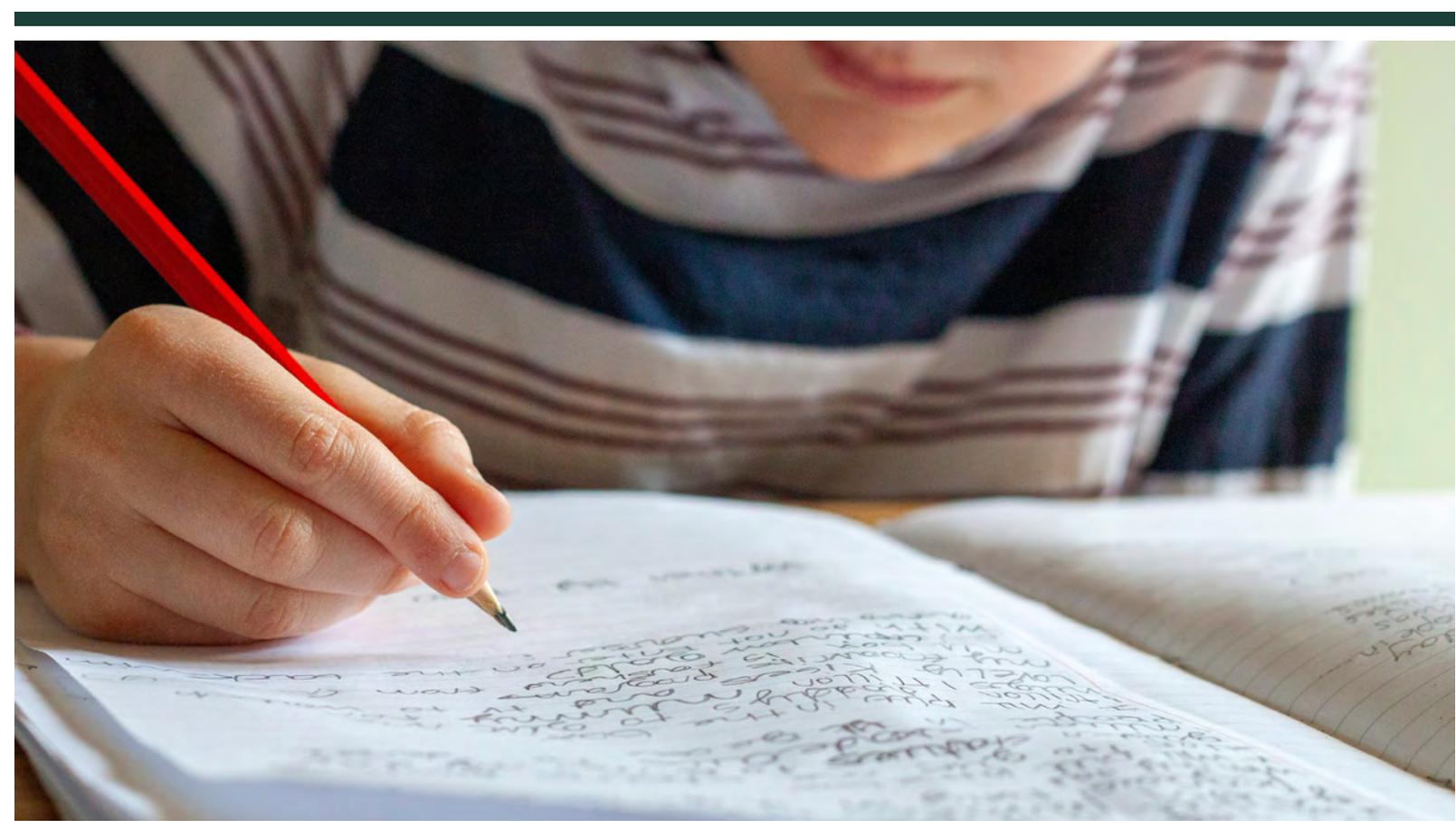
The Destination: A Future-Ready Learning Ecosystem

The destination – a *Future-Ready Learning Ecosystem* – lets go of a rigid system designed around standardized *schooling*, to make way for one centered on agentic *learning*. It's built by re-architecting three foundational assumptions: *what* we learn, *how* and *where* we learn, and *how* we support learning.

At its core, the new system is a publicly-funded menu of learning experiences – in and beyond school – that are relevant, flexible, mastery-based, and learner-driven. Public funding is flexible, portable, and weighted to learner needs, following them to the learning experiences they choose – including school buildings as well as community- and career-connected spaces. Learners and their families, with support from a multi-modal AI and human-driven guidance system, navigate flexible pathways with supported autonomy. Providers are held to account for positive results by informed families and communities through dramatically transformed accountability systems.

Imagine a system truly **designed to ensure each child thrives.**

Instead of designing for a mythical "average" learner, this system is built for each and every learner. The new system holds as a core design principle that every learner is known, seen, and loved. Learning experiences are highly relationship- interest-driven, and aligned to the future-ready competencies young people need to thrive in life, career, and democracy. Effective learning designs grounded in the Science of Learning and Development for multilingual learners, neurodiverse learners, learners with disabilities, and gifted youth are woven into the fabric of every pathway. Real-time accountability systems are in place to ensure that every learner is being well-prepared to thrive in their future.

Imagine a system where progress is based on mastery, not seat time.

Learning and the crediting of that learning can occur anytime, anywhere, no longer restricted to a single building or an outdated agrarian calendar. When a learner needs extra help, they receive real-time support from expert adults and interactive AI agents. When they excel, they can accelerate. All progress is captured in a secure learner record, where the data is owned by the learner and their family.

Imagine a system oriented toward both individual and community success.

This is not an isolated, screen-centric, hyper-individualized future. It is the opposite. By using technology to customize for interest and pace, learners and educators have more time for developing deep knowledge, human skills, connection, and purpose in an AI-infused world. Learners solve real, community-based challenges together and interact with a rich and diverse variety of trained learning facilitators – from expert educators to near-peer and community mentors.

This new approach is designed to connect with a healthy, updated public infrastructure. Public buildings, including schools, become flexible learning spaces. Schools exist both as bundled sets of learning experiences, and as part of modular, self-constructed pathways. As learners mature, strong infrastructure – including safe transit options – enables them to move between places of learning like a lab, a classroom, an apprenticeship, and a service project.

The Vision in Practice

These principles are not abstract. They come to life in the daily lives of learners and educators. To make this vision concrete, let's look at this ecosystem from three distinct perspectives: the foundation of a young child, the journey of an adolescent, and the new, empowered role of educators who support learners.

The Foundational Years (Ages 4-12)

For younger children, the system prioritizes safety, belonging, self-regulation, foundational knowledge and skills including core literacy and numeracy, and learner-led exploration – solving for the unique needs of this developmental stage. Families can access full-day, year-round, publicly available learning environments (including schools), all of which are designed to support both individual growth and the common good. But they are not monolithic.

- **Instead** of a single, one-size-fits-all traditional school model, learners can access multiple options including more **flexible, modular, partial and full-day learning environments.**

- **Instead** of one uniform curriculum for every child, families can exercise agency in **"stacking" different certified models**, including a wide range of school- and community-based learning environments.

- **Instead** of narrowing focus early, learners **explore a broad perspective of the world**, building a foundational love of learning alongside core skills and knowledge.

Imagine an 8-year-old. He's not just "in 3rd grade," moving from one subject to the next each hour. He is embedded in a tight-knit tribe of learners who are spending part of their week immersed in the soil of a community garden. After exploring local data on food insecurity together, their primary educator challenged them to identify new solutions. The group debated ideas, and decided to plant a "salsa garden" to share with a local food bank.

Within this project, our 8-year-old is pursuing a specific question that sparks his interest: How might we design a salsa garden that uses the least amount of water? While the cohort practices foundational

math (by measuring plots and plant spacing) and persuasive writing (to raise funds for the project), he teams up with his main project partner to research drought-resistant cilantro varieties and design a simple drip-irrigation system. In addition to math and language arts, he is building durable skills as a self-directed learner and a collaborative problem-solver – all while deepening his understanding of the role he wants to play in his community.

This 8-year-old's cohort is led by a primary educator, and the project is run by an AmeriCorps member teamed with a master gardener from the neighborhood. All the while, AI-enabled digital infrastructure is powering the experience in the background. The technology makes rigorous, interest-driven, real-world learning experiences a reality – not just through a few great field trips, but as the structure for most learning. It captures his work on the project through authentic assessment, and seamlessly links it to a progress monitoring system that this learner, his family, and his entire 'village' of educators and mentors can access – all of whom are tracking and supporting his progress toward his learning goals.

The goal at this stage is to build a rock-solid foundation of knowledge and skills – including core literacy and numeracy – while steering a greater share of learners' time to establishing a solid sense of identity and belonging, practicing metacognition about learning goals and progress, engaging in decision-making and collaboration, and – just as importantly – cultivating a foundational love of learning and exploring his contributions to the broader community.

Adolescence to Launch (Ages 13-20+)

From adolescence into early adulthood, the system is designed to maximize agency, purpose-finding, real-world connection, and successful launch into adulthood. The rigid architecture of the "factory" disappears, replaced by a flexible, high-traction series of experiences.

- **Instead of** rigid Carnegie Units based on seat time, learners move at their own pace, **demonstrating mastery** of skills and content through new assessment approaches.

- **Instead of only** discrete, siloed subjects, learners engage in **integrated, real-world projects and work experiences** that require them to build and transfer knowledge and skills from multiple disciplines.

- **Instead of** a single textbook or standardized curriculum, learners access a **universe of high-quality, personalized learning experiences,** both human and digital, made possible by AI and emerging technologies.

- **Instead of** abstract letter grades, learners build and own their own **mastery-based transcript** and a rich, **life-long portfolio of validated evidence** that shows what they know and can do.

- **Instead of** a future that is disconnected from friends and community, learners feel a real sense of belonging, and engage by design in **collaborative and community-oriented** learning experiences.

Imagine a 16-year-old. She's not just "in 11th grade." She is exploring an engineering pathway, which includes a credit-bearing internship with the city's public works department. Through this experience, she has joined a team tasked with a real-life challenge: design a sustainable water reclamation system for a new community park. Her internship supervisor, a municipal engineer, has helped her identify a personal quest: model the system's potential environmental and financial impacts, and then co-present her analysis to city council. This isn't a hypothetical assignment; it's a real deliverable. To succeed, she must master principles of physics, biology, and data science. At the same time, she is building essential skills in project management, collaboration, and public speaking, and investigating what her own purpose and strengths might be.

She is guided by her primary educator who knows her deeply and helps her build core knowledge, advised by her internship supervisor who guides real-world application, and coached by a near-peer mentor in the community. The experience is augmented by an AI-enabled digital infrastructure layer that makes complex, personalized, applied learning a reality all learners can access. A digital platform captures her proposal and public presentation as proof of her mastery. This evidence is seamlessly linked to her mastery-based transcript – a secure, portable record that she and her family own, and that her team of educators, advisors, and postsecondary counselors can access and understand.

This is the rich evidence that colleges and employers now demand. Graduation isn't a cliff at age 18; it's a seamless onramp to multiple pathways based on her learning journey and her goals for the future – whether that's college, a technical field, national service, or entrepreneurship.

The Educator's Experience

For educators, this new system is designed to engender the same human experiences that it expects them to build with and for learners. It tackles head-on the long-entrenched challenges of educator burn-out with better sustainability, more creative agency, and more joy in the human aspects of teaching. In this system, adults are guides and learning designers who are focused on fostering rich relationships and supporting learner-led pathways.

- **Instead of** being isolated deliverers of a rote curriculum, they partner with technology to build **active and engaging learning experiences.**

- **Instead of** being the "sage on the stage," they invest deeply in **cultivating learner agency** by facilitating inquiry, coaching for competency, and empowering learners to navigate their own growth.

- **Instead of** being constrained by traditional time and tasks, they are **freed by smart technology use** to focus on relationships with learners, collaboration, and effective instructional design

- **Instead of** a one-size-fits-all career ladder, there are **multiple, flexible pathways** for adult participation, training, and credentialing in a diverse learning ecosystem.

Imagine the full range of adults and near-peers engaged in supporting learners on their pathway through childhood, adolescence, and beyond. They might be a master facilitator for projects, a coach focused on building specific skills, a competency-assessor helping to recognize mastery progress, a worksite supervisor with visibility into each young person's broader portfolio, or a community mentor. Crucially, educators are no longer disconnected islands. They work in flexible and collaborative pods where they co-design, co-teach, and support one another, making the profession sustainable, dynamic, collaborative, and, as it should be, deeply respected.

An Invitation to Act Together

This is the "watercolor" picture of a *Future-Ready Learning Ecosystem* – not yet a detailed set of blueprints, but an emerging image of what must

come next. It is urgent, it is possible, and it is necessary. While this introduction has sketched the broad destination, the authors in the following pages will add more detail and specificity to many of its component parts. They will pose big ideas, share vivid examples, and raise critical questions that will help us advance toward this new architecture.

We invite you to join us in bringing this future more into focus through continued conversation, debate, and collaboration as we collectively explore what a future-ready learning ecosystem looks like. To share reflections, questions, or ideas sparked by this work, we welcome you to email us at **anthology@ thelearnerstudio.org**.

Set Human Flourishing in the
Age of AI as our north star

Modernize the "what":
Create a new K12
"Humanics" curriculum

Reframe the "how," "when,"
and "where" of learning

Rearchitect the "who"
of learning and human
development

Develop an aligned
learning infrastructure

Stepping Forward: How do
we get from here to there?

Pillar 1:
Set *Human Flourishing in the Age of AI* as our north star

As artificial intelligence reshapes the landscape of work and society, we are faced with a profound opportunity to redefine the purpose of our learning systems. For too long, our collective "North Star" has been fixed on narrow academic outputs – grades, test scores, and efficiency. But in an era where machines can increasingly handle the routine and the computational, the unique value of the human experience comes into sharp focus. This section of the anthology challenges us to pivot our orientation toward a more vital, enduring goal: **human flourishing**.

To navigate this shift, we must first ground ourselves in the **youth perspective**. We cannot design for the future without listening to and building alongside those who will inhabit it. We ask: What are young people telling us they actually need? Their answers often reveal a hunger for connection, purpose, and mental well-being that our current structures fail to nourish. We must align this with the **parent**

perspective, bridging the gap between what families intuitively want for their children – happiness, stability, resilience – and readiness for the future.

Changing our destination requires a new map, which leads us to the **school leader** perspective. Here, we grapple with the practicalities of transformation: How does a school move beyond rhetoric to organize its entire culture and curriculum around flourishing? Finally, we turn to the evidence, taking the **researcher's perspective** to understand the science of thriving. We explore what it means to fundamentally shift our lens from "education," often reduced to the transaction of knowledge, to "development," and ultimately to "thriving."

These questions urge us to look beyond the mechanics of schooling to the heart of our humanity. They remind us that in the Age of AI, our success will not be measured by what we know, but by how well we live, grow, and contribute to a flourishing world.

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What do young people say they need?

Shereen El Mallah, *Research Assistant Professor at the University of Virginia*

Before young people are heard, they are named. From "digital natives" to "the anxious generation," from "snowflakes" to "iGen" – each label both a forecast and a verdict, imposed before they have the chance to author their own story. These identifiers arrive loaded with implications: fragile or fearless, tech-addicted or tech-fluent, paralyzed by uncertainty or radicalized by urgency. More often than not, they reveal less about youth and more about adult unease.

Meanwhile, the architects of reform – the commissioned studies, the expert panels, the policy overhauls – move forward often with minimal input from those they intend to serve. Young people remain largely absent from conversations that will shape their lives. Ask them directly, though, and what emerges isn't a manifesto of demands but a catalog of permissions – the ordinary allowances that make development possible, the same freedoms most adults claim or take for granted but that young people must negotiate daily.

Honoring their complexity requires unlearning the instinct to fix and strengthening our capacity to witness. This includes making room for emotions that overwhelm without immediately pathologizing distress, and offering clear, calibrated information to help them distinguish ordinary turbulence from conditions that warrant intervention. It means allowing young people to process experiences at their own pace, make intentional choices, and build the necessary resilience to carry them forward.

Such environments require a collective reset – where trope gives way to truth, experience outweighs assumptions, and flattened stories expand to hold the breadth, depth, and multiplicity of young lives.

> The work of becoming who I want to be shouldn't require an apology tour.
>
> Sage, 17

Permission to be Complex

In a world eager to define them, young people are pushing back – against confining trends, reductive headlines, and narratives built on recycled stereotypes. They ask simply to be seen as themselves, not treated as case studies in contemporary youth pathology.

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Complexity isn't a problem to solve—it's the reality to honor.

We will inherit your world—let us leave our mark.

Ren, 16

Youth are not a future resource – they are a present force.

And what if I said, I'm not broken– I'm just not finished yet.

Mel, 17

Permission to be Consequential

There is a vast distance between being heard and being heeded, between performance and participation, between invitation and collaboration. Young people are not asking for permission to speak – they're claiming the right to reshape the world they will inherit.

The stakes are immediate. Gun violence recasts schools into crime scenes; climate futures will arrive on their watch; and economic structures have already priced many of them out of stability. Worn down by symbolic gestures, they demand infrastructures of influence – real channels to transform concern into action and care into consequence. They seek opportunities to demonstrate capacity without suffocating oversight. They call for recognition as citizens now, not citizens-in-waiting – their votes and voices treated as instruments of change, not deferred potential.

Even under the weight of burdens that preceded them, young people continue to roll up their sleeves and step boldly into action.

Permission to inhabit uncertainty

If young people describe one shift that could ripple outward, it would be this: to lean into being a work in progress, to venture into uncharted territory, and to learn without fearing that detours signal failure. They are committed to defining "a good life" on their own terms – often making choices earlier generations may not have recognized or valued.

The shift begins with normalizing mistakes as part of learning – reflected in adults approaching struggle with steadiness and care, fully aware that the quickest way to lose access to a young person's inner world is to respond with alarm when they offer a glimpse of it. This lays the groundwork for young people to claim agency in how and what they learn, moving from absorbing knowledge to constructing it, and from being taught to becoming teachers of their own understanding.

Within that space, young people may lean on adults: for tangible support with planning, organization, and time management; for guidance in weighing options and anticipating consequences; or simply

for perspective and encouragement as they make decisions with real stakes – not because they are deficient, but because executive function and life experience are still under construction. Too often, we build timelines that assume readiness arrives on schedule. In reality, being positioned for major life transitions and feeling prepared for them are distinct.

Beyond developmental support, young people need practical fluency in adult systems – how to navigate bureaucracies, manage finances, and access resources. They need exposure to possibilities beyond the four-year-degree script and mentorship that illuminates opportunities rather than prescribing them. Adults may be navigating uncertainty themselves but at minimum young people deserve honest engagement, rather than vague assurances that it will work out.

What young people recognize – and what many adults may have forgotten – is that we did our "becoming" with less scrutiny and more grace. They seek similar latitude, not because they are more fragile, but because societal terms have changed while developmental expectations remain rigid.

Uncertainty isn't the obstacle to their becoming – it's the condition for it.

> I don't want to be replaceable. I want to know there's a me-shaped space only I can fill.
>
> **Casey, 14**

Permission to Matter

Mattering begins with spaces that acknowledge young people exist. This means environments where they feel genuinely rooted: education systems that recognize them as irreplaceable rather than interchangeable, peer networks that are built on authentic connection rather than social currency,

and adults who choose presence over surveillance.

They seek assurance that they are significant to specific people in specific places, that their absence would register as loss. They search for evidence that their actions have impact – confirmation that they are both valued and that they add value.

They are hungry for depth – meaningful connection that penetrates beyond the surface-level interactions. This often centers on the complex territory of friendship: learning who to trust and how to be trustworthy and navigating the tension between needing others and being needed by them.

They know when connection is curated for appearance, when interactions are transactional, when being together is about proximity rather than significance. They search for something more honest: relationships where care and contribution flow in both directions, where they are valued for being and trusted with doing.

Mattering transcends being seen—it's being searched for.

What young people ask for is not radical. It's fundamental.

Complexity – because humans are never singular.

Consequence – because participation requires influence.

Uncertainty – because growth is nonlinear.

Mattering – because without it, nothing else holds.

These four conditions interweave: complexity makes space for uncertainty; uncertainty reveals what matters; mattering paves the path to consequence; consequence deepens complexity. Together, when honored, they turn permission into possibility and unlock each young person's inherent power to shape the world.

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What do parents say they need?

Jenny Anderson, Journalist and Co-Author of The Disengaged Teen

Parenting today feels like a ball of contradictions: be present but not hovering, responsive but autonomy-supportive, lean into their interests but get out of their way. While technology helps us work and stay connected, it's turned homes into battlegrounds over screens, social media, and gaming. Anchors that parents once clung to – reliable schools, college as a predictable pathway, jobs for those who worked hard – have loosened, or become unmoored. Even the simple reality of having kids feels out of reach for many: 71% of Americans disagree that raising children in America is affordable. In 2015 that figure was 51%.

Americans are increasingly worried about affordability of children

Concern About the Affordability of Raising Children
Percent who agree/disagree the cost is affordable for most people
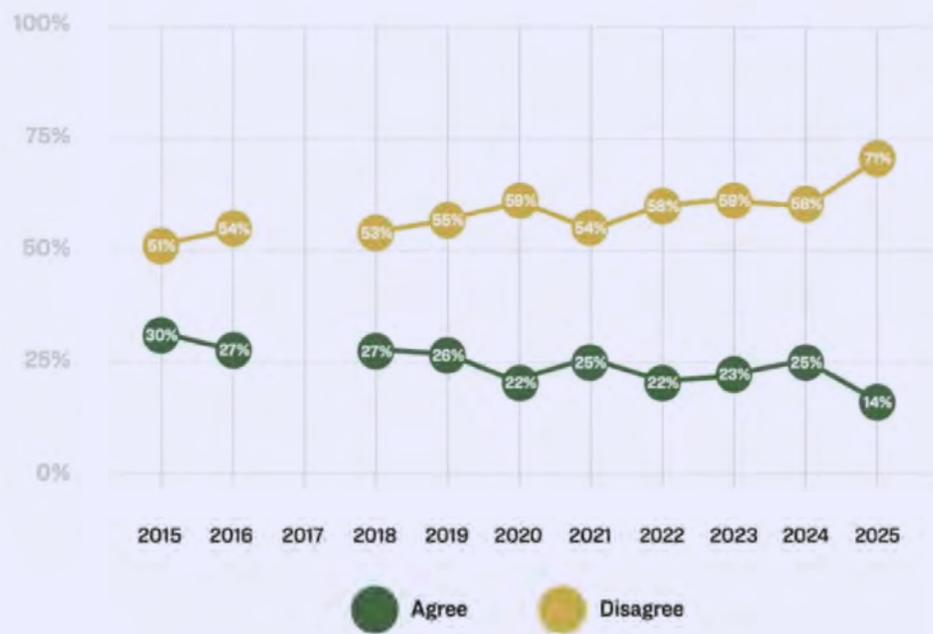
SOURCE: *American Family Survey 2015–2025.* Based on all Americans.
QUESTION WORDING: How much do you agree or disagree with the following statement: The cost of raising a child/children is affordable for most people. Response options: Strongly agree, somewhat agree, neither agree nor disagree, somewhat disagree, strongly disagree.

The result is exhaustion, confusion and a deep loss of agency. Parents worry that technology is harming their children and that schools aren't preparing them. They worry about mental health, negative peer groups, and "staying on track," even though few know what the right track is (Champion et al., 2023). A record low of 35% of Americans are satisfied with the quality of K12 education, an eight percentage point drop from last year. Admittedly, parents with kids already in the system seem to have a confirmation bias and are happier with what they are getting (74% completely or somewhat satisfied) even though only 41% of them actually think that their kids are being well prepared for college. A paltry 30% think they are being prepared for work.

Another disconnect was reflected in research Rebecca Winthrop and I conducted for our book via a Brookings-Trancend survey, where 26% of tenth graders said they loved school while 65% of parents thought their kids loved school. A third of tenth graders say they get to develop their own ideas in school; about 70% of parents think they do.

We Want Thinkers Who Can Do Things

Americans disagree on many things about education, but parents across demographics want kids who can think critically, solve problems, and make decisions. Critical thinking has remained a top priority in Populace's Purpose of Education index since 2019. This is likely to continue to increase for two reasons: AI can increasingly think for us (coming after social media already fractured attention spans). We need to know how to think so the machines don't do it for us, and so we know how to work with AI. Secondly, achievement is declining as problems are rising.

Despite billions invested in education, performance on PISA and NAEP, among other tests, is falling.

Trends in mathematics, reading and science performance

PISA test scores, OECD average
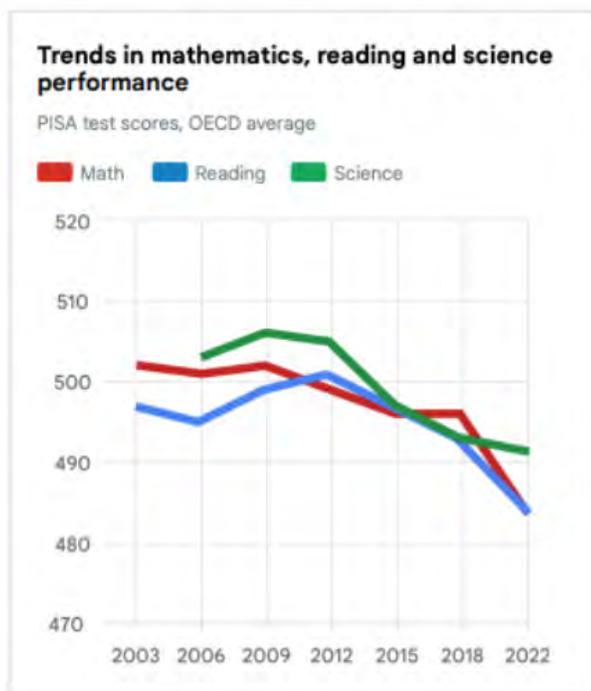
Source: OECD (2023), PISA 2022 Results (Volume I): The State of Learning and Equity in Education.

Even if standardized tests are a narrow measure of achievement, worsening proficiency in math, reading, and science, the very subjects schools prioritize, should alarm us. When kids report achievement pressure as a top stressor, yet perform worse on academic measures, it's a clear signal: the system is not delivering academic returns. Nor is it building the capacity required to handle the complexity of the world they're inheriting. Teachers report that foundational learning skills – self-control, cognitive flexibility, the ability to sit with frustration – are worsening. Our response has been to double down on what is easy to measure instead of what works: meaningful, relevant, rigorous work that builds knowledge and offers opportunities to stretch kids' thinking.

Parents want kids who can do things, not just pass tests. Before COVID, respondents to a Populace survey ranked "prepare for college" as their 10th highest priority for K–12 education; by 2023, it had dropped to 47th. For four years running, Americans' number one priority has been "develop practical skills" – managing money, preparing a meal, making

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an appointment. We might expect these to be taught at home. The fact that we now ask schools to teach them reflects parents' overwhelm and need for support. Across groups, the common thread is hunger for schools that build both thinking and doing – capable citizens who can navigate complexity and daily life.

Technology, Pressure, and Fragile Adults

Parents hold a mix of fear and hope about technology. Recent surveys show many parents think AI could undermine children's basic skills even as they hope it can support learning. They are whiplashed by tech's broken promises; social media that was supposed to connect us often hooks, isolates, and targets young people where they're most vulnerable. Stories of students who coast through assignments with AI and never build their own thinking muscles feel like warnings. Parents sense a mismatch: if kids are less able and jobs more demanding, their children are not in good shape.

At the same time, many families are financially stressed: one third reported having an economic emergency (not enough food, foregoing medical attention) in the past year. Childcare, housing, healthcare, and college costs have soared while wages have not kept pace. Under conditions of constant fear and scarcity, learning and thriving become much harder. Parents and caregivers are struggling too. Data from Making Caring Common show that depressed teens are far more likely than non-depressed teens to have a depressed parent, and anxious teens are far more likely to have an anxious parent. Relationships and communities are fraying just as kids need them most; adults and young people spend less time with friends and in community, and isolation is rising.

Parents need schools that build academic resilience, embrace intellectual rigor, build for civic thriving, center engagement, and provide diverse pathways for success.

They also need a lot more support.

From Achiever Mode to Explorer Mode

In promoting our book and talking in schools and to parents, Rebecca and I have heard deep, widespread frustration with a system that rewards Achiever mode. This is the learning state where kids frantically work to collect gold stars for everything put in front of them, even if they don't understand what they are trying to win. Parents also dislike the pervasive apathy produced by Passenger mode: kids coasting along, showing up but not really learning (more than 50% of kids surveyed, we found).

They want a system that rewards what we call Explorer mode: the ability for kids to figure out who they are and what they care about, and to develop the learning muscles to go after it. This includes finding their spark, becoming good thinkers, and developing into capable, confident doers. What they

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have instead is a system that demands and rewards conformity around a narrow and increasingly competitive set of academic and pre-approved extracurriculars. Students are corralled towards a limited set of outcomes deemed "success" rather than being encouraged to explore ways they can find their own path to success and fulfillment. The result is endemic disengagement (Anderson, Winthrop 2025). It is not surprising that they struggle to imagine a system that nurtures a broader set of winners, or offers a more expansive definition of success.

Systems change slowly, so many parents turn inward, trying to upgrade themselves rather than school. This is a thankless task amidst deep dislocation and uncertainty. Parents want assurance that their significant investment in their kids – financial, yes, but more so the investments of energy and deep love – will pay off, that their kids have a shot at a meaningful life. Right now it is unclear where that assurance will come from.

What makes a flourishing child?

Dr. Tyler Thigpen, Co-Founder and CEO of The Forest School: an Acton Academy in Atlanta, The Forest School Online, and the Institute for Self-Directed Learning

A flourishing child isn't merely high-performing or well-behaved. They're curious, purposeful, connected, and resilient. They wake with a sense of meaning and purpose bigger than themselves, work toward goals that matter, and contribute to others' good. They are connected to themselves – mind, body, and spirit – and to nature. They think for themselves, care about others, bounce back from setbacks, and keep going when it's hard.

Across schools, families, and states that my team and I've worked with, flourishing grows when young people feel care, competence, and control. They need caring relationships that create psychological safety; real chances to demonstrate competence through meaningful work; and a sense of control over their time, goals, and growth. Human flourishing and self-directed learning are two sides of the same coin.

When these conditions are present, learners grow into adults who can lead their own lives – and contribute meaningfully to democracy and community life. Without them, we risk raising dependent learners: people trained to comply, not to think; to wait for direction, not to initiate; to consume, not to create. That dependency shows up beyond school walls – in workplaces that crave self-starters but find few, in citizens vulnerable to misinformation, and in young adults anxious about decisions without a clear rubric. A flourishing child is not only the goal of good schooling – it's the foundation of a flourishing democracy.

Research confirms the skills of self-direction can be learned. My colleague Dr. Caleb Collier and I describe a four-phase developmental pathway: desire, resourcefulness, initiative, and persistence. Desire connects to belonging and purpose – why I care beyond myself. Resourcefulness gathers information, tests evidence, and discerns truth. Initiative acts on conviction rather than waiting for permission. Persistence sustains engagement through difficulty – essential for deep learning, democratic participation, and workplace success. When schools intentionally design for this progression, learners think critically, collaborate across differences, and practice acting for the common good.

Flourishing is not a mood. It's a set of civic and personal habits that can be cultivated. Motivation, autonomy, and meaning activate the brain's learning networks more powerfully than external control.

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Over-structuring and constant adult direction suppress curiosity, empathy, and judgment – the very muscles democracy and workforce development depend on. The deeper crisis in education isn't low test scores; it's low agency. If we want a culture of innovation, civic strength, and broad-based opportunity, we must teach the skills of self-leadership early and often.

Across learning environments making this shift, a pattern emerges: when children are trusted to take ownership, they rise.

Take Elin, a fourth-grader who dreams of writing a series of stories in worlds she designs. Early drafts were sprawling and unfocused. Over time, she learned to set milestones, seek critique, and revise. The skill she's building isn't just creative writing – it's authorship of her own process: moving from wonder to discipline, inspiration to follow-through.

Or Olivia, a middle-schooler who said, "I don't want answers. I want it to teach me." She craved productive struggle. Her breakthrough came when she began planning her study blocks, comparing strategies, and explaining why a solution worked before checking if it was correct. She grew from compliance to curiosity, from finishing to understanding.

Then Luke, a high-schooler who wanted to "learn faster." He discovered speed came not from shortcuts but from self-organization – creating routines, teaching others, and reflecting on retention. His measure of mastery shifted from completion to contribution: using what he learns to help a teammate, mentor a peer, or improve a community project. That's the leap from individual growth to civic purpose.

When young people learn how to direct their own learning, they are also learning how to direct their participation in community and public life. So how can education systems organize around flourishing – where learning, purpose, work, and democracy meet? Three shifts rise to the top.

First, redefine success.

By declining to patent the polio vaccine in the 1950s, Jonas Salk turned a scientific breakthrough into a global gift rather than a private asset. Likewise, we should regard the knowledge of how to grow self-directed learners as something to be widely shared and prioritized, making the teaching of flourishing and self-direction a core purpose of school so young people can guide their own learning rather than be perpetually guided. Let us move beyond seat
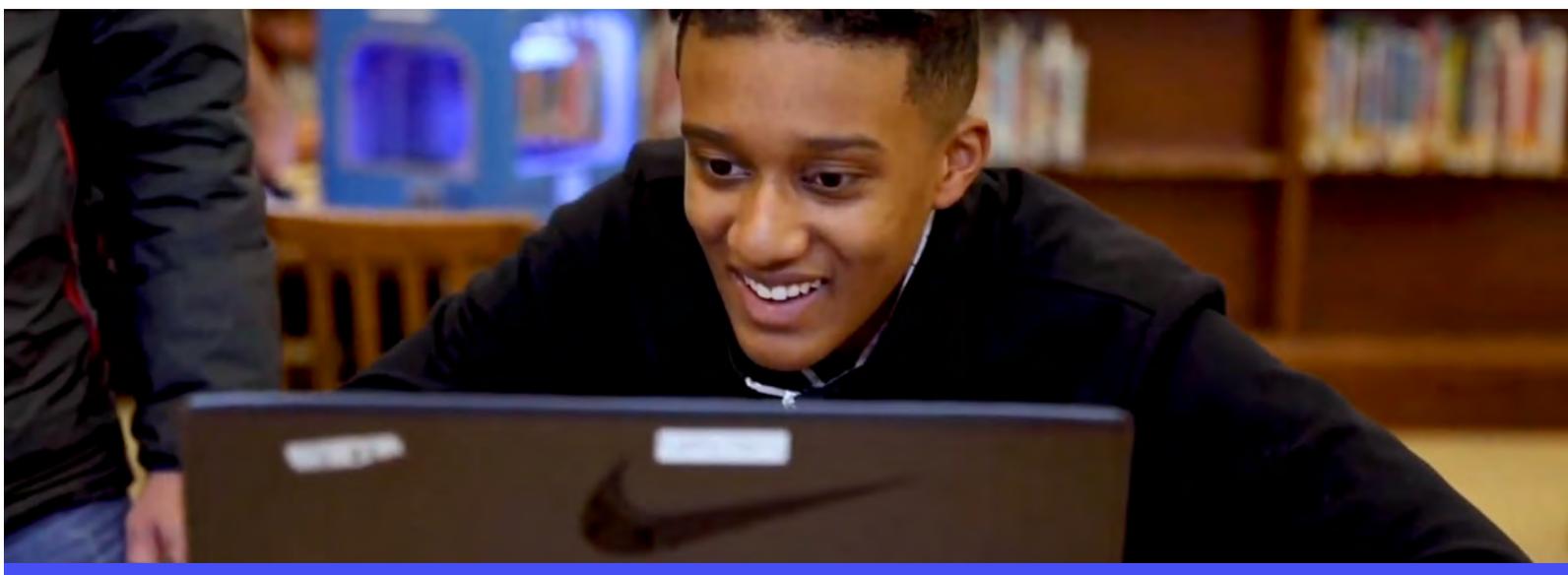
time and one-right-answer tests to track growth in discernment, originality, collaboration, and agency – the human skills automation can't replicate and civic life depends on.

Second, redesign structures.

Flourishing calls for moving beyond a standardization education system to a blended model that combines shared expectations with genuine personalization and agency. Every learner still needs a basic floor in reading, writing, math, and science. But we also need to track growth from each student's starting point, so progress counts no matter where they begin. Instead of relying only on test snapshots, learners can show proof of what they know and can do through portfolios and exhibitions. Older students should be able to pursue pathways – academic, technical, or mixed – with chances for apprenticeships and college credit along the way. All of this can roll into a kind of "passport": a portable record of skills and experiences that travels with them and is legible to colleges, employers, and communities. Done well, this protects shared standards, opens room for local choice, shows real learning, and connects school directly to life after graduation – without forcing one-size-fits-all.

Third, realign adult roles.

Flourishing learners grow best around flourishing adults. Teachers become guides who coach rather than command. Parents and caregivers support without rescuing. Communities become classrooms – mentors, civic leaders, artists, and entrepreneurs invite learners into real work that matters to others. When adults model collaboration across lines of difference, young people learn to do the same. Flourishing is not independence; it's interdependence.

Together these shifts yield a more relevant purpose for schooling: not producing dependent graduates but cultivating thoughtful, self-directed, career-ready, community-minded citizens capable of both freedom and fellowship – and a new generation of grounded, non-anxious adults who approach
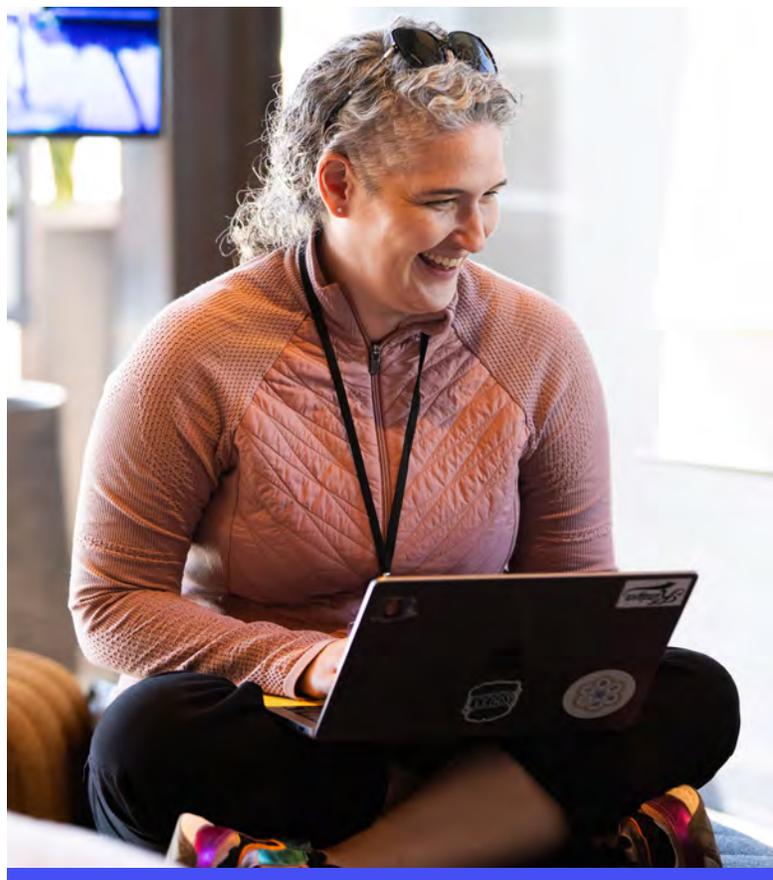
life with mindsets of trust, curiosity, and shared responsibility for human growth.

Flourishing in the Age of AI requires more humanity, not less. Algorithms can personalize content, but they can't form character or conscience. The future of work will favor people who can learn new tools, manage themselves amid change, collaborate across differences, and persist through uncertainty. The habits of self-direction that sustain human flourishing are the same habits employers prize and communities need.

Across the country, schools and networks are reimagining education around a shared vision of flourishing. When young people are trusted with real responsibility, supported by caring adults, and connected to work that serves others, they don't just become better students – they become better colleagues, neighbors, and citizens.

What does it mean to shift our focus from "education" to "development" to "thriving"?

Karen Pittman, Founding Partner at Knowledge to Power Catalysts (KP Catalysts)

The term 'thriving' is an unabashedly positive term used to describe individuals, systems, communities, even economies. In all these contexts, thriving implies a continued state of well-being, sustainability and positive growth. Definitions of thriving range from simple to complex. A word cloud generated from mainstream news sources is my preferred way to show the dynamic complexity of this concept, reinforcing the connections across levels:

Thriving communities need thriving youth.

Thriving youth need thriving ecosystems.

Thriving ecosystems need thriving systems.

Thriving systems need thriving communities.

The term thriving appears frequently in statements about the renewed purpose of education (e.g., Portrait of a Graduate statements) that build on the emergent principles from the science of learning and development and the science of adolescence. It is also associated with a wide range of humanizing school practices that elevate the importance of social and emotional learning, student voice and choice, and opportunities to incorporate real-world learning and skill building into the school day.

AI has accelerated the timeline for moving from practice introduction to coherent system-level transformation. But the urgency is reinforced by surveys of educators, employers, community youth development leaders, parents and young people that affirm the learner-centered design principles. The good news is that the shift is happening. The bad news: It's happening unevenly, taking hold fastest outside of public systems, fueled by private dollars.

So, the question becomes, how can we help public systems reimagine public education in support of youth thriving? Do we bet on the proliferation of alternative value networks associated with new models of learner-centered education (e.g. microschools) to disrupt the status quo? Do we take a page from juvenile justice and just begin to dismantle the system to force innovation? Do we wait for vouchers and AI-driven solutions to run their course?

Options to consider:

Widen the aperture. Envision a public education system in which schools maintain their core functions but work with the other systems in the learning ecosystem to ensure equitable future-ready learning environments *with full-day, year-round, up to age 25 learning and development opportunities* that build the competencies and connections that advance youth thriving (e.g., after school and summer programming, libraries and cultural institutions, service and conservation corps, youth employment and workforce development agencies).

Elevate the other systems in the learning ecosystem. These systems are not as large, visible or robust as schools and enrollment is voluntary. As a result, they are more flexible and customer-sensitive, frequently creating "hacks" to real infrastructure problems (e.g., transportation, assessment, staffing) that hamper school transformation efforts and contribute to higher satisfaction rates.

Use summer as a springboard. Expectations for learning and development are more flexible in the summer. Invite schools, community-based learning organizations, employment and workforce development organizations to work together to "saturate" the summer months with options, looking for ways to move successes into the school year.

Focus on teens and young adults who are still in the community. Acknowledge the neuroscience that affirms executive function development into the mid-twenties, even for adolescents who have experienced serious trauma and setbacks that have left them over-age and under-credentialed.

Invest in the mindset shifts needed to replace the grammar of schooling with the grammar of learning and development. School systems are closed ecosystems by design. Students are assigned to schools and grades, moving within the traditional walls of accountability that define the school day, school year, and attendance and graduation requirements. School leaders are aggressively modifying the rules to allow freer movement of their students and community partners in and out of the building. But they find it difficult to dismantle the systems of control.

Let's look at three more word clouds.

The words associated with development are positive, like thriving, but put more emphasis on the process (e.g., progress, advancement) that occurs individuals, systems and communities. The words associated with learning are much more specific and focused on the individual. They include words associated with the natural learning process (e.g., exploration, curiosity) and broad learning outcomes (e.g., skills, knowledge) as well as words associated the learning experience (including terms related to formal instruction.

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The words associated with education, however, have a different vibe. It's not surprising to see terms like classrooms, bells, exams, textbooks, attendance, hallways, recess, subjects, lessons and grades. This is the language of schools shared by generations.

However, the absence of any words associated with learning, development or thriving is jarring. And it explains why, in most schools, learner engagement declines steadily with age (only 25% of high school students report being engaged) while learner's anxiety about being ready for what comes next in life grows (80% of high school students feel unprepared for making choices about what comes after high school).

A Different Place to Start

Strengthen or create purpose-built learning ecosystem intermediaries. Every community has a learning ecosystem. Healthy, equitable ones, however, require careful stewardship. Ecosystem stewardship and system leadership require different mindsets, skill sets, strategies and, often home bases independent of the systems in the ecosystem. Look for organizations (usually non-profits) that have been purpose-built for ecosystem stewardship. In his talks, University of Pittsburgh learning ecosystem researcher Dr. Thomas Akva, explains their value:

"If we want to center youth thriving, we have to direct our efforts to understanding and shaping ecosystems. You need different tools to impact a web than those you use to impact an individual."

Here are a few examples of non-profit intermediaries that have committed to ensuring adolescents are future ready, formalized their initiatives outside of the K-12 system to ensure the flexibility needed to work across system boundaries, but are actively working to partner with and create opportunities for educators in their districts linking them and their students to partners, trainings, resources, and certifications that enhance schooling for all.

- **www.communityshare.org** based in Tucson, AZ ignites a passion for learning and civic engagement by activating the wisdom, skill and lived experiences of educators, students and community members.

- **www.pastfoundation.org** based in Columbus, OH is a hub for innovation, connecting education, industry and diverse communities to problem solve the future of work and inspire lifelong learning.

- **www.afterschoolmatters.org** empowers teens across Chicago through paid after-school and summer opportunities to explore their passions, gain valuable skills, and build their futures through programs in the arts, communications, leadership, sports and STEM.

- **www.heartoforegon.org** empowers Central Oregon youth and young adults 16 -24 through employment, job training, education and service to Central Oregon communities providing stipends or credits and creating clear pathways to industry certifications and/or educational diplomas.

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Pillar 2:
Shift from centering *schooling* to centering *learning*

Modernize the "what":
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If we are to build a learning system designed for human flourishing, we need to fundamentally reconsider the inputs of that system. For generations, the "what" of education was relatively static: a fixed canon of content and a hierarchy of procedural skills. But in the Age of AI, where knowledge is ubiquitous and computation is automated, the value proposition of humans is shifting. We are forced to pause and ask a transformative question: When machines can access information and perform calculations instantly, what remains uniquely and critically human?

This section of the anthology rejects the false dichotomy of skills versus knowledge and explores the important aspects of both that must be integrated together for relevance in the modern world. We begin by examining **modernized discipline knowledge,** asking: What shape does knowledge development take when the goal is no longer retention, but synthesis and application? Similarly, we look at **math**, historically a gatekeeper of academic success, and ask what numeracy truly means in a world of advanced computational tools. How do we move from calculating to reasoning?

Beyond traditional subjects, we need to define the **human skills** that will distinguish us in a machine-augmented world – skills like self-knowledge, relational intelligence, and novel thinking. These are the **future-ready competencies** and **durable skills** that the workforce demands, yet they are often marginalized in our current curriculum. Finally, we broaden our lens to the ultimate purpose of education in a free society: civic thriving & purpose. We ask what our systems must look like to produce not just workers, but engaged, informed citizens capable of sustaining a pluralistic democracy.

Defining "what matters most" is no longer about adding more to the plate; it is about curating the specific competencies that allow learners to navigate complexity, build connection, and find purpose. These questions guide us toward the essential building blocks of a future where humans don't just compete with AI, but thrive alongside it.

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What shape does knowledge development take in the Age of AI?

Charles Fadel, *Founder and Chairman at the Center for Curriculum Redesign*

The naive statement "Google knows everything, why learn anything?" has now been transferred to AI, and needs to be tackled head on. Nevertheless, the fair question AI raises, "What should students learn for the age of AI?", needs to be addressed. AI is thus forcing a deep re-examination of the role of Disciplinary Knowledge in Education.

Expertise AND Transfer

Expertise is needed for employability, and Transfer for wide and wise, societal and personal, application of Knowledge in various real-world settings.

A) **Acquisition of Expertise:** The Knowledge aspect of a discipline needs to be enhanced: as AI easily replicates the Declarative and Procedural aspects of the discipline, students will *also*[1] need to learn the Conceptual and Epistemic layers, to interface with AI at a more robust level, capable of challenging the AI's responses. Deep expertise is the combination of all four levels. An example of a Concept in Mathematics is "deceiving then explosive' for an exponential, whilst the content is its algebraic formulation $f(x) = e^x$. Similarly, learning Epistemics will require understanding what constitutes the discipline (via four seminal questions[2]). This implies revisiting what is considered "foundational" declarative and procedural knowledge (aka "Essential Content"), which is difficult to do[3], and where personal biases abound.

Modernizing Traditional Disciplines: Alignment with a modern world requires modernizing traditional disciplines: After all, for instance, why so much

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[1] Scaffolding still matters greatly, hence the need to learn declarative and procedural layers, but more discriminantly, as described herein.

[2] 1. What counts as evidence? 2. How is that evidence generated? 3. How are claims justified or refuted? 4. How is knowledge communicated and updated?

[3] CCR has developed criteria to do so, which are beyond the scope of this paper

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trigonometry, and so little data science[4],in a modern world? All disciplines require the removal of obsolete items carefully ("with a scalpel, not a chainsaw").

Furthermore, "dosing" complexity wisely will be essential in reshaping declarative and procedural standards: each standard should be tagged as one of three tiers of complexity (Produce, Interpret, Appreciate).

Adding Modern Disciplines: For a modern world, the following disciplines need to be made mandatory in K-12, as they a essential to employability, personal, and societal growth, yet they are crowded out by traditional disciplines and are spottily available as options at best::

- Technology and Engineering: Economic drivers are mostly related to "anything-tech": Biotech, Nanotech, Cleantech, AI/CS, advanced manufacturing, FinTech, FashionTech (wearables), HealthTech, etc.

- Social Sciences: understanding oneself and others is a critical need in a fragmenting world.

- Entrepreneurship: is, in itself, the job of the future, as disruptions to traditional staid careers abound, due to AI and other factors.

Interdisciplinarity and cross-disciplinarity: The former can be described as a number of Themes[5] that can be incorporated as exemplars of various content items, and depending on the conduciveness[6] of a given Discipline; while the latter will be developed via Projects (which should be mandatory for each course)

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[4] https://curriculumredesign.org/modern-mathematics/
[5] Environmental Literacy; Global Literacy; Information Literacy; Systems Thinking; Design Thinking; Digital Literacy; Computational Thinking.
[6] https://curriculumredesign.org/wp-content/uploads/Interdisciplinary-Themes.pdf

B) Exercising Transfer: Knowledge remains inert unless it is:

- Demonstrated in multiple settings, for near to far transfer; this can be achieved via real-world multidisciplinary projects and internships.

- Used properly ("Skills[7]"), with the appropriate behavior and engagement in the world ("Character[8]"), with the necessary reflection, adaptation, learning how to learn ("Meta-Learning[9]") and to do so continuously given AI. Such competencies are required in more than 40 US States. Disciplines are more or less conducive to developing a specific competency (e.g. Communication and Language). Furthermore, AI requires discrimination about which facets of competencies will matter more, as less replaceable by AI[10] (for instance, *Imagination*, in Creativity).

The complete framework's diagram can be found below.

The recommendations summarized herein have been researched and described in great detail in CCR's books "Four-Dimensional Education" and "Education for the Age of AI".
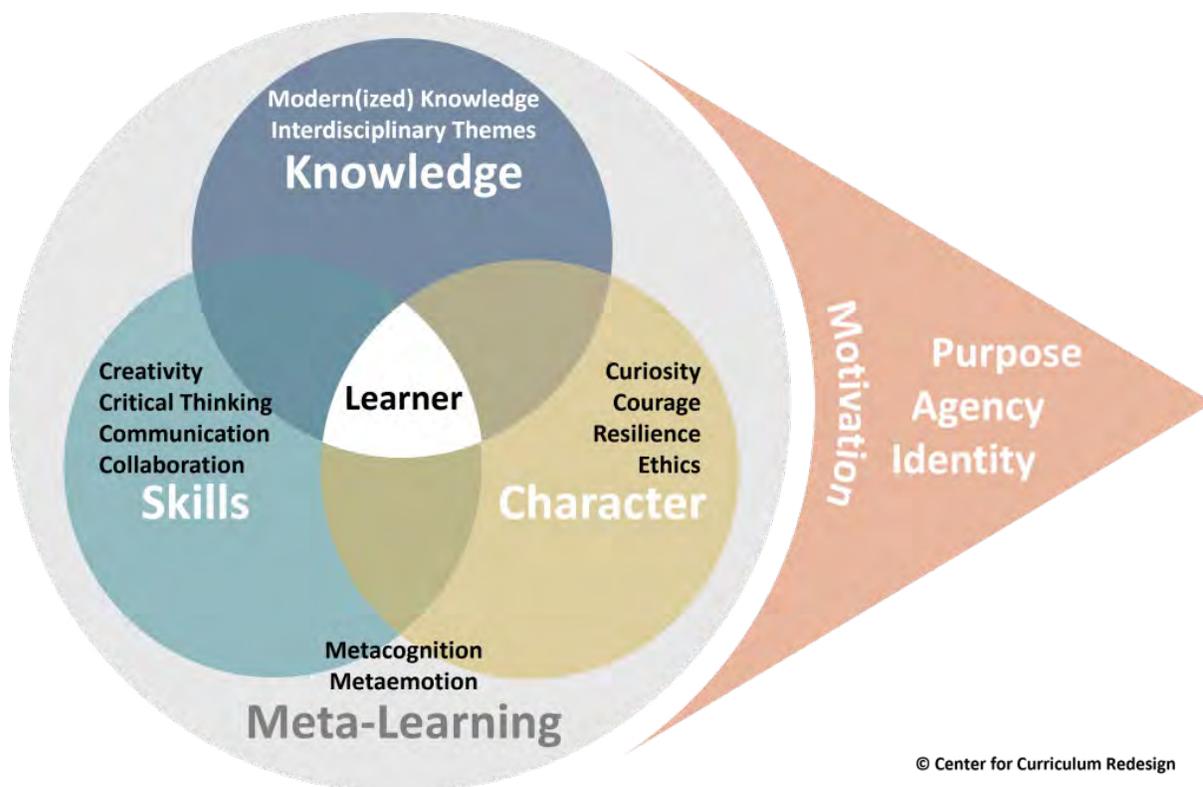
Four-Dimensional Education (Source: CCR)

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[7] Creativity, Critical Thinking, Communication, Collaboration
[8] Curiosity, Courage, Resilience, Ethics
[9] Metacognition, Metaemotion
[10] "Education for the Age of AI", Chapter 6, Pages 148-151

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What shape does knowledge development take in the Age of AI?

Beth Anderson, President and Chief Executive Officer at Core Knowledge Foundation

A quarter century ago, E.D. Hirsch Jr. published a cleverly titled essay: *'You Can Always Look It Up'...Or Can You?* His concern was prescient. The internet was placing information at our fingertips, but students weren't building enough foundational knowledge to make meaning of it, or sometimes even know what to "look up." Hirsch worried the advent of the internet would accelerate progressive education's emphasis on "learning skills" at the expense of content knowledge, mistaking access to information for actual understanding.

This year, Dr. Barbara Oakley and colleagues released *The Memory Paradox: Why Our Brains Need Knowledge in an Age of AI*, providing neuroscientific confirmation that, indeed, you can't "just look it up." Cognitive offloading to AI prevents the brain from forming the mental schemas required for comprehension and true learning.

Yet the "Age of AI" also offers an opportunity for a knowledge revival, especially if we can bridge the divide between progressive, child-centric education and communal, knowledge-based education. Both sides care about equity, engagement, and preparing students for meaningful lives. Neuroscience and the risks of over-reliance on AI simply remind us that these aims require equipping all students with the foundational knowledge that makes learning possible. By "foundational knowledge," I mean both the shared background and vocabulary all students need for common understanding and the domain-specific knowledge that enables deeper thinking within fields.

Why Knowledge Matters More Than Ever

As AI accelerates, addressing our "knowledge deficit," as Hirsch called it, becomes even more urgent. A student who asks AI to explain climate policy can't evaluate the response without foundational knowledge of science, economics, and civics. In fact, they likely don't even know the right questions to ask. AI can synthesize information instantly, but it can't give students the language and conceptual frameworks needed to comprehend and think critically about that information. Without knowledge in their minds, students become passive consumers (and "writers") of AI-generated content rather than informed, engaged, and discerning users of a powerful tool.

What Knowledge-Rich Classrooms Actually Look Like

Some fear that teaching content means boring, rote, "industrial era" instruction. The reality is the opposite. In knowledge-rich classrooms, students are deeply engaged, not because content is tailored to their interests, but because facts and ideas, taught intentionally, cultivate curiosity and enable neural connections, pattern-recognition, and genuine thinking.

As one educator-parent shared on the History Matters podcast, she overheard her second-grader apply basic economics learned in social studies during an Easter candy trade with his older sister, confidently pronouncing, "Your supply is low and your demand is high, so it'll cost you two Swedish Fish!" I've seen a fourth-grade class of predominantly immigrant students energetically discuss whether Columbus should be considered a hero or a villain, demonstrating the language and historical knowledge to grapple with complexity and a topic too often deemed by adults to be too controversial. I've observed a third-grade teacher bring her class back to attention by asking students to touch their patella, then their sternum, then their Achilles tendon – joyfully reinforcing vocabulary, literary allusion, and anatomical knowledge. And teachers implementing a knowledge-rich curriculum often share, "My students' writing has improved dramatically because they finally have something to write about!"

This is what education can look like when we prioritize building knowledge. Students develop not just individual understanding, but the shared foundation that makes discourse, real-world application, and collaboration possible. This foundation also equips them to use AI and strengthens confidence, agency, and critical thinking – the very "skills" most progressive, child-centric educators seek to develop.

Two Types of Knowledge All Students Need

To prepare students for the AI era, all learners need two essential types of knowledge:

Shared background knowledge: The historical events, mathematical and scientific concepts, literary and cultural works, geographical understanding, and civic foundations that create common ground for communication and collective problem-solving. This isn't about uniformity of thought. It's about ensuring students have shared reference points that enable productive engagement across differences. When students study the Constitutional Convention together, they can debate modern governance challenges with shared context. Without that foundation, conversations fragment into isolated, ungrounded, and undebatable opinions.

Domain-specific knowledge: Deep understanding within disciplines that enables transfer and expertise.

If shared knowledge enables communication, domain knowledge provides the disciplinary lens students need to internalize how scientists evaluate evidence, how historians interpret sources, how mathematicians model relationships, how engineers design solutions, and how writers construct meaning. As Charles Fadel argues in Education for the Age of AI, AI's ability to replicate declarative and procedural knowledge means students must understand not just what a field knows, but how each discipline builds and evaluates knowledge.

Questions We Must Answer

Recognizing that shared background and disciplinary knowledge are the foundation, we must determine what that knowledge should include. As Fadel puts it, we must revise curriculum for the Age of AI "with a scalpel, not a chainsaw," removing obsolete content, making space for modern disciplines, and ensuring teachers are not overwhelmed.

- *What foundational knowledge do all students deserve?* What's truly essential versus merely traditional? How can we modernize the canon thoughtfully, ensuring the curriculum is inclusive and relevant while remaining manageable?

- *How do we decide what to prune?* What procedures can be safely offloaded to AI without undermining deeper learning? Conversely, what content is indispensable for building the mental models students need to ask good questions, evaluate AI's output, and build and transfer knowledge across domains?

- *What domains and disciplines must we prioritize?* How do we balance traditional subjects with emerging fields like data science essential for the modern world?

- *How do we ensure coherence across the curriculum?* How can we provide all students with access to a purposeful progression of shared background and domain-specific knowledge that builds year over year, aligns across disciplines and instructional materials, and enables deeper comprehension and discernment?

You Can Always Ask AI...But Should You?

Only if you know enough to make both the question and the answer meaningful – to engage in active learning rather than passive consumption. This is why foundational knowledge matters more in the Age of AI, not less.

Yet the stakes extend far beyond AI usage. We must accept this paradox: the more powerful AI becomes, the more essential foundational knowledge becomes for human flourishing. Answering these curricular questions with clarity, courage, and cognitive science as our guide will ensure students develop the ability to ask AI anything and the judgment to know when and how they should, but most importantly, the knowledge and understanding required to learn continuously, contribute meaningfully, and thrive as individuals and citizens.

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What shape does numeracy take in the Age of AI?

Zarek Drozda, Executive Director at Data Science 4 Everyone

What do our core school subjects – including math – look like in the age of AI? With today's tools, the entirety of human knowledge is immediately accessible, computational procedures of any scale are not only possible but also cheap to automate, and pocket-size digital devices are so ubiquitous that it's rare to catch a human without one.

In short: breadth, depth, and immediate access to most of what we teach in our existing curriculum, at any time and place.

This new reality is profound, and might imply an extreme but logical solution: no need for math,

science, or most of our other subjects as-taught today. It's wasted time, right?

Yet our education system has a strong historic emphasis on imparting math. Mathematics is our most ancient classroom subject, with the followers of Pythagoras recording and transferring early mathematical proofs to one another in the 6th Century BC. The term "mathema" literally translates to "subject of instruction" in Ancient Greek. From ancient civilization through the Sputnik era to the computer revolution, mathematics education has managed to resist nearly every wave of existential threat from technology that otherwise implied its automation. Hand-held calculators? We still teach long-division and times-tables. Digital graphing software? We still hand-write the algebra to solve $y = mx+b$. Any rethinking may risk defying some ancient wisdom, or at least represent a fool's errand against an immovable tradition.

However, an outright defense of our approach to math education also assumes it's working in the first place. 78% of high school graduates fall below NAEP proficient on the 12th grade "Nation's Report Card" assessment, a trend that has continued with robust consistency for the past two decades. Our international ranking in math scores is a worn-out horse of a news story, from the 1980s to just last year. And the resulting levels of "math anxiety" – a literal fear of numbers or "being a math person" – is estimated to impact as many as 93% of U.S. adults. At that scale, our national math problem necessarily impacts both our G.D.P. and our civics in dramatic yet still unmeasured ways.

The most alarming of all: the share of students reporting that "math will help me when not in school" has declined since 2017 – suggesting a hidden "relevancy crisis" lurking beneath the surface. The

question "why am I learning this?" is every math teacher's dreaded quagmire today. In a world in which students grow up with digital devices that automate so much of the math curriculum, we should expect this to only increase.

A holistic conversation on numeracy in the age of AI needs each of these three starting points together: acknowledging 1) present technology can automate most of the mathematics we currently require, that 2) our system as-is fails to empower the majority of students in mathematics anyway, and yet 3) even when presented with prior automation, we have still chosen again and again to teach some manual procedures, because there may be value for muscle-memory that is "built-in." Especially given how often we need math in daily life situations and to simply question ideas, it seems dangerous to abandon them completely.

So now what?

Most historic debates on math education only focus on one of these dimensions and conveniently ignore the others. We need a better framework for the problem that recognizes all of these realities simultaneously and integrates them. Here's a few

approaches (with active momentum behind them in the field) that may hit three birds with one abacus:

1) **Conceptual re-leveling:** in a world of AI, not every concept in the math curriculum demands automaticity gained through repeat practice and drills; some may be better served at a conceptual "supporting" or even "appreciation" level, which has been argued by Phil Daro – one of the original Common Core authors. Most math standards provide guidance on what to teach, but not at what depth or for how long. In the status quo, this results in students learning many concepts a mile-wide and an inch-deep, with the assumption that all concepts are created equal, limiting time for project-based learning, durable skills transfer, or applying math concepts in the context of real-world data and phenomena. Instead, we can rebalance time away from memorizing many formulas towards deeper fluency in the most critical topics, while better emphasizing both proof-based argumentation and digital daily life applications in statistics and data analysis. Contact Student Achievement Partners or Data Science 4 Everyone for more information on the project, including on pilots in four states.

2) **Interest-based math pathways:** this approach transitions high school math from a "one-size-fits-all" approach towards the autonomy offered in a typical college experience, where students can choose between the math content that best fits their interests and career aspirations. STEM or Economics students may pursue Calculus, Psychology or Law students may pursue Data Science & Statistics, and Humanities or Arts students may pursue Quantitative Reasoning courses in high school. "Why am I learning this?" becomes a question students get the chance to answer themselves. See the U.T. Austin Dana Center Launch Years initiative and Data Science 4 Everyone (our team), who have engaged over 25 states in developing this model.

3) **Math-badging:** intense debates have permeated the grade-level timing of courses like Algebra 1 and the existence of "honors" vs "non-honors" math placement. Yet these arbitrary distinctions could vanish in a system of self-paced learning that still recognizes the pre-requisite model of math education with module-based assessments. Systems that enable self-paced learning could support this content solution in what otherwise is historically perceived as the most rigid school subject. See the XQ Institute for their pilot in three states.

4) **Non-linear progressions:** the present-day math curriculum assumes mathematics "stacks" in a linear trajectory (e.g. you must learn basic Algebra before Calculus, or addition before multiplication). Yet learning sciences literature at both the micro- and macro-level is questioning that assumption, where students have been observed to learn more effectively in both interleaved formats (mixing problem types to encourage strategic planning for a problem up-front, drawing on multiple areas of knowledge) or through integrated mathematics (learn many concepts at once and the connections between, rather than one siloed course at a time).

Our current inflection point invites new approaches that can simultaneously increase relevance and confidence for students, recognize some baseline quantitative reasoning and fluency is critical for everyone, and as Conrad Wolfram argues, "teach math as if computers exist." Our historic failures in math education should not be a national mourning, but rather a license for creativity unlocked by technology. If we get this right, the impact may be infinitely larger than we could imagine.

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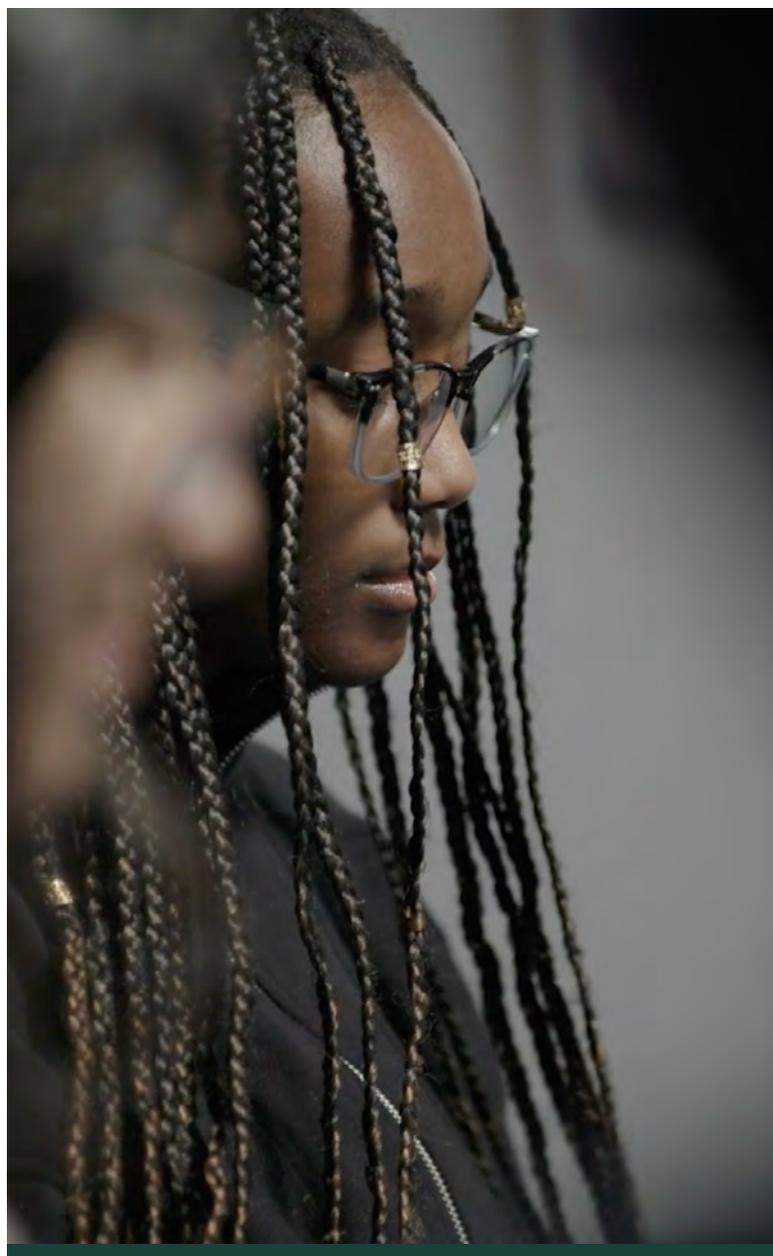
What are the uniquely human skills learners will need?

Alan Cheng, Superintendent of Consortium, Internationals, NYC Outward Bound Schools at New York City Department of Education

Generative AI has forced education to confront a question we can no longer avoid: What is school for when knowledge is everywhere and automation is cheap? When machines can generate essays and solve algebra problems, the answer is not to compete with technology. Instead, we need a new North Star: Human Flourishing. We must double down on the imagination, empathy, and purpose that remain uniquely ours.

As a high school superintendent in New York City, I spend my weeks visiting classrooms across the five boroughs. What stands out are the moments when learning feels deeply human: when a student's eyes light up during a presentation, when peers debate an idea that matters to them, when a teacher listens with genuine curiosity. Creativity sits at the center of those moments. It is how students make sense of themselves and the world.

The Human Skills That Matter Most

- Self-knowledge: understanding one's strengths, motivations, and values; knowing how one learns and grows.

- Relational intelligence: the ability to connect across differences, to collaborate, to listen, and to build trust.

- Creative and novel thinking: generating ideas, solving problems, and making meaning in uncertain contexts.

- Ethical and reflective reasoning: recognizing consequences, acting with integrity, and learning from feedback.

AI can process data and generate text, but it cannot exercise judgment, empathy, or purpose. These human capacities must be intentionally cultivated.

Rebecca Winthrop has argued that AI compels us to prioritize what machines cannot replicate: critical thinking, emotional intelligence, ethical reasoning, and creativity. These traits are not just skills; they are habits of mind that allow us to flourish as individuals and as citizens.

What It Looks Like in Schools

Our public schools can't wait for policy shifts to make this happen. Across New York City, I see teachers and students already building these human capacities through meaningful, creative work.

At Bronx International High School, recently arrived multilingual students collaborate on climate-justice projects. They collect data on local flooding, interview residents, and produce bilingual multimedia presentations. Through this process, they practice inquiry, empathy, and voice. Creativity becomes the bridge between language learning and civic engagement.

At City-As-School, one of the city's oldest performance-based high schools, students complete internships that connect passion to purpose. A student interning with an architecture firm designed a model for sustainable housing in the Bronx. Another working with a nonprofit produced a podcast on youth mental health. These projects develop self-direction, ethical reasoning, and creative synthesis.

At NYC Outward Bound schools, exhibitions replace tests. Students publicly present and defend their work, reflecting on how they have grown and what they have learned. An authentic audience transforms performance into a sense of belonging and responsibility.

Through our partnership with Playlab, we co-design AI tools that support reflection rather than replace thinking. Students use prompts to examine their reasoning, identify biases, and refine questions. As Mitch Resnick of MIT Media Lab notes, most technologies deliver instruction rather than cultivate creativity. Our aim is the opposite.

These examples show that creativity is not a separate domain or elective. It is the way students learn to know themselves, connect with others, and act with agency.

Building the Conditions

To make human-centered learning durable, it must be structurally embedded in how schools operate—through curriculum, assessment, and leadership.

1) Curriculum as Creation - Students should produce original, interdisciplinary work across subjects. Projects, exhibitions, and performances allow them to apply knowledge in complex, authentic contexts.

2) Assessment that Honors Process and Excellence - Learning must value reflection, iteration, and voice, while still insisting on high standards. As Ron Berger wrote, excellence is not elitism; it is a way of honoring young people's capacity for beautiful, meaningful work.

3) AI as a Tool, Not a Shortcut: Students need explicit guidance on how to use AI responsibly. With scaffolds and reflection, AI can amplify creativity rather than replace it.

4) Creativity as an Equity Imperative - Creative opportunities should not be limited to electives or advanced programs. Every student deserves the chance to imagine, design, and make. This is particularly transformative for multilingual learners, students with disabilities, and those who have been historically marginalized.

5) Leadership as Modeling - System leaders must create time for teachers to collaborate, experiment, and share student work. Real change grows through daily choices that signal what we value.

When Creativity Thrives, So Do Readiness and Belonging

Employers consistently say they seek graduates who can think independently, communicate clearly, and collaborate across disciplines. Colleges want students who can frame questions, not just answer them. And research shows that creative engagement improves student well-being and persistence. In our district, schools that emphasize authentic projects see higher attendance and stronger engagement.

Creativity also strengthens democracy. Deborah Meier reminded us that "the habits of free inquiry and multiple viewpoints are not luxuries; they are the required habits of a sound citizenry." In classrooms where students create, discuss, and reflect together, they are learning to participate in civic life.

Creativity as a Public Good

When I first read Elinor Ostrom's Governing the Commons, her framework for managing shared resources resonated deeply with me. She argued that communities sustain collective goods through local norms, participation, and shared responsibility. Creativity in public education is one of those goods.

Protecting it means:

- Establishing local norms for how AI and creativity intersect.

- Building co-governance models that include student voice.

- Dedicating time and resources to creative work.

- Supporting educators in designing and assessing creativity.

- Monitoring access to ensure that creative learning is equitable.

- Like clean air or safe water, creativity requires stewardship. It is the renewable energy of human progress.

Looking Ahead

The good news is that schools are not waiting. Every week, I see students tackling problems that matter, teachers adapting lessons to spark curiosity, and leaders carving out time for reflection and design.

AI will keep advancing, but what defines us is not our ability to process information. It is our capacity to imagine, build, and care. Creativity sits at the intersection of all the human skills our students will need: self-knowledge, relational intelligence, ethical discernment, and the courage to make something new.

The work of education is to protect and grow those capacities. That is how we ensure our young people not only adapt to the world of AI but shape it for the common good.

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What are future workforce demands, and what do they mean for the most important skills to center in learning systems?

Tim Taylor, Co-Founder and President at America Succeeds

A Changing Frontier

Millions of graduates will walk across the stage this spring – diplomas in hand, ready to face a world transformed by artificial intelligence and automation. But many will soon discover that knowledge alone doesn't equip them to navigate a job interview, collaborate on a diverse team, or adapt to constant change. The gap isn't about what they *know*; it's about *durable skills*. And it's a gap we can close.

The World Economic Forum warns that employers expect 39% of workers' core skills to change by 2030, and that 59% of workers will need reskilling by then. Lightcast research suggests the pace is even faster: one-third of required job skills have shifted between 2021 and 2024. So, which skills endure when technology evolves at breakneck speed? And how can learning systems cultivate them?

The answer lies in what are often dismissed as "soft" skills but are, in fact, our *human advantage*. These durable skills – communication, collaboration, critical thinking, adaptability – are transferable across jobs and life stages, and they are increasingly the most sought after by employers. A recent analysis found that eight of the top ten most in-demand skills in job postings are durable skills, underscoring their central role in preparing young people to flourish.

The Human Ege: Beyond Technical Know-How

Scroll through job postings today, and you might be surprised by what employers seek. In an analysis of 75 million job ads, 76% demanded at least one durable skill, and 47% asked for three or more. Communication, collaboration, critical thinking, problem solving, adaptability, creativity,

empathy, and leadership appear far more often than programming languages or machine tools. Employers seek durable skills nearly four times more often than technical skills.

Why? Because technology can perform calculations and recognize patterns, but only humans can interpret context, navigate ambiguity, build trust, and exercise judgment.

Even the U.S. Bureau of Labor Statistics now highlights these capabilities. Its latest framework identifies 17 broad categories – from adaptability and creativity to leadership and communication – signaling that human capacity is as vital to the future workforce as technical prowess.

Durable skills also underpin civic health. As AI curates our information and interactions, individuals need critical thinking and media literacy to discern fact from misinformation. Empathy and collaboration help diverse teams bridge differences and work across borders. Durable skills are not only the currency of the labor market, they are also the foundation of democracy and human flourishing.

A New Skills Economy: Building Clarity and Trust

Recognizing the importance of durable skills, employers are shifting from degree-based to skills-based hiring. Yet this transition has created a crowded marketplace of micro-credentials and digital badges of varying quality. Without a shared standard, employers struggle to interpret what credentials mean, learners accumulate certificates that may not translate into opportunities, and educators lack guidance on which skills matter most.

To make durable skills meaningful, we need trusted, transparent signals and employer-validated assessments that accurately reflect real-world competencies. When educators and employers align on these measures, learners gain credentials that carry weight and employers gain confidence that those credentials reflect readiness.

Rethinking Learning Systems

Embed Durable Skills Across the Curriculum

Teaching durable skills isn't about adding another class called "Communication 101." It's about weaving human capacities into every subject and learning experience.

In North Carolina, the Portrait of a Graduate framework defines six durable skills and outlines performance levels from "approaching expectations" to "exceeding expectations." When teachers use such rubrics, they can assess collaboration during a science project, evaluate critical thinking in a history debate, or recognize adaptability during a group presentation.

Project-based learning, debates, peer feedback, and real-world problem solving turn classrooms into rehearsal spaces for life. Clear expectations ensure that a third grader's communication looks different from a tenth grader's or a college student's – while still building toward mastery.

Build Trusted, Employer-Validated Assessment

Learning systems must move beyond self-reported badges or generic surveys to performance-based, employer-validated assessments.

The National Association of Colleges and Employers (NACE) Career Readiness Competency Assessment, for example, evaluates skills on a four-point scale – from emerging knowledge to advanced application – using clear, reliable descriptors. Similarly, states and organizations are piloting collaborative projects, portfolios, and simulations co-designed with employers to demonstrate mastery.

For a durable-skills signal to work, employers must be co-architects of the rubric and its validation. Their endorsement ensures that a credential is more than a digital badge and reflects the competencies that truly drive success.

Foster Lifelong Learning and Human Flourishing

The rapid pace of change means that even the best education will be insufficient over a 40-year career. The World Economic Forum projects that 59% of workers will need reskilling, while Lightcast finds that job skills turn over by a third every three years. Yet only one-third of employees seeking new roles believe they have the skills required—and lack of time remains the biggest barrier to training.

Employers, policymakers, and philanthropists must invest in paid learning time, recognize prior learning, and support modular pathways that let workers upskill while earning.

Above all, learning systems must remember their ultimate purpose: human flourishing. Education is not merely a pipeline to fill jobs; it is an invitation to discover purpose, nurture curiosity, and build the capacity to contribute meaningfully.

As one high-school student put it, "*I don't just want a job* – I want to know that what I'm good at matters." Durable skills – communication, empathy, critical thinking – make that possible. They enable people to adapt to change while staying anchored in values and relationships. They ensure that as technology advances, our humanity advances with it.

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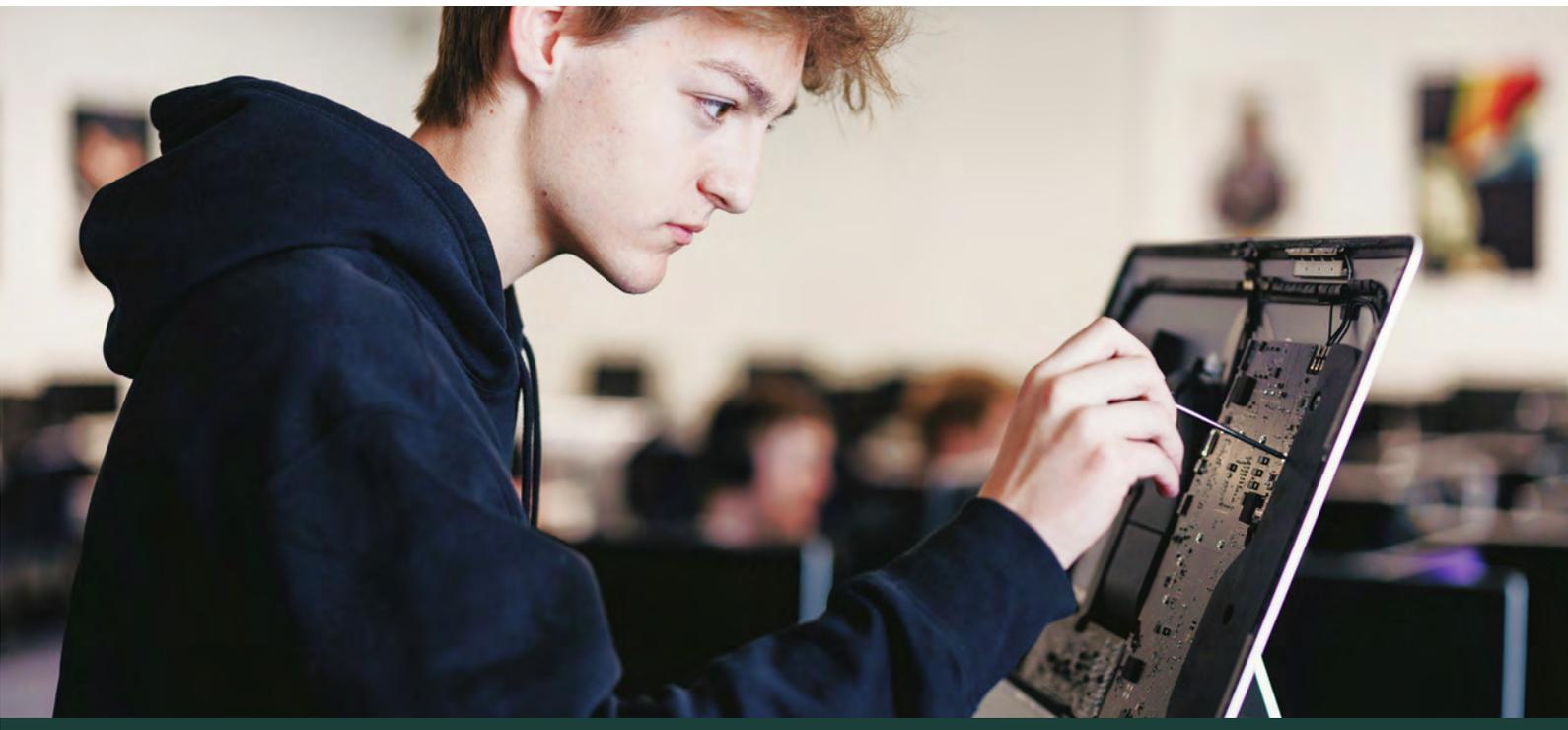
Conclusion: Claiming the Human Advantage

The world of work is entering uncharted territory. Automation and AI will transform tasks we once thought uniquely human, but they also elevate the importance of our most human capacities.

Durable skills are not an add-on; they are the foundation of economic opportunity, democratic engagement, and personal well-being. By embedding them across curricula, validating them through trusted assessment, and supporting lifelong learning, we can build an ecosystem that serves both the economy and the individual.

In the Age of AI, our greatest differentiator will not be how quickly we code, but how deeply we connect, how imaginatively we solve problems, and how boldly we lead with compassion. If we invest in cultivating these human advantages, every learner will be prepared not just for the next job, but for a lifetime of contribution and meaning.

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For what competencies must our new learning systems be designed?

Antonia Rudenstine, Executive Director at reDesign

Three eight-year-olds in Mr.Cook's classroom designed an AI tutor, then "… stress-tested it with a quality assurance process more rigorous than most commercial edtech platforms. They typed inappropriate requests, tested whether it would do their homework, tried to make it play games. Each failure became a design decision. These children learned: they control these tools. The AI doesn't make decisions. They do." (Connected Classroom, October, 2025. https://connectedclassroom.org/perspectives/students-control-ai-not-use-it).

This is remarkable because our education systems have been suppressing these capacities for 60 years. In the 1960s, George Land tested creative problem-solving on behalf of NASA. He found that 98% of five-year-olds scored at genius level. By age ten, only 30%. As adults? Only 2%. Land's conclusion: the more time young people spend in school settings, the less able they become to engage in creative problem-solving (https://www.youtube.com/watch?v=ZfKMq-rYtnc). But when given the opportunity, as Cook's students demonstrate, something different emerges.

When young people learn how to use AI tools, they become designers, authors, creators, and problem-solvers…not just consumers. They develop informed agency: the practical, embodied knowledge about how things work, coupled with a belief in their efficacy that enables them to act. And, as Cook's students demonstrate, this strengthens the capacity to meaningfully partner with technological systems.

As AI capabilities accelerate, what competencies do all of us need to develop that will make it possible to exercise informed agency in learning, work, relationships, and civic participation?

The Inflection Point

The World Economic Forum predicts 170 million new jobs by 2030, with 92 million displaced and 39% of existing skills outdated (https://www.weforum.org/publications/the-future-of-jobs-report-2025/).

But I would argue the greater risk isn't job displacement. It's raising Gen Z and Gen Alpha to undertake tasks that machines now handle more effectively, while never providing them with the opportunity to develop the distinctly human capacities essential for building relationships, sustaining democracies, and creating purposeful lives.

Consider Maya, a high school junior who excels at mediating peer conflicts and organizing community projects—capacities nowhere reflected in her transcript. Or James, a 35-year-old laid off from manufacturing, with no language for the problem-solving and adaptive thinking that would make him valuable in emerging roles.

The cost: disengaged learners, adults unprepared for change, fragile communities, and millions unable to develop or describe the competencies AI cannot replicate – the same competencies that enable human-AI partnership for solving complex problems.

A Strengths-Based Approach to Lifelong Growth

AI can now handle the procedural knowledge that is the hallmark of the US schooling system. This creates the opportunity to recenter distinctly human competencies: designing solutions, sustaining our well-being, expressing oneself in powerful ways across many media, advocating for ourselves and others, and engaging in critical analysis and discernment (https://www.redesignu.org/future9).

Consider designing solutions – a competency that weaves together inquiry, empathy, iteration, and systems thinking. A seven-year-old identifies that playground equipment excludes wheelchair users, interviews classmates about their experiences, sketches possible designs, and tests prototypes. A 28-year-old recognizes that her company's return-to-office policy is causing key talent to leave, gathers data across teams, proposes a flexible hybrid model, and pilots it with one department. A 70-year-old sees neighbors struggling with food access, maps community assets, and co-creates a neighborhood sharing network.

These are competencies we use across contexts throughout our lives: as five-year-olds resolving playground disputes, as humans solving problems in our workplace or community, as parents building families, as elders passing wisdom forward.

When we define Future-ready Competencies in terms of human development, and make performance levels transparent, observable and action-oriented,
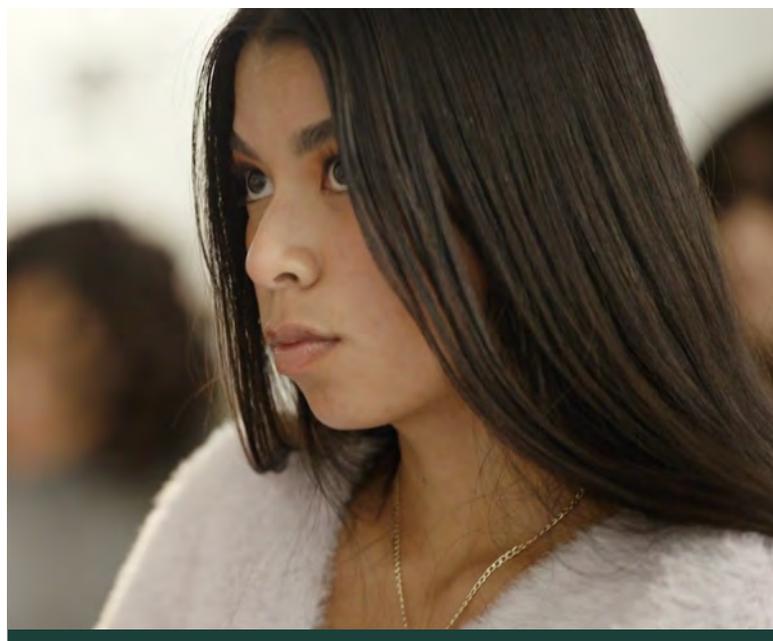
individuals of any age or stage gain the opportunity to nurture informed agency, as they assess their capacities, identify where growth would support flourishing, and pursue development in contexts that matter – learning settings, workplaces, family and community spaces, or personal practice.

The danger of this moment is to over-index on workforce skills, and adolescent readiness, while missing the developmental arc of competency development that begins in early childhood. Flourishing requires attending to competencies across the full span of development – as neural networks form, as identities develop, as life circumstances shift.

What Research Tells Us

How do we determine which competencies matter most? Through rigorous synthesis of cultural values and aspirations, coupled with research across cognitive science, biology, psychology, and human development.

Over the past fifteen years, I've met with educators, parents, community and industry leaders, academics, politicians and young people to find out what they believe "young people should get really good at." Across different roles, political affiliations,

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class, culture, and geography, there are consistent throughlines: we believe that communicating, problem-solving, and navigating conflict, are essential.

From here, we need to be much more rigorous in looking to research, ensuring that our definition of what a competency is, and how it's learned across ages and stages truly reflect what is known: creating competencies that can't be described and observed at different development stages sets everyone up for failure.

When we were working on reDesign's Future9 Competency Framework we undertook three checks on our competencies: (1) We brought them to industry, community, politicians, educators

and young people for feedback. (2) We engaged researchers to apply their expert knowledge. And (3) We cross-walked the Future9 with 14 leading US and international competency frameworks.

The analysis (see chart below) revealed remarkable convergence in the field: 13 of 14 frameworks attend to competencies across community building, design, inquiry, expression, agency, conflict navigation, critical analysis, quantitative reasoning, and well-being. Only the US State Standards stand apart – not designed as a competency framework at all, they address only two of these nine domains, revealing the absence of any systematic commitment to developing and measuring what matters most.
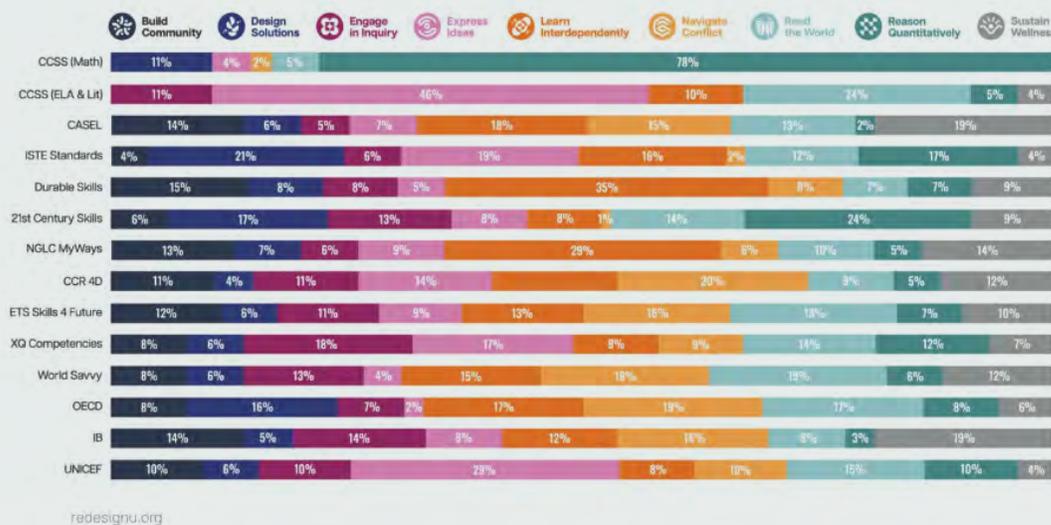
The Path Forward

The opportunity of this moment is to reorient our learning systems in school, work, and community toward the development of uniquely human competencies: to ensure that the "genius" of five-year-olds and the design capabilities of eight-year-olds will grow and deepen, rather than atrophy.

This isn't aspirational thinking. It's a pragmatic response to the world we're already living in.

Countries from Singapore to Finland to Brazil are reorganizing education around these frameworks. Districts in Kentucky and employers in Tennessee demonstrate what becomes possible with shared competency language. The tools, research, and examples exist. What we need now is coordinated commitment to make competency development as visible and systematically developed as we currently make test scores. The age of AI makes this necessary.

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What must learning systems look like to produce engaged, informed citizens for our pluralistic democracy?

TeRay Esquibel, *Founding Executive Director at Purpose Commons*

In partnership with the Purpose Science & Innovation Exchange (PSiX) at Cornell University

The cracks in our civic foundation are showing. Every time disruption rains down, the water rises and we scramble to patch leaks with new programs or interventions. Until we repair what lies beneath, the flood will keep coming.

At the foundation of any thriving democracy, beneath the policies, tests, and technologies, are three essential beams: **purpose, belonging, and agency**. These are not soft ideals. They are the structural supports of both learning and civic life. When young people (and the people they rely on) lose connection to them, our collective capacity to flourish weakens.

When I talk with people about how youth are engaging with systems and tools, whether it's AI, school attendance, or college and work pathways, the pattern of our responses always reminds me of the same image.

Imagine an adult watching a small child eating dirt. Concerned, they take the child to the doctor. The doctor explains the child isn't being reckless, somehow, their body knew it was missing something. The dirt was supplying minerals the child needed. Once those nutrients were provided, the child stopped eating the dirt. Their relationship to it changed completely: dirt became something to play in, not something to consume.

That story mirrors the ways we respond to young people and change. We often see behavior we don't understand (how they're using AI, disengagement from school, or rethinking college) and immediately debate what to do with the dirt. One side says, "Get rid of it." The other says, "Give them more." And rarely do we stop to ask the more important question: **why are they eating dirt in the first place?**
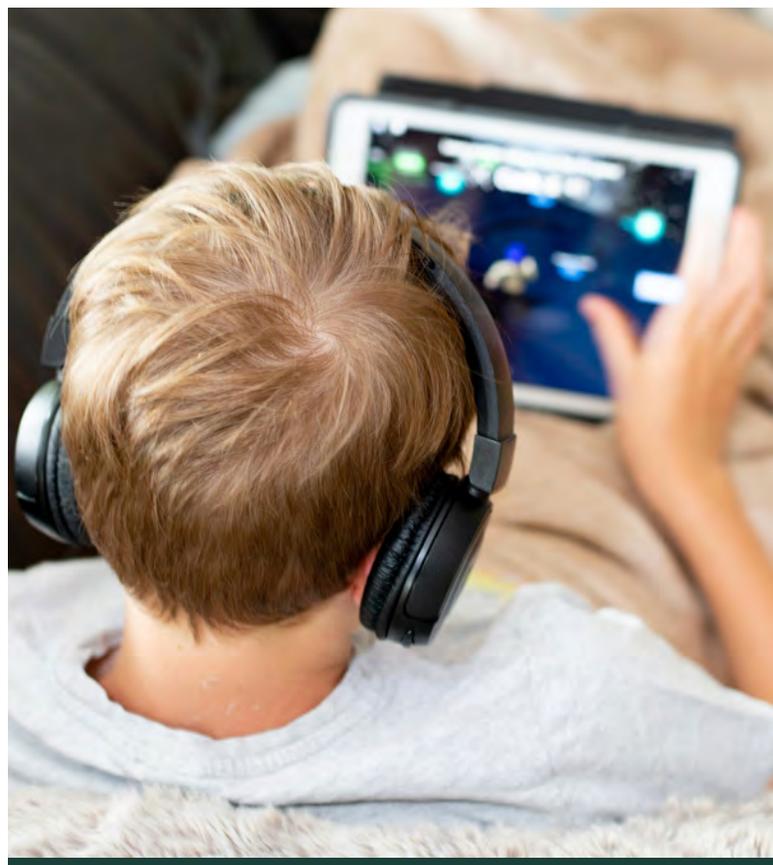
We react to the behavior instead of the need. Young people (and adults) are turning to AI for companionship, creativity, or belonging not because they love the technology itself, but because it's meeting needs our human systems no longer satisfy. The question isn't whether to take the dirt away or add more of it. It's what deficiency is being revealed, and how we can nourish the underlying need.

This isn't just about AI. It's about how our education systems have mistaken the *tools for the purpose*. Tests and credentials were designed to guide learning, not replace it. Test should be mirrors, not finish lines. When reflection becomes performance and measurement becomes meaning, we lose sight of why we're learning in the first place.

AI isn't creating disconnection, it's amplifying it, exposing where purpose, belonging, and agency have gone underfed. The question before us is whether our learning systems can meet the human needs that make any tool or technology meaningful at all.

At my previous organization, **Ednium: The Alumni Collective**, our work with Denver graduates revealed how easily purpose gets lost. After two school shootings, we resisted the impulse to react and instead sat with students and recent alumni to ask what they thought might prevent future violence. Their response was striking: "*We don't know why we're here.*"

They weren't questioning safety plans or counseling support, they named a lack of connection between what they were learning and the lives they hoped to build.

That same disconnection shows up among the adults who serve youth. Teachers, nonprofit leaders, and administrators enter the work to empower young people but spend their days navigating compliance. It's often not too much work that burns them out; it's work misaligned with their sense of purpose. The same systems that make students feel unseen make adults feel replaceable.

That experience became the seed for my current work at **Purpose Commons**, where we're building the science and practice of cultivating purpose across the systems that shape young people's lives.

Research confirms what experience reveals: people with a strong sense of purpose live longer, experience better mental and physical health, form stronger relationships, and are more civically engaged and altruistic (Hill et al., 2016; Burrow & Hill, 2020; Damon, 2008). Purpose helps people persist through challenge and orient their lives toward qualities every democracy depends on and outcomes our systems claim to want to achieve for the youth they serve.

In our national design research at Purpose Commons, young people and youth-serving professionals described the same conditions that allow purpose to grow: belonging, exposure, and agency to act (*Purpose Commons Design Research Report, 2025*).

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The structures of our current education ecosystem are limiting our **cultural capacity to thrive amid difference** because they have misinterpreted the real goal of education. Instead of cultivating people who can live, learn, and lead together in a pluralistic democracy, our systems reward compliance over curiosity. This misalignment narrows our shared imagination about what learning, community, and democracy can be.

If the cracks in our civic foundation are widening, it's because the beams beneath it, **purpose, belonging, and agency** have grown weak. And in that way, we are all like the child eating dirt. Our bodies and spirits know something vital is missing. We crave connection, meaning, and the ability to shape our world, when our systems fail to offer those things, we turn elsewhere. When the beams are restored, we no longer mistake the dirt for nourishment; we can play, create, and thrive together, regardless of the tools before us.

In a flourishing learning ecosystem, these pillars are intentionally cultivated across every setting young people grow. Youth and adults co-design learning experiences tied to real community challenges. AI tools serve as mirrors for reflection and iteration. Learning happens anywhere purpose can be practiced.

A system designed this way would do more than prepare young people for work; it would **prepare them for pluralism**. Because they've experienced belonging across differences, they develop skills to engage with others. Because they've had exposure to new ideas and communities, they build curiosity instead of fear. And because they've practiced agency by making choices, and shaping change they learn what it takes to participate in democracy rather than retreat from it.

The work ahead will be to shift our collective mindset from output to outcome, from product to purpose. **Purpose, belonging, and agency are not luxuries to add once we've achieved success; they are the foundation of success**. If we rebuild from there, we can weather whatever storms the Age of AI (or any other major change) brings by learning with meaning, connecting with care, and imagining a shared future worth building together.

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What must learning systems look like to produce engaged, informed citizens for our pluralistic democracy?

Fernande Raine, Founder and Co-Lead at The History Co:Lab

Democracy did not emerge as a form of organizing politics because it was efficient. It emerged because human beings, over centuries, developed the idea that every person holds an equal measure of dignity that deserves recognition and room to grow. For a long stretch of history, this belief lay dormant, as societies organized around the assumption that authority comes from above and that ordinary people are not to be trusted with power.

It was only 300 years ago that a mental shift began to gain traction. After centuries of religiously defined hierarchies and conflicts, secular philosophies – often drawing on lessons gleaned from indigenous peoples of North America (Graber/Wengerow, 2023) – advanced the notions of human rights, equal dignity, and the need for ordinary people to co-create the terms of their governance. The rise of printing presses, cafes, and civic associations made it possible for individuals to form, debate, and refine ideas together. Democracy became thinkable.

But it was the 19th century that made democracy *felt and necessary*. The Romantic movement that swept Europe and the Americas insisted that each person possesses a unique inner life of longing and moral imagination. Poets, philosophers, and artists awakened their contemporaries to the idea that humans are not merely rational, but are meaning-making individuals (Innes & Philp, 2005). Out of this fusion of Enlightenment reason and Romantic fire emerged democracy's promise that *all* people "are created equal and are endowed by their creator with certain inalienable rights", including the freedom to pursue their view of happiness in community with others.

In the roughly 150 years since, the longing to realize this promise of freedom has fueled struggles for abolition, civil rights, and national self-determination. One of the most quintessentially American expressions of this commitment to freedom was articulated as the United States entered World War II. Speaking to a country bracing for loss and sacrifice in the fight against Nazi Germany, Franklin Delano Roosevelt named the **Four Freedoms** that America stood for, at home

and abroad: freedom of speech, freedom of belief, freedom from want, and freedom from fear. In essence, he was defining what he believed to be the conditions for human thriving: the ability to have a voice. To hold one's own convictions. To build a life supported by one's gifts. To face the future without terror.

Fast forward to our world today – a world marked by global economic and political insecurity, rapid technological change, and fraying social trust. In this moment, Roosevelt's four essential freedoms are precisely what many young people feel they lack. They do not feel free to say what they think or believe (Knight Fdn, 2024). They fear for the future and are unsure what work or contribution will be possible for them in an age of AI (Gallup, 2024). Growing up in near-constant and hardly controllable visibility, they navigate unrelenting judgment, comparison, and the pressure to appear correct before they have had the chance to risk being wrong. Many feel stuck, without a clear pathway toward purpose or mobility (Pew, 2025).

Given this state of essential freedoms: *What must*

learning systems look like to develop young people as engaged, informed participants in a pluralistic democracy? The answer lies in the design of environments and experiences in which young people **develop the foundational skills for and experience the conditions of freedom**: where they use their voice, explore beliefs in relationships, build purpose through real work, and realize that they are capable of shaping the future.

Through design work with researchers, youth and communities, we have articulated a set of **18 essential learning journeys** every young person should have by age eighteen. These experiences, which can be offered anywhere, by any adult in any setting, cultivate the dispositions and competencies required to be a free human being, advocating for his/her freedom in community with other free individuals. They are not specific to civics instruction, but they form the foundation for individuals and communities to learn, grow, imagine and create.

We have grouped these experiences by how they develop the four essential freedoms FDR placed at the heart of democracy and human thriving:

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Freedom of Speech: The Courage to Think and Speak for Oneself

To feel free to speak, a young person must first hear their own voice. This grows through experiences that require articulation and deliberation:

- Civil discourse on a contentious topic

- Writing/delivering a public speech

- Creating a public narrative or podcast

- Deep reading journeys

- Civic Solitude/the formation of one's own values

In these conditions – where disagreement is safe, curiosity is welcomed, and ideas are debated – young people learn the foundational lessons of civic freedom and pluralism: *My mind and thoughts are my own. I can honor yours, even when our values and ideas differ.*

Freedom of Belief: Encountering Difference Without Fear

At the heart of our nation's story is the assumption that human beings should be free to embrace whatever religion they please. Young people need structured encounters with different worldviews, cultures, and moral imaginations, for example through

- Conducting oral histories across generations

- Researching and interpreting community histories

- Participating in deliberative bodies where diverse perspectives meet

These experiences allow young people to appreciate differences in values as a sign of humanity, not of righteousness,

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Freedom from Want: Discovering One's Capacity to Create and Contribute

Freedom from want is not only material; it is existential. It is the confidence that I have *gifts the world needs*. To develop this freedom, young people must experience themselves as creators and individuals with potential:

- Creating a piece of original art

- Designing a game

- Completing a challenge of self-mastery

- Contributing work that is displayed, shared, or performed

Mastery of skills builds dignity and purpose, allowing young people to find pathways to meaningful roles adding value to their community.

Freedom from Fear: Understanding How Systems Work – and How to Shape Them

To be free from fear requires knowing what threats are made of, and recognizing that the future is not fixed. This requires experiences that reveal how society works:

- Mapping a complex system

- Shadowing a public leader

- Co-designing a solution to a community problem

- Organizing and doing something that changes a real outcome

- Hosting a public exhibit or community ritual

When young people see that people just like them make and remake the systems around us, a new belief takes root: *We are not spectators of history. We are its authors*. This is the essence of agency, and an antidote to despair.

Democracy and economic opportunity run on the desire for dignity, belonging, purpose, justice, and a better future. AI, a technology meant to make our lives easier, can do many things. But AI cannot desire nor help us realize our common purpose in freedom.

The education system we need for an era of AI is clear: one that ensures that every young person feels what it's like to be fully free as a human, so that they may choose to defend the system that guarantees freedom and flourishing for them and for others.

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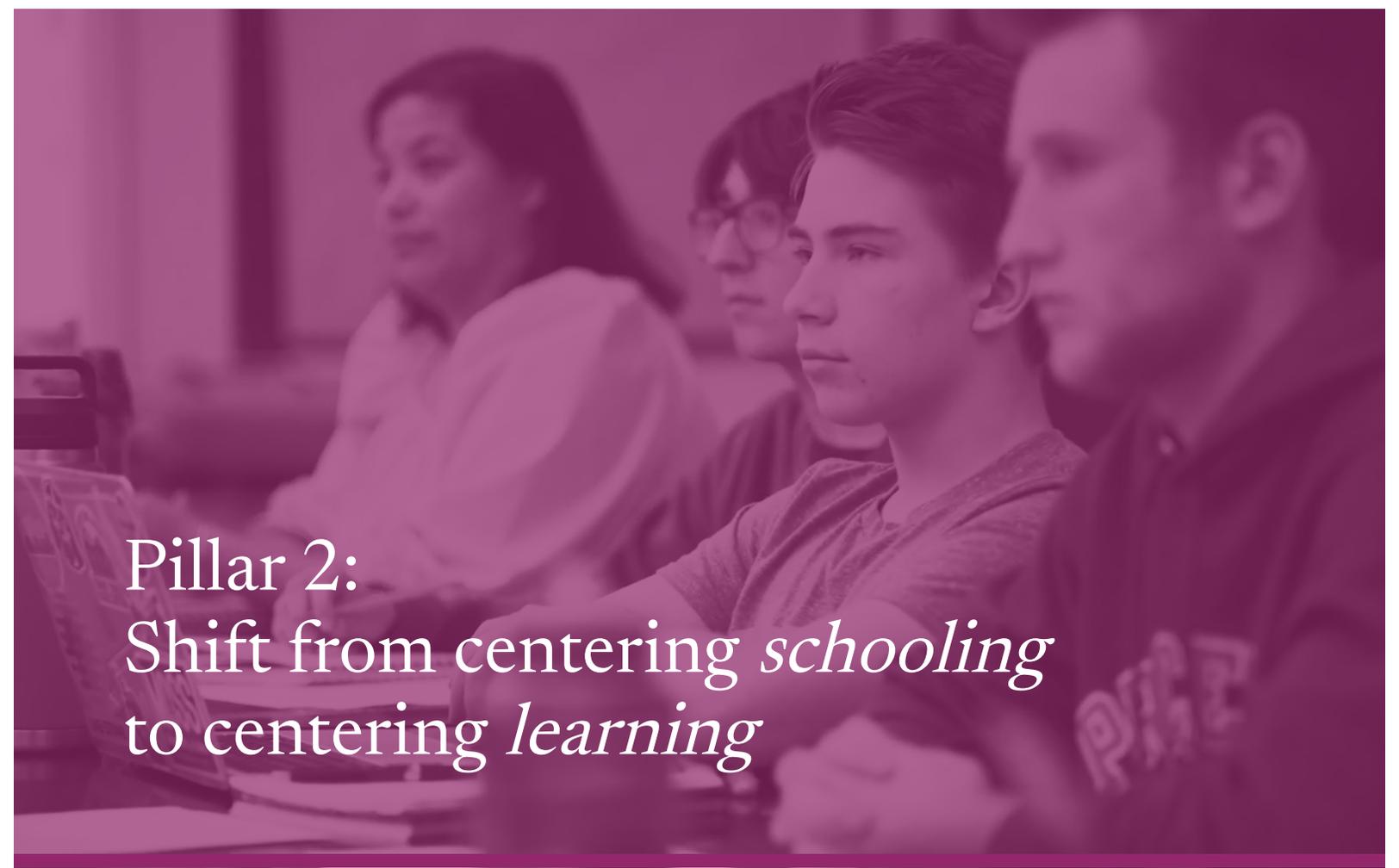
Pillar 2: Shift from centering *schooling* to centering *learning*

Reframe the "how," "when," and "where" of learning

We are living through a seismic shift in human potential. For over a century, systems relied on the dominant logic of "schooling" – a standardized, industrial model to sort students and deliver content. But in the Age of AI, that architecture is insufficient. The path forward requires a fundamental redesign: shifting from rigid schooling to the boundless possibilities of learning.

This section of the anthology begins with the foundation: the **Science of Learning & Development (SoLD)**. We now know more than ever about the biology of the brain and what activates deep, durable learning. But knowing is only the first step; we must ask how to translate that science into a **learning redesign** that centers the **future-ready competencies**, that young people actually need to thrive.

To do this, we need to define what it truly means to be **learner-centered**. This is not just a buzzword; it is a commitment to fairness, **learner agency, and engagement**, recognizing youth as active co-creators. We need to build ecosystems for learning anytime, anywhere, valuing experiences inside and out of school to cultivate a generation of changemakers.

Finally, new systems demand new metrics. We need to move towards **mastery-based progression**, ensuring learners advance because they are ready, not just older. This requires **new credentials** that map to the future. In this era, we must ask how **AI serves as a catalyst**, serving not merely for efficiency, but to expand human capacity.

These questions are not hypothetical. They are the design specifications for a future where every learner can flourish. Welcome to the shift.

What do we know about what activates deep learning, as we think about what learners need in the Age of AI?

Pamela Cantor, M.D., Founder and CEO at The Human Potential L.A.B.

Picture a high school classroom in a community that is no stranger to damaging storms, droughts, or wildfires. Students have identified the changing climate as the topic they would most like to tackle. In small groups, they design and build models to weatherproof and fireproof homes, houses of worship, and businesses nearby. Their teacher facilitates the work, asking about the sources informing their approach, what geometry or physics they may be using, and why. Two students seek out the school's facilities manager for materials; another consults an uncle he admires, a firefighter, about fire-retardant landscaping. Other kids are inspired by the plight of a local fruit tree farmer to write an opinion piece for the local paper, suggesting improvements to capture and store rainwater to mitigate the effects of drought.

Now imagine a middle school located in an enterprise district. Here, students have been asked to create a business plan for their favorite food truck, including pricing, menu, diesel consumption, and eye-catching swag. They consult an AI tool for the most popular Peruvian, Indian, Chinese, and Italian dishes and who invented them. They talk with truck operators, collect data through a survey, and sample new flavors. They learn what Halal and Kosher each mean in the context of food preparation, and that a few of their classmates follow similar guidelines at home.

What do these experiences have in common? They invite students to study, create, build, and contribute something meaningful and memorable, often guided by someone who matters to them. They are designed to spark curiosity and engagement. When elementary students are asked to interview and photograph veterans, police officers, nurses, and artists about their career paths, and share what they

have learned with their classmates and parents, the excitement is palpable.

When done well, these kinds of experiences produce a flywheel effect. As learners learn more about their ability to impact the world through their schoolwork, they become more confident in what they can try next. When they see themselves as connected to something larger than themselves, they are inspired to go deeper into topics that interest them and motivated to learn the skills necessary to understand and impact them.

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These pictures reflect something very different from traditional learning settings. Here, the North Star is agency, curiosity, and drive *in each learner*. Everything is designed with one thing in mind: to activate the biology of learning through human connection. And then to amplify each student's agency and energy to reveal what they are capable of.

In education, relationships are often referred to as the "soft stuff". This is a big problem. Human connection is not just an interpersonal event; it is a biological event. This is because our brains are electrical structures, and the primary energy source for their development is human connection. It is the most powerful biological force there is. Quite literally, connection sparks the electrical and chemical activity that builds new circuitry in the brain.

Here's how it works: The brain is an electrical organ with massive demands, using more than a quarter of the body's energy. It cannot store oxygen or glucose; both arrive only with steady blood flow. Humans can drive blood to their muscles by exercising, but to drive blood to the brain, we rely on the neurochemical cascade that connection sets in motion.

When we connect—through trust, touch, or shared belief—our brains release chemicals that ignite growth. Oxytocin and vasopressin quiet the stress system (HPA axis) and increase blood flow to the brain; dopamine fuels motivation and focus; serotonin stabilizes mood; brain-derived neurotrophic factor (BDNF) and other growth factors drive neuroplasticity, the brain's ability to rewire and learn. In other words, human connection changes neural chemistry; neural chemistry supplies energy; energy drives neural growth and wiring; and wiring produces everything we are capable of being and doing. This is called Hebb's law - neurons that fire together wire together - and as this happens, we become able to do increasingly complex things, whether it is reading, riding a bike, or building a robot.

The path from connection to possibility begins with the biological readiness to absorb something new. It's a place where creativity can blossom because fear and embarrassment are absent. Feedback is welcome because there is trust. Human beings are actually drawn to it, like water when they are thirsty. Curiosity is a drive state. It's a need to know. You can see it at work every time a learner is motivated to practice because a coach or teacher believes in them and takes their questions and aspirations seriously. When that happens, they practice with greater discipline and effort. They gain greater fluency more quickly, and then achieve mastery with the confidence to take on greater challenges. This is the Russian psychologist Lev Vygotsky's "zone of proximal development" in action. It's that sweet spot where a human interaction helps a learner push up against what they thought they were capable of and break through to the next level.

When a student is introduced to a subject that matters to them a lot by someone who matters to them a lot, there is no greater fuel for learning. It is the secret sauce of engagement, motivation, and human development itself. Each adult in a

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student's life, from parents to teachers, to librarians, to coaches, carries the power to activate deep learning. In school settings, advisories, project-based learning, and looping with teachers can help foster deep, trusting relationships and new ones. But the biology of learning doesn't just happen in one-on-one interactions; it can happen in classrooms, communities, work settings—anywhere a student feels they belong, are valued, known, and cared about.

No one knows what is encoded in their DNA. Because of that, no one knows the outer limit of what is possible for them. But deep learning, developmental range, and human possibility do not appear by chance. They emerge in contexts and under conditions that unlock them: safety over fear, belonging over separation, connection over isolation, agency over avoidance.

The biology of learning makes the developmental range of the learner visible, shapes performance, and enhances the fit between the learner and their context. The closer the fit, the greater the performance. And it is fit that amplifies purpose and confidence, that primes performance, that lets any young person see what they are capable of.

Artificial Intelligence will help get us closer to finding the fit for each learner. But getting the most out of these tools, like anything else, requires biological energy, a lot of it. Today, there is still only one source of neurochemical energy that drives human agency, creativity, and curiosity —and that is human connection. It is the most powerful energy source we know, even now, in the age of AI.

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How might we redesign learning experiences to center the future-ready competencies young people need?

Andy Calkins, Co-Director at Next Generation Learning Challenges (NGLC)

Think about a particularly powerful and enduring learning experience you had, growing up. Where did you encounter it? Why did you choose this particular experience?

If you're like most Americans, that experience was not to be found in your everyday schooling. More likely, you named an extracurricular like drama club, or a sport, or a science fair project, or something that had no connection with attending school.

What if your school – and the school your own kids attend, the school every young person attends – were designed to enable that kind of powerful, purposeful, super-engaging, life-enhancing learning *all the time? Every day?*

Walk into Northern Cass School District in rural North Dakota and you'll find third grade teacher Megan Margerum's students creating their own "Watch Me Grow" projects – building on their natural, in-born curiosity to explore, make, communicate, learn, lead, and adapt. By eighth grade, students in Northern Cass complete sophisticated, interdisciplinary "gateway projects" that help prepare them for high school's demands. That's where learning twines with the world outside the classroom. One music-interested senior recently rewrote (for credit) the final scene of *Into the Wild* as an original song, working with a professional musician in a recording studio to produce the track and her reflections on the experience. These aren't special programs for gifted students; they are what learning looks like for everyone at Northern Cass.

This is Horizon 3 learning. Not someday; not in special schools serving selected students. *Now,* in public schools serving diverse student populations on typical budgets, from rural North Dakota to urban Los Angeles and Portland, ME.

To paraphrase William Gibson: the future is here, today, for tens of thousands of lucky students in public schools like Northern Cass. For them, experiences like the one you recalled as your most important, enduring learning journey take place routinely. They are what school is all about. For the 40 to 50 million other learners attending the nation's public schools: *Sorry.* Not yet.

This isn't a problem of knowing what to do or why to do it. It's a problem of sparking and marshalling the will to help it happen.

It may be the most urgent and important work of our times.

What "Next Gen Learning" Encompasses

Various labels for powerful forms of learning have emerged over the past two decades: student-centered, project-based, personalized, competency-based, experiential, "real-world"/authentic learning. These aren't competing models. They're overlapping approaches unified by what students actually experience: deep, enduring learning in which students find purpose and relevance; that is constantly informed by varied ways of demonstrating increasing competence and mastery; that is collaborative with teachers and peers; and is interactive, challenging, and equally accessible to every student.

"Next gen learning" is what happens when schools integrate these elements into coherent models – approaches that *students* experience as coherent – rather than treating the elements as add-ons to the pervasive, teacher-directed model that's dominated what kids have encountered in U.S. public schools for a century now. It's learning designed for both capability (knowledge and the skill to apply it in novel situations) and agency (the self-direction to take ownership of your own development and life choices).

What It Looks Like: Schools Proving It Works

Casco Bay High School (Portland, Maine) demonstrates how relationship-building through "Crew" advisory programs and immersive, real-world learning motivates deep student engagement in their school. Crew isn't just homeroom; it's where trust and belonging get built through deliberate structures that persist across students' four years. Casco's "learning expeditions" aren't simply the occasional cross-curricular project you might find in traditional schools; they are Casco's learning backbone, enabling students over time to take intellectual risks, engage in productive struggle, and develop the resilience required for deeper learning.

Sunnyside Unified School District (Tucson, Arizona) shows what district-wide coherence looks like through a relentless focus on Identity, Purpose, and Agency – their "IPA" vision for student success. At Sunnyside, students don't just know the framework—

they've internalized it. Students expertly distinguish between "true agency" – what Sunnyside cultivates – and the superficial "voice and choice" refrain of other, less visionary reform efforts. CTE (career and technical education) students proudly display the precision-designed and -produced prosthetic limbs they have created for amputees. Coherence in Sunnyside isn't a diagram; it's a deeply shared depth of understanding about the purpose and nature of the work that is lived daily by students and adults alike.

What Makes These Examples Work

Three interconnected design principles enable this learning:

Whole, Authentic, Purpose-filled Experiences. Traditional schooling fragments knowledge and skill development across curricular silos that don't actually exist in real life. Next gen learning creates developmentally appropriate "junior versions" of real work. If your remembered learning experience involved an extracurricular activity, that's a perfect example. In next gen learning schools, students

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are developing a wide range of competencies by pursuing, collaboratively or on their own, increasingly complex projects that provide a context of content. They vividly demonstrate the fallacy of tired arguments about "knowledge vs. skills" or "hard vs. soft skills."

Personalized, Competency-Based Progression. All of these schools ask students to demonstrate mastery rather than accumulate seat time. They fluidly mix students instead of marching them through age-based grade levels. Students understand the competencies they are working to develop – individually, for each learner – along with how and why they are developing them. The schools' shift from "I taught it" to "they learned it" fundamentally changes accountability and outcome mindsets across the entire school community. You don't tend to hear "Will it be on the test?" from students in these schools.

Breaking Down Walls. For many students in traditional public schools, their real life lies outside their school's walls. Inside the school, they generally can't use the most powerful technologies humankind has created (smartphones and AI), they aren't trusted to make important choices, and

they find much of what they're learning boring and irrelevant. In next gen learning schools, the line separating "inside" from "outside" is porous. In middle school and above, these schools integrate internships, community projects, dual-credit college course-taking, and industry partnerships into daily schedules. Students build social capital through relationships with mentors and employers while practicing competencies in authentic adult contexts. This "Wider Learning Ecosystem" provides the complexity and authenticity that classroom-only learning cannot replicate.

Creating schools like these, or transforming existing schools to reflect these learning approaches, can be daunting, complex work. And yet: Today, thousands of students are learning this way and applying their youthful energy, curiosity and wide-open innovating to problems of every grain size, from campus litter to the U.N. Global Challenges. In doing so, they are acquiring the skills they'll need – and that we all urgently need them to develop—in order to lead societal efforts to solve these problems. Tens of millions of other students are out there, waiting and hoping for the rest of us to act.

What do we mean by learner-centered?

Devin Vodicka, Co-CEO and Co-Founder at Learner-Centered Collaborative, and Katie Martin, Co-CEO and Co-Founder at Learner-Centered Collaborative

Learner-centered education begins with a simple but radical belief: every learner is capable, curious, and worthy of an education that honors who they are and who they can become. It is an approach rooted in relationships, relevance, and agency – where deep, meaningful learning grows from each learner's strengths, interests, and context, rather than a prescribed curriculum or a test.

In 1894, the National Education Association's Committee of Ten proposed a model that still defines the structure of school today: twelve years, core academic subjects, and "seat time" as the measure of learning. This industrial design prioritized uniformity and college preparation over purpose, real-world learning, and personalization. While it served an era focused on sorting students into the workforce or higher education, it no longer reflects the world learners inhabit today. It is incumbent on us to shift our education model from a school-centered hierarchy to a learner-centered ecosystem.
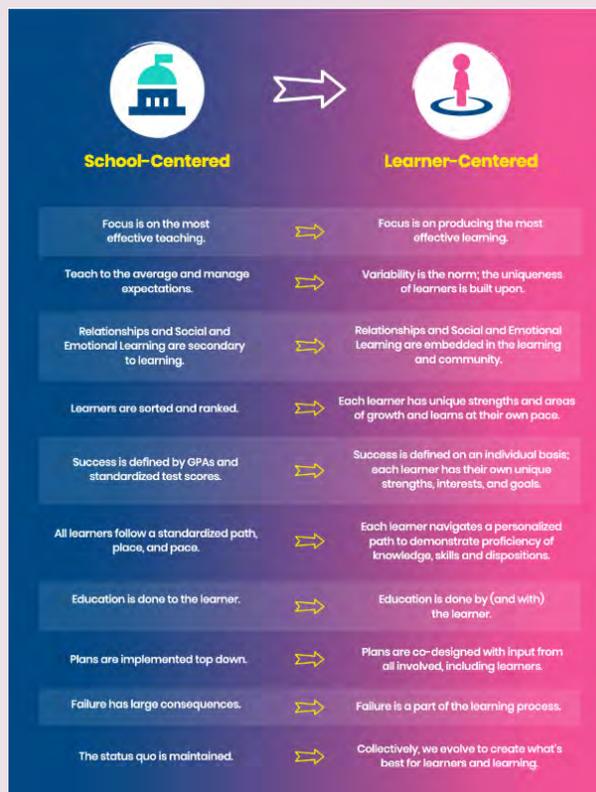
Instead of asking how students can fit into the system, a learner-centered paradigm asks us to consider how the system can fit each learner. In practice, learner-centered education recognizes students as active partners in their learning rather than passive recipients. This approach equips learners not only with foundational knowledge but also with the essential competencies – such as collaboration, creativity, and critical thinking—that enable success beyond school.

Why It Matters Now More Than Ever

The urgency for a learner-centered ecosystem has never been greater. Across the country, districts face declining enrollment, disengagement, stagnant outcomes, and eroding trust in public education. Students and families are signaling that the traditional, one-size-fits-all model no longer meets their needs or aspirations.

At the same time, rapid technological change – especially the rise of artificial intelligence – is reshaping how we live, learn, and work. Information is no longer scarce; it is everywhere. What matters now is not how much we can memorize, but how

we apply foundational skills to think critically, solve problems, and adapt with empathy and integrity. These human capacities develop best through learning experiences that prioritize connection, curiosity, and agency.

If we overlay artificial intelligence on a traditional, school-centered model, education risks becoming even more standardized and impersonal. Learner-centered ecosystems, by contrast, ensure technology amplifies human potential rather than replaces it.

Early evidence from our research partners demonstrates the impact of learner-centered ecosystems:

- Higher student engagement and sense of belonging

- Growth in reading, math, and whole-learner outcomes

- Increased confidence and readiness for college, career, and life

When learners feel ownership and purpose, academic achievement and well-being rise together. Learner-centered education isn't just more humane – it's more effective.

How We Get There: Transforming Systems from Within

The shift to learner-centered education isn't about adding new programs or technology; it's about shifting mindsets, practices, structures, and culture. It requires reimagining how change happens inside systems; not from top-down mandates but from a co-design and decision-making process that ensures the entire learning community is represented.

At Learner-Centered Collaborative, we've learned that sustainable transformation happens when communities co-create their future. A powerful example comes from Escondido Union School District (EUSD). Guided by Superintendent Dr. Luis Ibarra, the district engaged teachers, staff, parents, and students to design a new vision to "actualize the unlimited potential of every learner."

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Working together, EUSD and Learner-Centered Collaborative facilitated student forums, convened design teams, and co-created a Framework for the Future. This framework defines success for every learner, maps big moves across the system, and outlines a personalized, authentic, and competency-based learning model. School teams have engaged in school redesign, reimagining learning experiences, and leadership academies that inspire and support learner-centered innovation. As Deputy Superintendent Laura Philyaw explained, "Times have changed and the needs of our students have changed – and so we have to change, too." Their example illustrates a crucial truth: meaningful transformation happens with communities, not to them.

Creating Sustainable, Learner-Centered Evolution from Within

Transforming public education into a truly learner-centered ecosystem requires more than new programs or policies—it demands a fundamental shift in how change itself happens. Lasting transformation occurs when districts become the engines of their own research and development: building urgency for change, supporting people through transition, and empowering educators,

students, and families to co-create the future together. Rather than relying on top-down mandates, this approach cultivates a clear vision and a culture of intentional innovation, reflection, and shared ownership, allowing new mindsets, practices, and systems to take root and flourish.

At the heart of this work is the recognition that change is both human and systemic. The learner-centered change process draws on research from education, psychology, organizational change, and design – all converging around the shared goal of creating systems that honor how people learn, grow, and thrive.

District Embedded R&D Cycle

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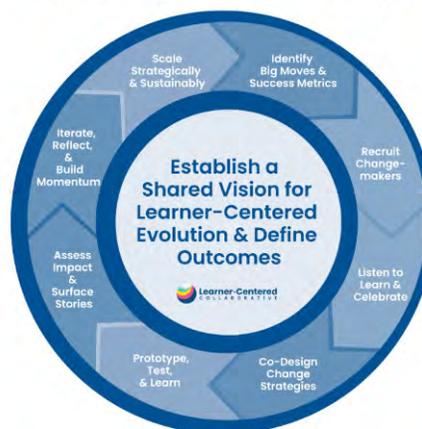
To guide this work, we draw on key insights from change management frameworks. Bridges' Transition Model highlights the emotional journey of change – helping people let go of the old, navigate uncertainty, and embrace new beginnings. Kotter's Dual Operating System underscores the need for both structure and agility, where formal systems and networked teams operate in tandem. And Rogers' Diffusion of Innovation reminds us that engaging early adopters and innovators accelerates momentum, builds trust, and creates the conditions for scale and sustainability.

The process of redesigning systems, grounded in principles of Improvement Science and Design Thinking, ensures that the change process is both data-informed and deeply human. Over time, districts evolve into dynamic ecosystems of learning – where educators, students, and families co-create and refine practices together.

Sustaining this evolution requires job-embedded professional learning that supports educators through coaching, collaboration, and continuous feedback within daily practice. Research-practice partnerships can then connect local innovation to broader systems change, ensuring both rigor and relevance.

Together, these insights affirm that transformation is not a one-time initiative but a living process – one that balances vision with humanity, and structure with creativity.

The Future We're Building

A learner-centered ecosystem doesn't just prepare young people for the future; it builds the very qualities humanity will need to shape it.

We already see this future emerging in classrooms that replace worksheets with real-world challenges, in districts shifting from grading to growth, and in educators using AI to deepen, not diminish, human connection. The task before us is not to imagine whether such a system is possible, but to act together to make it inevitable.

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How might we recognize and support learning that happens both inside and out of school?

Gregg Behr, Executive Director at The Grable Foundation & Co-Author, When You Wonder, You're Learning, and Tyler Samstag, Director of Instructional Innovation at Allegheny Intermediate Unit and Executive Director at Remake Learning

Most mornings, Maya begins her day like many high school students: finding her seat, opening her laptop, and diving into a lesson with her classmates. But for Maya, learning doesn't end when the bell rings. After class, she walks to the public library, where she edits a podcast episode about her neighborhood's history. Later, she heads to a university-run makerspace to prototype a new bike rack for use in her community. Before heading home, she meets peers at a nearby park to test water quality in the lake – a citizen-science effort requested by the city council, which has asked students to share their findings at an upcoming meeting.

In the evening, Maya logs into her digital portfolio to reflect on what she learned not only in class, but from her mentors, local partners, and peers who are shaping her ideas and supporting her learning journey across the community.

Maya's day is a glimpse into a growing movement to create learning neighborhoods – places where

schools open outward and communities step inward to help all young people discover their talents and purpose in the world.

For a long time, we've told a familiar – and too simplistic – story about education: that schools haven't changed in a hundred years and that they operate separate from the communities around them. But that version of the story isn't the whole picture. Many educators and school leaders have worked hard to evolve their practice – introducing new technology, personalizing instruction, and remaking learning experiences to respond to the needs of an ever-changing world.

Still, too many of today's schools remain tethered to a structure built for a different era – one where learning was assumed to happen primarily inside a building, on a rigid schedule, and measured by a narrow set of outcomes. But the world has changed: physical and digital life blend together and the skills young people need – collaboration, critical thinking,

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creative problem-solving, and more – are shaped by experiences both in school and beyond it.

This shift is about embracing what has long been true: learning happens everywhere. Learning neighborhoods build on that sensibility by connecting the places where young people live, play, and grow – from libraries and parks to small businesses and museums. When these spaces work together with intention, young people gain richer opportunities to explore their interests and imagine their futures.

In Southwestern Pennsylvania, this work has taken root through Remake Learning, a network of educators, technologists, researchers, community partners, and more, working together to make learning relevant, connected, and joyful. For 20 years, Remake Learning has widened the lens on what learning can look like, helping educators connect in-school and out-of-school experiences, bridge early learning through higher education, and explore new ideas from futurists and learning scientists. With two decades of experience supporting practices that are now becoming more common, Remake Learning has inspired more than 40 other such efforts in the United States and beyond.

In the Butler Area School District, for instance, located north of Pittsburgh, such local partners as the public library, YMCA, and arts organizations are transforming downtown into a hands-on classroom where students create, perform, and contribute to the city's renewal. In the Northgate School District, a decommissioned hospital has been reimagined as a shared campus where students collaborate with healthcare professionals and emerging-tech partners in projects that blend wellness and innovation. And in the South Allegheny School District, the roar of planes overhead and their proximity to the county airport sparked a four-year aviation pathway for high school students – one that includes certification opportunities, flight-simulation experiences, and a direct runway to high-demand careers.

These school districts aren't waiting for the future – they are building it. And they remind us that when learning stretches beyond the school walls and

school day, young people don't just gain skills. They gain connection and a sense of belonging to something bigger.

But even as these learning neighborhoods take shape, schools can only go so far on their own. While educators are creating new opportunities for young people, they are still asked to operate within systems set by mandates, regulations, and even mythistory connected to a different era.

There is a profound mismatch between what students and society need and what schools are asked to measure – a mismatch driven by policies and post-secondary systems still anchored to traditional transcripts. Letter grades, seat time, and standardized tests often still define achievement, even as students demonstrate mastery in collaborative projects, service learning, and internships that rarely appear on a transcript.

Set Human Flourishing in the Age of AI as our north star

Modernize the "what": Create a new K12 "Humanics" curriculum

Reframe the "how," "when," and "where" of learning

Rearchitect the "who" of learning and human development

Develop an aligned learning infrastructure

Stepping Forward: How do we get from here to there?

That's where the next leap in education must occur. The future of credentialing should reflect the full landscape of learning, that which happens in the school building, during the school day, but also the neighborhood beyond: in afterschool programs, apprenticeships, online, and even on athletic fields and courts. Imagine a student portfolio or learner wallet that grows with a learner over time, a living, portable record owned by the student themselves. This would capture not only what a young person knows, but how they apply their learning in authentic settings. Educators, community experts, and industry partners could all validate evidence of mastery. This kind of record could travel with a young person across schools, community organizations, work-based learning experiences, and eventually into higher education and employment – replacing the static transcript and illustrating the full journey of a learner and the social network they build along the way.

In that future, success isn't defined by scores and marks. It is recognized because a broader community has seen a child's potential, helped them pursue their purpose, and validated their accomplishments along the way.

The good news is we don't have to wait for this future. It's here right now. The learning neighborhoods we see today show what becomes possible when schools and communities design learning with young people rather than for them. We honor the ingenuity already alive in classrooms when we surround educators with partners who share their mission. And we give every child a neighborhood that believes in their future.

Maya's world is not a fictional one. We see it – in Southwestern Pennsylvania and in communities far beyond our corner of the world. Our task is simple and profound: to see this learning, to support it, and to give it credit. Because when the whole community becomes a classroom, every learner gets the chance to flourish.

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How might we recognize and support learning that happens both inside and out of school?

Demi Edwards, CEO and Co-Founder at Education Reimagined

Learning has no limits.

It happens in conversations with loved ones and strangers; in the trial and error of trying something new. It's in the quick calculation of leaving a tip or the hurried skim of the morning news. It's in the quiet moments when we allow our senses to soak in our surroundings, from the hum of a city street to the quiet chirp of a cricket carried on a cool evening breeze.

We're always learning, as we make sense of the world and our place within it. **This is the work of being human.**

Yet, our current education systems only capture a fraction of this reality. They prioritize rote memorization over adaptable, complex thinking. They equate learning with seat time, excluding the wisdom and opportunities embedded in communities. Uniformly applied measurement mechanisms dictate what learning "counts." Because of this, internships, work, community service, caregiving, passion-driven projects, and travel are too often treated as "extra."

Content over context. Control over discovery. Standardization over humanity. **It doesn't have to be this way.**

Across the country, education leaders and communities are expanding their apertures to recognize, connect, and credential learning opportunities no matter where they happen. It begins with a shift in mindset: **decentering the school building to center each child's learning journey**. At Education Reimagined, we call this learner-centered education.

In this approach, each child's interests, context, and aspirations shape their educational pathway. They co-create experiences with educators, families, and peers as they navigate opportunities across schools, businesses, community organizations, parks, and cultural institutions. Transparency and trust are the foundation, with professional educators and community mentors collaborating to assess and acknowledge learning through credentials that translate across industries and postsecondary pathways.

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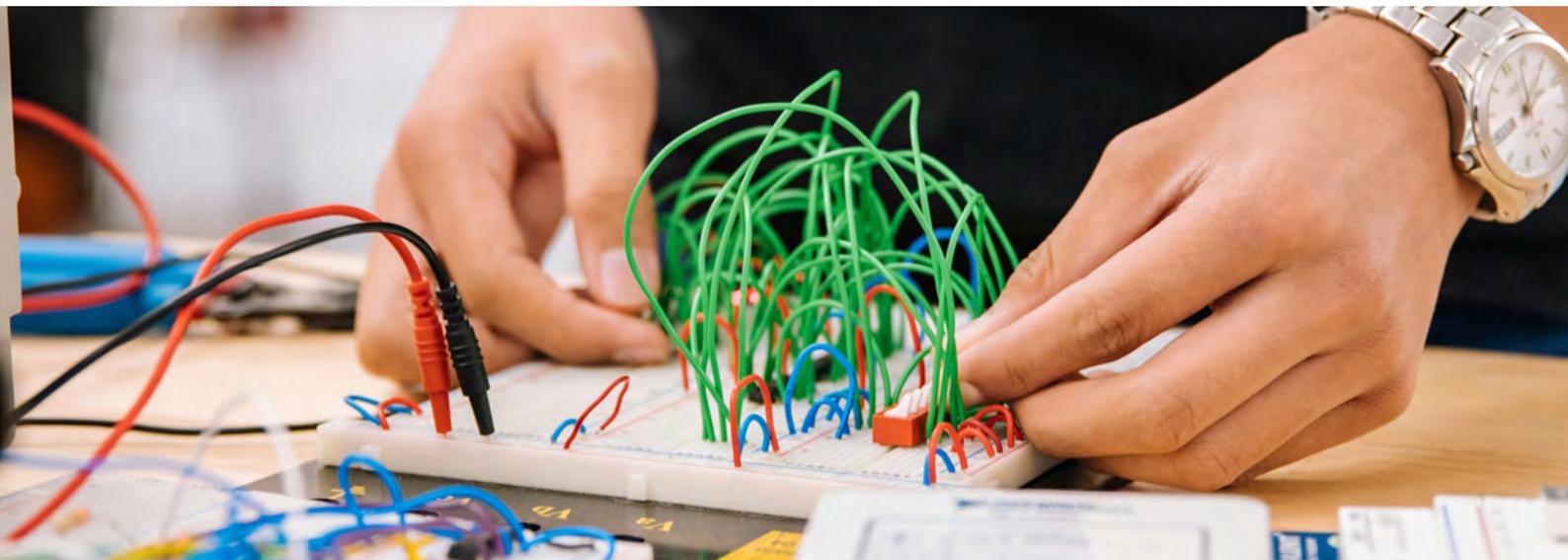
This isn't theoretical; it's happening now:

- **Big Picture Learning schools** nationwide empower young people to design their journeys grounded in real-world internships, community mentors, and passion projects, culminating in exhibitions and portfolios that showcase growth and mastery. At The Met School in Providence, one student, Jayden, turned his love of baking into a thriving cookie business that serves classmates and teachers alike. More than a side hustle, the venture counted as a credited learning experience, reflected in his transcript and portfolio.

- **Crosstown High** in Tennessee embeds project-based learning opportunities within a burgeoning community redevelopment initiative to create a local hub for wellness, art, civic life, and culture. Seeking to build greater community cohesion and safety across Memphis, a group of learners partnered with local businesses to design and paint vibrant, community-oriented murals around the city. They fostered skills in marketing, arts, finance, and community relations along the way.

- **PAST Foundation** in Ohio links learning to life by leveraging local districts, industry, and community partners to cultivate diverse learners' self-efficacy and self-advocacy to confidently enter and succeed in STEM fields

they'd previously seen as unattainable. In partnership with Battelle, PAST has developed portable learning kits with adaptable curricula and deployed them to district educators, public libraries, and museums. They're bringing hands-on, tech-inspired learning to young people across Columbus and beyond.

- **SparkNC** in North Carolina collaborates with districts statewide to create shared collaborative learning spaces called SparkLabs, where learners explore high-tech fields through modular, competency-based learning experiences. Partnering with Apple, SparkNC invited learners from participating districts to design an app connecting learners across its interdistrict network; finalists presented their prototypes to Apple and local business leaders for real-world feedback and selection.

- **Tacoma Public Schools** in Washington reimagines the community as the classroom by co-locating learning environments in zoos, theaters, and businesses, enabling learners to earn credit through internships, apprenticeships, and service projects. In a trio of public choice schools serving over 1,700 learners within the district, every junior sources and completes a semester-long internship, contributing to woodshops, civic agencies, graphic design studios, and countless other community spaces.

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These examples illustrate what becomes possible when we center children's learning journeys, blurring or entirely erasing the boundaries between "in" and "out" of school to reveal robust learning ecosystems.

Technology is catching up to this reality. Efforts like the Mastery Transcript Consortium, the International Big Picture Learning Credential, Unrulr, and LearnCard are making it possible to document and share evidence of learning that happens anywhere. These tools make credit translatable, transferable, and interoperable. Young people can own and tell their unique stories of growth and development, not as something externally conferred to them but as evidence of who they are becoming.

For example, contributing to a community garden initiative may garner credit in communications, horticulture, or mathematics. Tutoring peers might be recognized as a demonstration of empathy and responsibility. The dedication of a traveling tennis team or part-time job would be seen and valued.

While possibilities abound, it isn't about just "counting" everything. That swings us to the opposite extreme and risks losing the magic and fluidity of authentic learning. Striving to count every life experience, learners may miss actualing living them.

So, what should be credited? Experiences that are purposeful, connected to a young person's goals and growth, and aligned with a community's Portrait of a Graduate, learner profile, or future-readiness framework. These might include projects, performances, internships, apprenticeships, or community contributions that show evidence of skill development, agency, and reflection over time. The opportunity is to design systems flexible enough to honor diverse learning experiences and learner goals, without reducing everyday life to a checklist of competencies or preemptively deciding when, where, or how meaningful learning occurs.
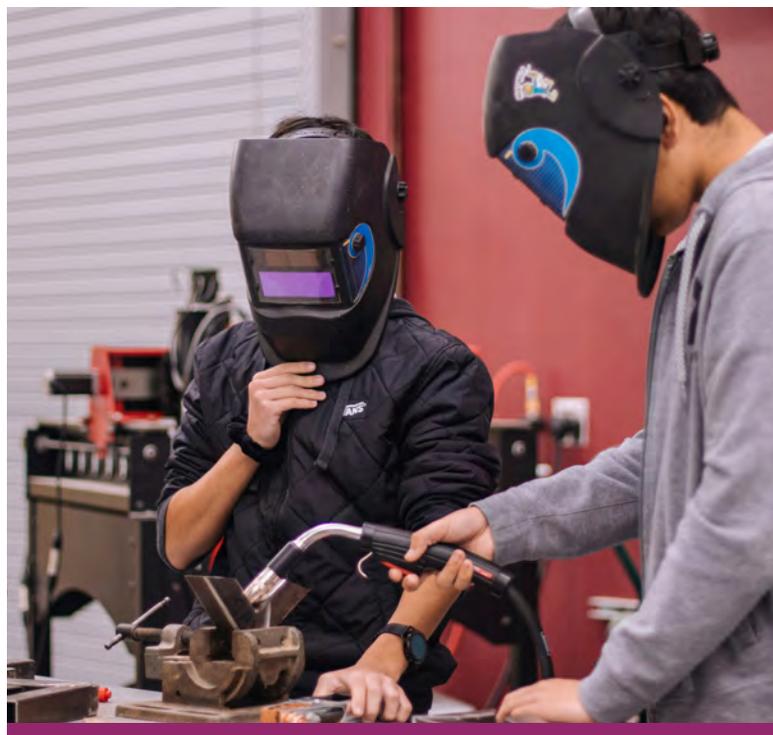
Communities across the country are already prototyping this balance. In Columbus, the PAST Foundation is collaborating with local employers to prototype industry-relevant credentialing platforms that have the capacity to scale statewide. In Dallas, out-of-school network Big Thought has

built a Creator Archetype to equip partners with common language across five key domains, while still maintaining autonomy over the kinds of learning experiences offered. In Hawai'i, HĀ serves as a culturally-rooted, shared learning framework that promotes Hawai'i's unique context and honors the qualities and values of its indigenous language and culture.

Across the country, the demand is clear. Communities are abundant with learning opportunities and, also with challenges that the creativity and ingenuity of youth are uniquely suited to address. Families and learners are seeking learning that is engaging, relevant, and rooted in meaning. Schools and educators are increasingly looking beyond their walls for partnership, expertise, and shared vision.

This is our moment to build the infrastructure, both human and technical, that can bridge silos and interweave our communities in new ways. When context, discovery, and humanity are alive in our systems, it isn't a question of whether learning is happening. It is evident; it is limitless.

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Why is it important that learners progress based on mastery? What does that make possible?

Chip Linehan, Co-CEO and Co-Founder at Building 21

"Every report card left us feeling like they thought our kid was dumb and years behind. Then we saw her mastery report – it celebrated her hard work and growth. For the first time, we felt our daughter was truly seen."

- Parent of a student with an IEP at a Building 21 partner school

This parent is describing the same child, evaluated by two different systems. The difference isn't the student – it's what we choose to measure and when we decide learning counts.

In our current system, learning remains time-bound and standardized, rewarding compliance rather than ensuring mastery of essential skills. Students are ranked and sorted by narrow definitions of success, deepening inequity and eroding motivation, especially for those furthest from opportunity.

Today's rapidly changing world demands different skills: creativity, collaboration, adaptability, and ethical reasoning. Artificial intelligence is accelerating this shift, automating routine tasks while elevating uniquely human capacities. Yet rising disengagement and declining college persistence, especially among low-income and first-generation students, reveal how inadequately current systems prepare young people.

Modern learning science offers a better path forward. Every learner's brain is malleable and unique, shaped by relationships, culture, and experience. Variability is the norm, not the exception. When schools treat time as fixed and learning as variable, they reinforce inequity. Mastery-based learning flips that equation, allowing students to advance by demonstrating what they know through authentic work, not through the accumulation of seat time. Teachers become facilitators and coaches, offering personalized supports. This replaces factory-model schooling with a system grounded in how people actually learn: through application, feedback, and iteration.

Key Building Blocks of a Mastery-Based System

A mastery-based system rests on five interlocking foundations:

Clear competencies and learning progressions define what mastery looks like and how it develops over time, creating a visible continuum of growth that helps teachers and students identify where a learner is and what comes next.

Performance-based assessments provide authentic evidence of learning. Projects, exhibitions, portfolios, and reflections reveal how students apply knowledge in meaningful contexts and capture complex skills, including durable skills like communication, collaboration, and self-direction.

Student-centered learning platforms make mastery learning work at scale. Digital platforms track progress, record evidence, and provide real-time feedback, making progress visible and actionable for teachers, students, and families.

Flexible pacing and coherent supports honor individual variation. Students advance when ready, not when the calendar dictates. Combined with

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continuous feedback and revision, this reframes learning as a journey toward mastery rather than a march through a time-bound system.

AI-Integrated Supports, such as Building 21's Beacon system, track progress across competencies, provide immediate formative feedback, design rigorous, personalized projects aligned to students' interests, and help teachers identify when students need extra support. This makes personalized pacing logistically feasible. Combined with human judgment and coaching, AI becomes a force multiplier: handling routine tasks so teachers can focus on building relationships and nurturing growth.

When these five building blocks are in place, they unlock new possibilities for everyone involved.

What Mastery Makes Possible for Students

Clarity and purpose. Students get a clear map of what mastery looks like and multiple ways to demonstrate growth. Instead of chasing subjectively defined grades, they collect evidence through projects, performances, and portfolios. When learning connects to authentic application, students can finally answer "Why am I learning this?"

> "You actually know what you're doing and why you're doing it. They want me to succeed in life. They've helped me realize that it's okay to move how I move, and learn how I learn."
>
> — Student at a Building 21 School

Agency and belonging. Students are no longer penalized for their pace of learning. They can revise and resubmit work until it demonstrates mastery, cultivating persistence, ownership, self-direction, and confidence.

Broader definitions of success. Mastery frameworks measure more than academics, including durable skills that employers identify as essential, such as communication, collaboration, and self-direction. Building 21's data show that students' competency performance is a stronger predictor of college persistence than standardized test scores.

Anywhere, anytime learning. Because mastery is based on evidence rather than location, students can earn credit for learning that happens in classrooms, workplaces, community programs, or at home.

What Mastery Makes Possible for Educators

A coherent instructional arc. Teachers design backward from clear competencies, skills, and performance indicators, using assessment evidence to guide instruction. Learning becomes transparent, purposeful, and connected.

> "This has been an absolute game-changer. Parents can finally see exactly how their child is growing. It's clear, actionable, and builds trust."
>
> — Teacher at a Building 21 partner school

Feedback that drives learning. Research shows feedback produces some of the largest gains in student achievement. In mastery systems, feedback loops are continuous and built around revision, giving learners multiple opportunities to reflect, improve, and demonstrate growth. Students learn that feedback isn't judgment—it's an invitation to improve.

> "If you get something wrong, you have the time to get it right. It doesn't give you an immediate fail—it just gives you more time to get better."
>
> — Student at a Building 21 School

What Mastery Makes Possible at the System Level

Connected learning ecosystems. Mastery-based learning breaks the link between learning and location. Students earn credit for competency wherever it occurs – classrooms, internships,

community projects, or digital spaces. Shared competency frameworks ensure learning is recognized wherever it happens.

Equity by design. Transparent standards make learning visible and fair. Students earn credit when they demonstrate proficiency, not when they navigate systems built around access. Real-time data highlights opportunity gaps and supports targeted intervention. By focusing on evidence rather than compliance, mastery systems create multiple equitable pathways for every learner.

Continuous improvement. Mastery systems generate rich, real-time evidence that powers learning at every level. AI-powered digital tools can support this work, helping educators analyze patterns and sustain continuous feedback cycles while preserving the human relationships essential for learning.

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A Call to Action

Mastery-based learning is no longer theoretical; it is gaining momentum. States like Vermont, Utah, and Colorado have adopted proficiency-based graduation requirements. Networks including XQ Schools and KnowledgeWorks are helping districts design competency-based pathways. School networks like Building 21, Big Picture Learning, and Summit Public Schools prove what's possible: learner-centered environments built on clear progressions, authentic assessment, and personalized support.

Traditional systems were built for standardization and compliance. They struggle to prepare young people for a world that demands adaptability, creativity, and continuous learning.

Mastery-based systems offer something different: coherence across diverse learning environments, equity grounded in evidence and transparency, and alignment with how brains actually develop. Most importantly, they offer a blueprint for how education can evolve by centering how students learn rather than how schools operate.

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How does greater agency drive deeper engagement and learning?

Celeste Bolin, Executive Director at One Stone

Christopher Cardella joined the One Stone lab school as a young man carrying the weight of an extremely difficult childhood. He had witnessed addiction, violence, and instability at home and reflected "I kept accelerating towards my eventual demise without care. I accepted that I would die before I got out of high school, and felt comfort in that." When he arrived he was skeptical that school could be anything more than a box to check before the real world. Still, he brought a wide range of interests, from environmentalism to social issues like substance abuse, which would fuel his growth at One Stone.


Chris's first immersive camping trip to Yellow Pine opened his eyes to complex environmental issues and became the anchor for his learning. He threw himself into additional opportunities with remarkable agency: he testified at a Northwest Power and Conservation Council hearing on salmon restoration, led outdoor trips, and spent summers honing wilderness skills with the Idaho Conservation Corps. Despite becoming homeless at age seventeen, Chris persisted, designing projects that reflected his passions, working through challenges, and reflecting on his growth. Where he felt powerless at home, he gained agency through newfound interests and opportunities.

Today, Chris is studying the thermal tolerance of alpine plants at the University of Montana, for which he recently earned a NASA research grant. His path was shaped by opportunities for true ownership of his learning. What transforms the learner experience into one that is truly student-driven is creating space to fail forward, nurture curiosity, and embrace passions. It is in this environment of trust, support, and freedom that students like Chris authentically and agentically grow.

One Stone is a nonprofit organization designed and driven by students for students. Founded in 2008, it launched its independent high school in 2016. There are no grades, bells, teachers, or set schedules. Students never have to raise their hand to speak or ask permission to use the bathroom. Our purpose is simple: we believe in the power of students.

Eighty percent of the students who enter One Stone report that they had not previously received a personalized education. They report, "Most of the classes I was forced into, I never got a freedom of
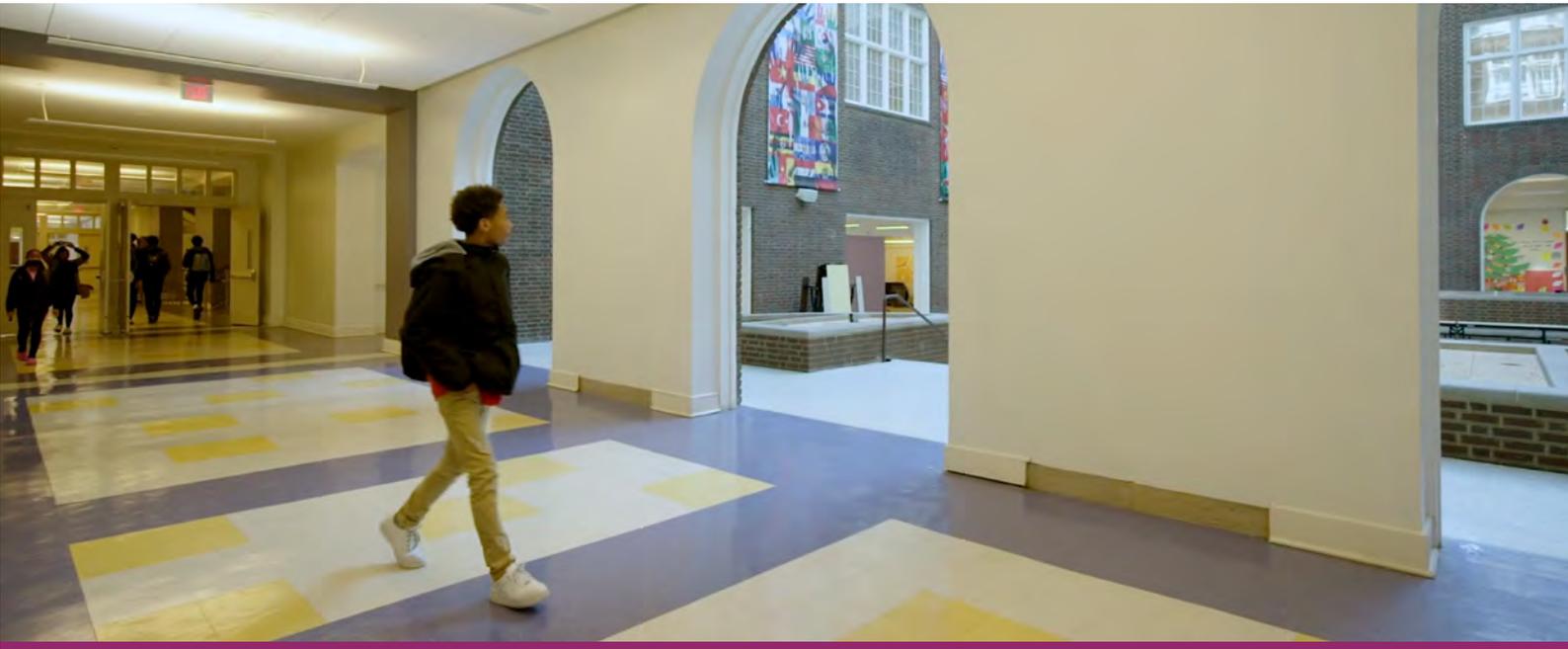
choice. Most importantly, I never had a voice or a way of expressing my knowledge without feeling belittled." Nearly 70% of teens face pressure to get good grades, adding up to an alarmingly high number of stressed-out students who are anxious about their academic and professional futures, and lacking autonomy to design their path.

At One Stone, we have learned that agency is not just a pedagogical concept; it is a lived experience. One of the trailblazing students at One Stone, Jared Perkins, expressed this concept clearly: "Doing the thing is infinitely better than learning about doing the thing." Rather than focusing on GPA, students engage in reflection, self-assessment, and requesting feedback. Student agency isn't supplemental, it's the design principle for relevant education. The shift from compliance to growth isn't just theoretical, it's shown in how students approach their learning. Sophie Gunther, a current student and One Stone Board member, reflects, "The BLOB is a great outlet for meaningful conversation and soul searching. It starts conversations about risk taking, passion, grit, and more," and, "On a personal level, it pushes you to look into the process of how and why you do work and learn."

A key tool for actualizing this is One Stone's Growth Framework, a research-backed Portrait of a Graduate

and assessment system designed to empower growth in durable and disciplinary skills. These skills, such as collaboration, communication, and management, provide relevance and self-direction. Every student graduates with a learner record (the "Growth Transcript") representing their goals and growth in durable skills and shaped by how they collaborate with mentors, peers, and coaches. The mark of an accurate Growth Transcript is that it looks more like a learner fingerprint – one of a kind and showing an authentic picture of growth.

In practice, the Growth Transcript translates into students taking the lead on projects, designing schedules, reflecting on progress, and applying learning in professional contexts with community partners. Data from 2025 One Stone graduates illustrate the impact: 100% report having experienced real-world opportunities that made learning relevant. Ninety-seven percent of all One Stone graduates agree they have learned how to explore their passions and feel equipped with the tools and skills to pursue those passions beyond high school.

These skills grow and translate into college and the workforce. Our oldest alumni report: "[One Stone] helped me build tools to understand myself, how to set goals, and core values. While I have changed as a person, starting to build that toolbox of skills

has helped me be open to pivots in my career and personal life."

These outcomes are not accidents of personality or privilege. At Bostonia Global, a One Stone partner public charter school in El Cajon, California, 80% of the students qualify for free or reduced lunch, are English language learners, or are part of the foster care system. Eighty-five percent of Bostonia students report stronger relevance and connection between their strengths and schoolwork after working on goals and growth in durable skills for a year. A high school senior from Bostonia Global stated, "I used to think my life was already decided for me, like I had no choice but to follow a path someone else set for me. But now, I see my Growth Transcript, and I see myself, my progress, my potential, my story. It makes me feel like I belong, like I can shape my own future."

At Duquesne Middle School, a One Stone partner public school with 100% free or reduced lunch, 77% of students report that they understand how the

skills in their Bold Learning Objectives, including self-awareness, adaptability, and ownership, apply beyond high school. An eighth grader at Duquesne reflected, "Career awareness is more than just picking a job – it's about understanding our passions, strengths, and values […] The BLOB will measure my growth in choosing my own path towards a career that suits me."

Yet surveys highlight a persistent gap. Four out of five hiring managers (84%) agree that most high school students are not prepared to enter the workforce (Swanek, 2025). To prepare students for real-world experiences we must co-create ecosystems that promote agency. Students need open doors to engage deeply with professional environments, so that learning feels relevant today and prepares them for tomorrow.

Building systems that honor student voice and connect learning to real-world experiences builds agency. When student learning reflects their passions, they experience deeper engagement, develop durable skills, and gain the confidence to act with purpose. Relationships and continuous feedback fuel this agency, creating a dynamic where learners feel empowered, supported, and motivated to contribute meaningfully because their voice matters.

At One Stone, we've seen that when students lead, learning follows. The courage and creativity of students like Chris prove that education works best when it's driven by students. We must lean in, pay attention, and ensure every student has the chance to lead their own learning.

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Parker, Kim, and Kiley Hurst. "Pressures Teens Are Facing." Pew Research Center, 13 Mar. 2025, www.pewresearch.org/social-trends/2025/03/13/pressures-teens-are-facing/.

Swanek, Thaddeus. Insights from Hiring Managers on Entry-Level Workforce Preparedness. U.S. Chamber of Commerce, 17 Sept. 2025, https://www.uschamber.com/workforce/new-hire-readiness-report-2025.

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How might learning experiences be designed to cultivate the next generation of change makers?

*Dr. Jennifer Charlot, Co-Founder at RevX, **Saskia Op den Bosch**, Co-Founder at RevX, and **Sarah Field**, Partner of Instructional Design at RevX*

The Call: Why Learning Must Change

"The water is contaminated."

"My classmate was murdered."

"My mother lost her job to AI."

These aren't headlines. They're words spoken by scholars in Mississippi – teenagers carrying responsibilities most adults would find hard to bear.

When they ask, "Why should I care about school?" they're not resisting learning; they're signaling that learning must rise to meet their lives.

This is the tension of our time: the system designed to prepare young people for the future is moving slower than the future itself. Automation, climate instability, and inequality demand humans who can think critically, act ethically, and adapt continuously. Yet too often, instruction (and school more generally) still trains scholars to recall, repeat, and comply.

RevX believes learning should evolve as the world does. It must help young people become the kinds of humans AI struggles to replace – curious, ethical, and capable of shaping change.

Learning as a Human Act

The skills most essential in the age of AI – communication, creativity, resilience, ethical reasoning, adaptability – aren't new. They're expressions of what makes us human. Behind each are two capacities that shape all the rest: agency, the power to act, and transferability, the ability to apply learning in new contexts in order to achieve the goals we want.

Traditional education rarely cultivates either. It fragments knowledge into subjects that live apart from life.

That's why RevX created DEEDS. If AI can do the recalling, humans must do the discovering. DEEDS

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helps scholars develop what machines cannot: the ability to discover problems that matter, examine them with curiosity and empathy, design solutions grounded in community need, and share learning in ways that inspire collective action.

Through DEEDS, young people learn to see themselves as capable of shaping and leading their communities. They build habits of inquiry, collaboration, and reflection that help them continue learning – no matter how the future shifts.

When learning becomes a *living process*, it stops being about right answers. It becomes a practice of asking better questions and using learning to make life better for us all.

DEEDS: The Architecture for Real World Learning

DEEDS – Discover, Examine, Engineer, Do, Share – is not a curriculum to follow. It's a cadence of learning that helps teachers and scholars move from curiosity to impact while keeping rigor and relevance at the center.

Discover begins with a real challenge that matters to the community.

Examine grounds curiosity in evidence, data, and multiple perspectives.

Engineer invites scholars to design solutions that demand both academic precision and creativity.

Do brings those ideas to life in partnership with others.

Share closes the loop as scholars communicate what they've learned, how their view of who they are has sharpened (identity), and how they have created change. They demonstrate this evolution through exhibitions, advocacy, or community action.

The topic can shift – from AI bias to coastal flooding to mental health – but the **process** remains steady. It gives teachers structure without scripting and gives scholars freedom without losing the rigor of the learning process.

DEEDS helps teachers, too. It turns planning into design thinking and lesson delivery into shared inquiry. It reminds educators that their role isn't

to provide all the answers but to guide the search for collective meaning. Our AI tool, Design with DEEDS amplifies teachers' capacity to plan.

What It Looks Like In Action

The earlier sections describe why and how learning must change, these stories show how young people are already living that future.

First Grade | Helping Foster Youth Sleep

In the Bronx, first graders learned that foster youth often struggle to sleep in new homes. They studied the science of light and sound, engineered night-lights and rainsticks, and delivered comfort kits to a local foster organization to help improve foster youth's sleep.

Fourth Grade | Making Intersections Safer

When fourth graders noticed that cars rarely stopped at their crosswalk, they partnered with Transportation Alternatives to gather data, study the physics of force and motion, and design safer intersection models. Their petition drew hundreds of signatures and the attention of city officials.

Eleventh Grade | Promoting Mental Health

In Mississippi, high school scholars confronted rising anxiety among their peers. After analyzing local data and partnering with NAMI Mississippi, they designed awareness campaigns for athletes and artists, hosted a districtwide event, and presented recommendations to the school board. Their proposals led to new wellness programs funded at the district level.

In every example, scholars build the foundational knowledge they need while also developing empathy, agency, and a commitment to contributing to their communities. Both the purpose and process of learning shift: scholars learn in order to create real impact, and the work itself requires continuous investigation, application, reflection, and iteration.

Proof of What is Possible in Learning Environments

At LEAD Public School 359 in the South Bronx, RevX's first demonstration site, scholars and teachers are showing what's possible when relevance and rigor meet.

Over four years, LEAD has seen consistent increase in scores. Most recently in 2025:

- 99% proficiency in English Language Arts
- 95% proficiency in math
- 90% proficiency in science
- 100% teacher retention

LEAD 359: In this project for the NYC Department of Sustainability, fourth graders built a pedal-powered energy system that transforms movement into clean

The numbers tell part of the story. The rest lives in the moments that can't be measured – the hum of a group building prototypes after dismissal, a student revising her argument because the data changed her mind, a teacher realizing that inquiry, not compliance, keeps scholars engaged.

Teachers describe DEEDS as the approach that reminded them why they became educators. Scholars choose to stay after school, not for extra credit, but to keep working on ideas they started.

This is the proof the future demands: not just higher scores but deeper reasons to learn, to collaborate, and to contribute. What these stories prove is simple: when learning is human-centered and real,

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scholars excel academically **_and_** develop the agency, adaptability, and purpose the future requires.

Learning That Embraces Change

The kind of work our scholars do requires what the future requires – clear communication, real collaboration, and sustained self-direction. It moves learning away from narrow tasks and toward rigorous relevance; away from isolation and toward connection; away from one-size-fits-all and toward customization; away from passive compliance and toward agency. It is the shift at the heart of [Transcend's LEAPS for Extraordinary Learning](#).

The strength of DEEDS is that it adapts as the world does. Topics change, tools evolve, and conditions shift, but the pedagogy bends with that movement. It acts as a flexible container – structured enough to support rigorous thinking, open enough to hold work that reflects students' interests, identities, and the challenges their communities face.

As scholars move through this process again and again, it becomes a way of seeing the world. Every question becomes a chance to understand, design, and contribute. Teachers begin to see every lesson as part of a larger arc of human growth and community change.

This is the future of learning – not flashy, not theoretical, but deeply human.

A system that holds its soul because relationships, identity, and purpose remain at the center.

A design that maintains its rigor because evidence, precision, and iteration guide each step.

A model that prepares young people not just to navigate change but to shape it.

DEEDS threads all of this together: strong academic outcomes, meaningful contribution, and the human capacities AI cannot replace – agency, relevance, connection, creativity, and ethical reasoning. It shows that when learning is built for both rigor and humanity, scholars rise.

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Stepping Forward: How do we get from here to there?

How can AI be used as a tool for learning, beyond more efficiency toward current outcomes?

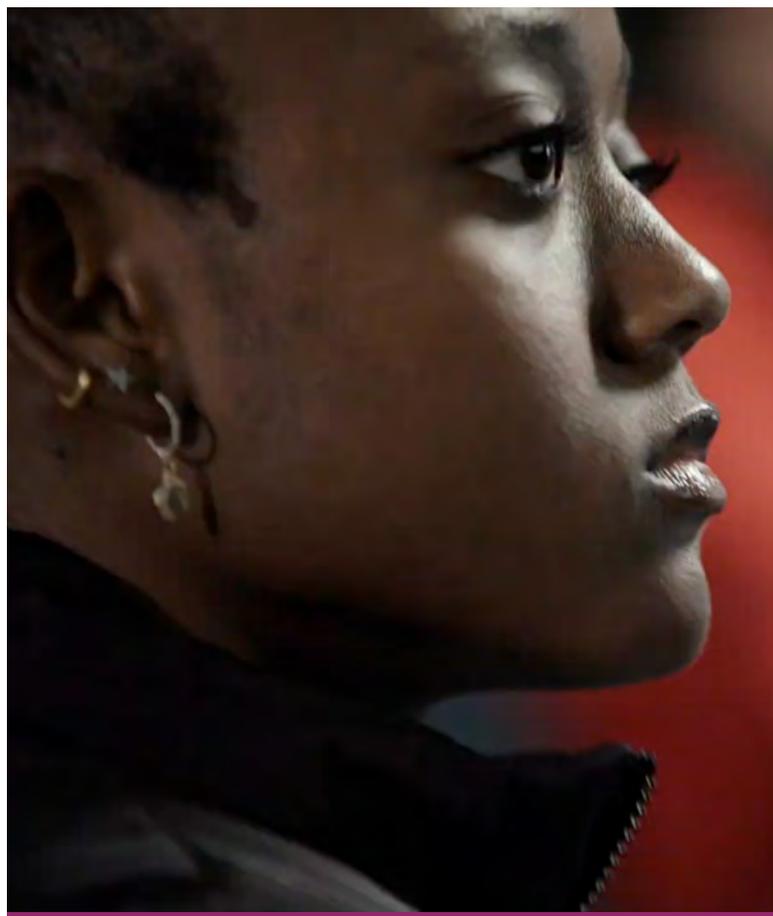*Babak Mostaghimi, Founding Partner at LearnerStudio*

If you had the knowledge of an entire civilization at your fingertips and had the task of building tools to support learning, what would you do? Would you build a multiple choice worksheet generator? A reading passage builder? A drill-and-kill tool dressed up as an adaptive game?

If this sounds crazy to you, you're not alone. With generative AI, we are in this very scenario today. Despite clear signals from almost every constituent group, employers, higher education, the military, parents, and even young people themselves, the vast majority of edtech AI tools are focused on making efficient a system of schooling that is not meeting modern future-readiness requirements.

If we want a learning system geared for the modern world, we should be centering a more responsive product development question: How can AI help us unlock human potential in previously unattainable ways such that every young person is inspired and prepared for life, career, and democracy in the age of AI as individuals and for the common good?

AI changes *how* learning can occur and what must be learned. For the first time in history, we are confronted with a technology that mirrors human-like language capabilities, exceeds human analytical capacities, and can mimic human intuition in ways that make it feel alive. As a result, in an AI-infused world, human skills, such as critical thinking, emotional intelligence, and creativity, rise in importance alongside modernized content knowledge, the ability to transfer ideas across contexts, and the self-efficacy and agency to identify and solve problems.

While some argue that AI is overhyped, we should recognize that "today's AI is the worst AI you will ever use." Soon we will laugh at the clunkiness of chat based AI in the same way that we laugh at early text messaging on flip phones. As multimodal agentic AI, AI that can process, integrate, and act upon information from text, images, audio, and video, becomes the norm and integrates with advances in wearable technologies and robotics, humanity is on the verge of capabilities for learning transformation that are presently unimaginable. As such, we must imagine the future of learning through the lens of advancing AI capabilities as opposed to static present capabilities.

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AI, when used in ways that deepen human abilities, relationships, and cognition, referred to as pro-human AI use, has the potential to unleash a new era of learning by impacting everything from learner support to learning experience design and differentiation.

So how can AI be used as a tool for future-ready learning outcomes?

1) **AI can build human skills and connection while improving content learning.** In a typical school today, building individualized learning for each child either requires a superhuman educator with unreasonable demands for differentiation, regimented quasi-differentiated curriculum materials, or placing students with an adaptive computer program. The superhero solution leads to rapid burnout. The regimented materials meet the needs of a non-existent average. The computer programs miss the relational aspect of learning, are often less personalized than advertised, and provide addictive dopamine hits that challenge the development of authentic motivation. None of it is ideal.

   But in an AI capable world, these tradeoffs are no longer necessary. AI can support the development of human skills and connection, while improving learning outcomes. Adult educators can gain

more time to work 1:1 with learners and build deep relationships with them even while learners experience high quality content and collaboration with their peers. These statements are not a dream, but a reality that is coming to life in learning environments via AI tools like OKO that engage learners in curated content and support collaborative problem solving among them similar to high-quality small group instruction.

2) **AI can personalize and democratize learning.** Across the world, students come to class each day and are told what they are learning that day by a teacher following a standard pacing guide and aligned curriculum materials. Star educators find ways to make connections between standardized content and children's interests, but children are largely expected to conform to whatever is being taught. This results in disengaged teachers forced into robotic content delivery roles and disengaged students forced into passive information receiving roles.

   But in an AI infused world, this entire equation is flipped. With AI powered tools like Inkwire, educators can build unique project-based learning experiences designed with their context, content, and skill development goals in mind. Better yet, organizations like RevX have leveraged

Inkwire to enable learners as young as middle school, to build their own learning journeys aligned to knowledge and skills development goals. In making learning more personal and approachable, these pro-human AI use cases democratize access to knowledge and learning experience development. Learning becomes an engaging experience of discovery, design, and development rather than compliance, conformity, and passivity.

3) **AI can empower educators and learners to solve their own problems.** Education is a sector that is often designed for instead of with. Tools are made to solve problems and then educators are trained on them. As expected, most of the tools fail to meet the needs of educators or their learners and practitioners are often forced to work around the tools until the next set are layered onto the sector.
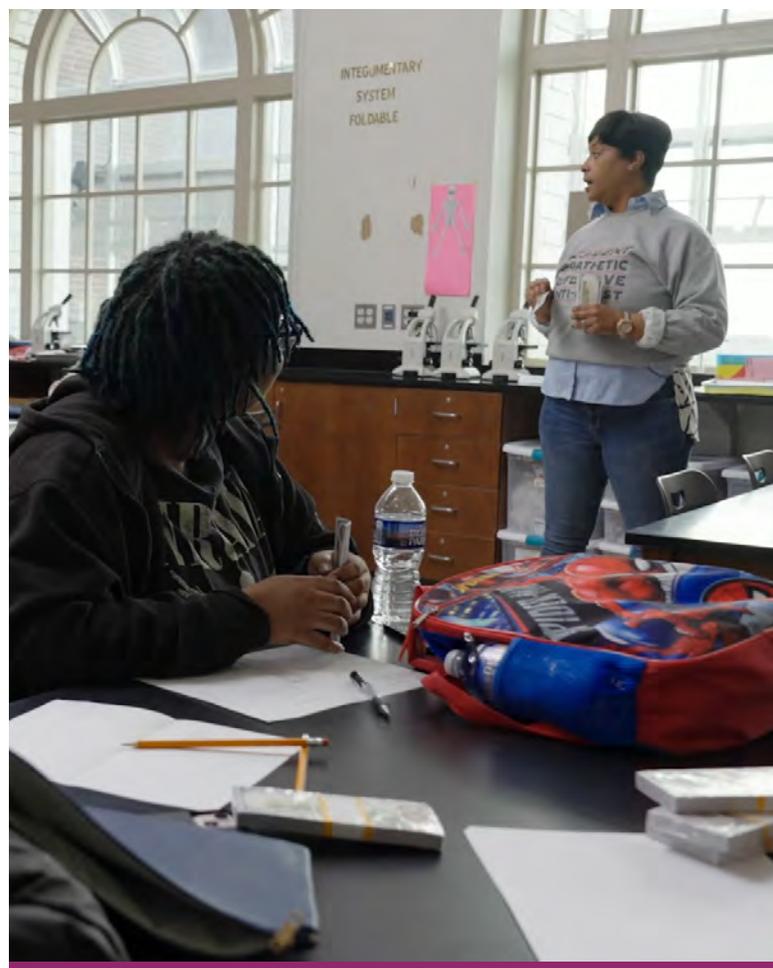
Pro-human AI tools finally undo this dynamic by enabling educators and learners to develop their own solutions to their own problems. With tools like Playlab, educators have built tools that enable them to replicate their coaching feedback to provide better support to many learners at classroom scale. Similarly, Playlab tools have been developed by educators to support integration of high-quality instructional materials into project-based learning environments.

But remember, these existing, deployed AI use cases are just the beginning of what is possible as **AI capabilities are rapidly improving every day.** New AI-supported assessment mechanisms will allow us to measure what matters by enabling real-time, ambient observation of knowledge and skills development that were previously hard to capture, understand, and grow. AI-enabled virtual and augmented reality experiences are enabling immersive learning that create meaningful practice environments for learners. When combined with new learning management systems and learning records, a whole world of learning possibilities opens up.

The true promise of pro-human AI is to fundamentally transform the very foundations of learning. The advent of AI offers education a chance to move

beyond the shallow efficiency of an outdated system and toward a future where technology amplifies our humanity, empowers every learner's unique journey, and measures mastery of the skills and knowledge necessary for the future.

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Pillar 2: Shift from centering *schooling* to centering *learning*

Rearchitect the "who" of learning and human development

For over a century, the "who" of our education system has been narrowly defined: a solitary teacher standing at the front of a room, delivering content to a row of students. But the architecture of the industrial classroom creates a bottleneck that no longer serves the complexity of human development. In the Age of AI, where content is ubiquitous and learning happens everywhere, we must radically expand our cast of supportive adults and peers. This section challenges us to redefine the agents of learning, moving from a system of isolated instruction to an ecosystem of diverse support.

The inquiry begins with the educator role. We need to ask: What does it truly mean to be a "facilitator of learning" when the teacher is no longer the sole source of knowledge? How do the competencies of our educators shift when their primary value moves from delivering facts to fostering curiosity, agency, and connection? But we cannot stop at the classroom

door. We need to widen the aperture to community-based roles, asking who counts as an educator. By recognizing mentors, experts, near-peers, and community leaders as essential co-pilots in a learner's journey, we unlock a vast, often untapped reservoir of social capital and wisdom.

This expansion requires us to navigate a delicate balance: right-sizing tech and human roles. We must imagine a future where AI does not replace the human connection but amplifies it, taking on the burden of efficiency to free up humans for the work of empathy, mentorship, and guidance. Finally, to sustain this new ecosystem, we must scrutinize our **talent pipelines**. How do we reimagine the recruitment and development of these diverse roles? What does a healthy, sustainable pipeline look like for a profession that is rapidly evolving?

These questions are not about diminishing the role of the teacher; they are about elevating it. They ask us to build a network of support so robust that every learner is surrounded by the guidance they need to flourish.

What does it mean to be a "facilitator of learning"? How is an educator's role shifting in the Age of AI?

Vriti Saraf, M.D., Co-Founder and Chief Executive Officer at Ed3

Arc of the Teaching Role

In Plato's *Phaedrus*, when the god Theuth brought the gift of writing to King Thamus, Thamus balked. Writing, he warned, would "produce forgetfulness in the soul". Writing would offer the appearance of wisdom where people will seem to know much, yet lack true understanding.

But literacy didn't hollow out thought, it expanded the horizon. Teachers, once oral storytellers and community historians, became scholars who could now compare ideas across times and places. Lectures, recitation, and discussion became the canon of learning.

Two millennia later, the printing press multiplied pages by the millions. "We have reason to fear," wrote scholar Adrien Baillet, that this "deluge" would make us "barbarous." Instead, knowledge and scholarly authority scaled. Educators guided readers through abundance and taught shared foundations for mass literacy.

Five centuries after that, the internet swelled the flood of words into an ocean of digital content. Learning became instant, interactive, and networked. The teacher's role shifted from gatekeeper of pages to navigator of hyperabundance and collaboration, helping students ask better questions and filter the flood.

...Except that's not what happened. Despite global access to ideas and turbulence caused by the social web, the teacher's role largely remained printing-press era: purveyor of content, gatekeeper of knowledge.

Now with AI, our access to skills, knowledge, and ideas has exponentially increased. The question is: will the teacher role evolve to meet the demands of this era or will it remain two technologies behind?

Consequences for Learners

Generative Artificial Intelligence (AI) can already simulate complex reasoning, produce multi-modal explanations, and analyze intricate patterns. Used well, AI can expand when, where, and how learning happens.

Yet, most educators are using AI for the busywork of teaching - grading, generating lesson plans, organizing schedules, summarizing research. Helpful, but a fraction of what's possible.

For learners, AI use is dictated by academic expectations. The generic essay, problem set, or presentation can be well-produced without much thought.

The danger isn't offloading these tasks; it's that in the age of AI, *they no longer suffice* as proxies for thinking.

If school expectations remain unchanged, cognitive skills like framing a question, weighing evidence, and producing a narrative, atrophy from underuse[1]. And because AI tools minimize cognitive friction and maximize engagement, the illusion of progress becomes quite seductive. This dependence has a predictable effect: Overreliance on AI breeds a brittle sense of agency; we are confident when AI is present and powerless when it's not.

Consequently, this is precisely the opportunity. AI won't collapse the teaching role... AI will actually expand it.

In the age of AI, teachers serve as facilitators of learning who architect the conditions where thinking, judgment, and belonging thrive.

AI widens space for richer, more demanding work. It becomes a catalyst for experimentation, redesigning workflows, and moving learning beyond the busywork. It concentrates the teacher's role on what machines cannot do.

Facilitators of Learning

As it turns out, today's teachers are recognizing this shift. In a national survey of 1,268 educators conducted by Ed3, five roles emerged in response to the open-ended question:

What do you consider the most human part of your work as a teacher — the part that would still matter most, even in a world where AI might do almost everything else?

- Teachers described their new role as:

- Builders of wellbeing and belonging

- Mentors for motivation and character development

- Designers of personalized learning and feedback

- Coaches of critical thinking and ethical judgment

Connectors of community and real-world experiences

As one veteran rural-school teacher put it, "AI can't feel the room. It can't sense when a student needs encouragement, or when a joke will break the tension."

AI isn't a rival to teaching so much as a redistribution of labor. Machines can draft, summarize, and sort. But the work that moves learning forward hinges on judgment in context, trust earned over time, and the ability to connect with a child.

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[1] https://www.media.mit.edu/publications/your-brain-on-chatgpt/
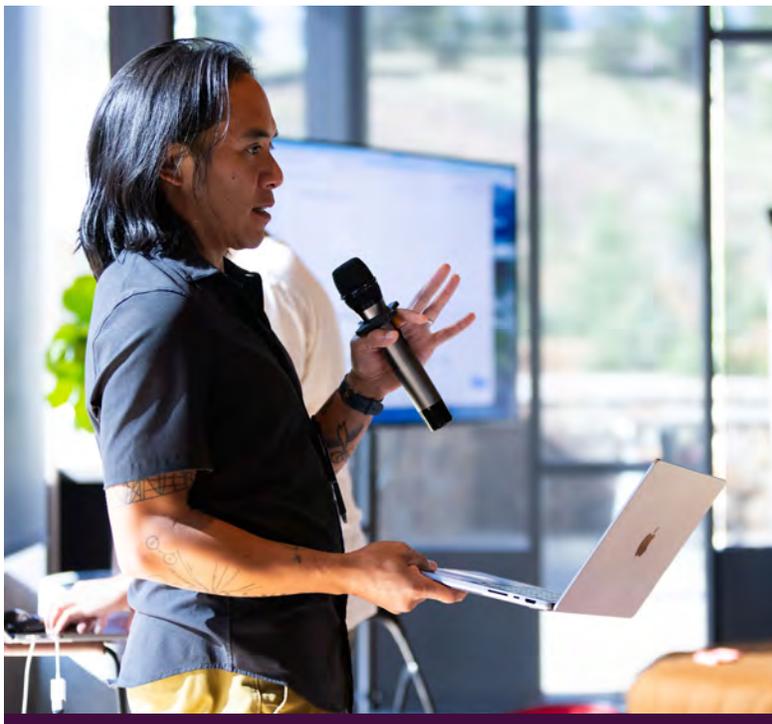
These human edges become even more important as many young people turn to AI companions[2] for friendship and emotional support. For students, these counterfeit relationships[3] can feel comforting and safe. For parents and educators, they raise urgent questions:

What happens when a young person mistakes an algorithm's mimicry of care with genuine human intimacy? Who helps learners discern between authentic empathy and synthetic approximation?

With little ethical concern[4] from companies building these bots, counterfeit humans are becoming fast friends with real ones. In this new world, facilitators of learning take on profound responsibilities:

- Guiding learners through uncertainty by helping them ask better questions before turning to AI, and normalizing disagreement as part of inquiry.

- Modeling judgment and ethical decision-making by surfacing limits of data and models, and justifying choices with evidence and values.

- Sparking curiosity, creativity, and purpose by staging problems that matter to society's wellbeing.

- Cultivating systems of critical thinking by mapping interconnections, building mental models, embracing productive failure, and running AI simulations.

- Building trust with students and families by creating safe, high-expectation communities where feedback is honest, belonging is felt, and motivation is shared.

Being a facilitator also means modeling thoughtful AI use. As teachers experiment, they can more convincingly guide students toward healthy, productive use.

"…it is my job to teach data literacy, information literacy, digital literacy, and AI literacy. To teach students how to properly evaluate information and vet sources and think critically and be skeptical and verify what they read. This also takes a lot of trust building and convincing, a human art…" said an early-career urban school teacher.

This list is not exhaustive and the facilitator role continues to evolve.

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[2] https://med.stanford.edu/news/insights/2025/08/ai-chatbots-kids-teens-artificial-intelligence.html
[3] https://www.youtube.com/watch?v=axJtywd9Tbo&t=671s
[4] https://www.reuters.com/investigates/special-report/meta-ai-chatbot-guidelines/

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Portrait of a Teacher in the Age of AI

The survey is one input into a national research and design effort led by Ed3 called The Portrait of a Teacher in the Age of AI. This project aims to deliver practical, adaptable tools to help leaders modernize how we identify teaching talent, nurture it, and validate growth in this new AI era.

The work spans four phases:

Between Promise & Practice: Evaluates how AI is actually used in schools, distinguishing between shifts in practice and acceleration of the status-quo.

1) The Architecture of the Educator Role: Maps current teacher tasks against emerging demands and predicts what will require human judgment versus augmentation.

2) Science of Artificial Relationships: Begins to evaluate the role of a teacher in helping learners navigate the cognitive and emotional impacts of AI relationships.

3) The Portrait Framework: Presents a localizable, interactive toolkit to help education leaders iterate the role of a teacher.

The project rests on a simple premise: For students to be critical thinkers, agentic, and fulfilled, their teachers must be critical thinkers, agentic, and fulfilled.

Humans at the Center

From the first written word to the printing press to the web, each leap shifted work to machines and moved teachers closer to the human center. AI makes that shift unmistakable.

Ten years from now, students won't remember which AI model they used... they'll remember who taught them to think without one. They'll remember the teacher who made a room feel safe and challenging; who connected schoolwork to real people and real needs.

So how does the role of the teacher change in the Age of AI? It becomes more important than ever before.

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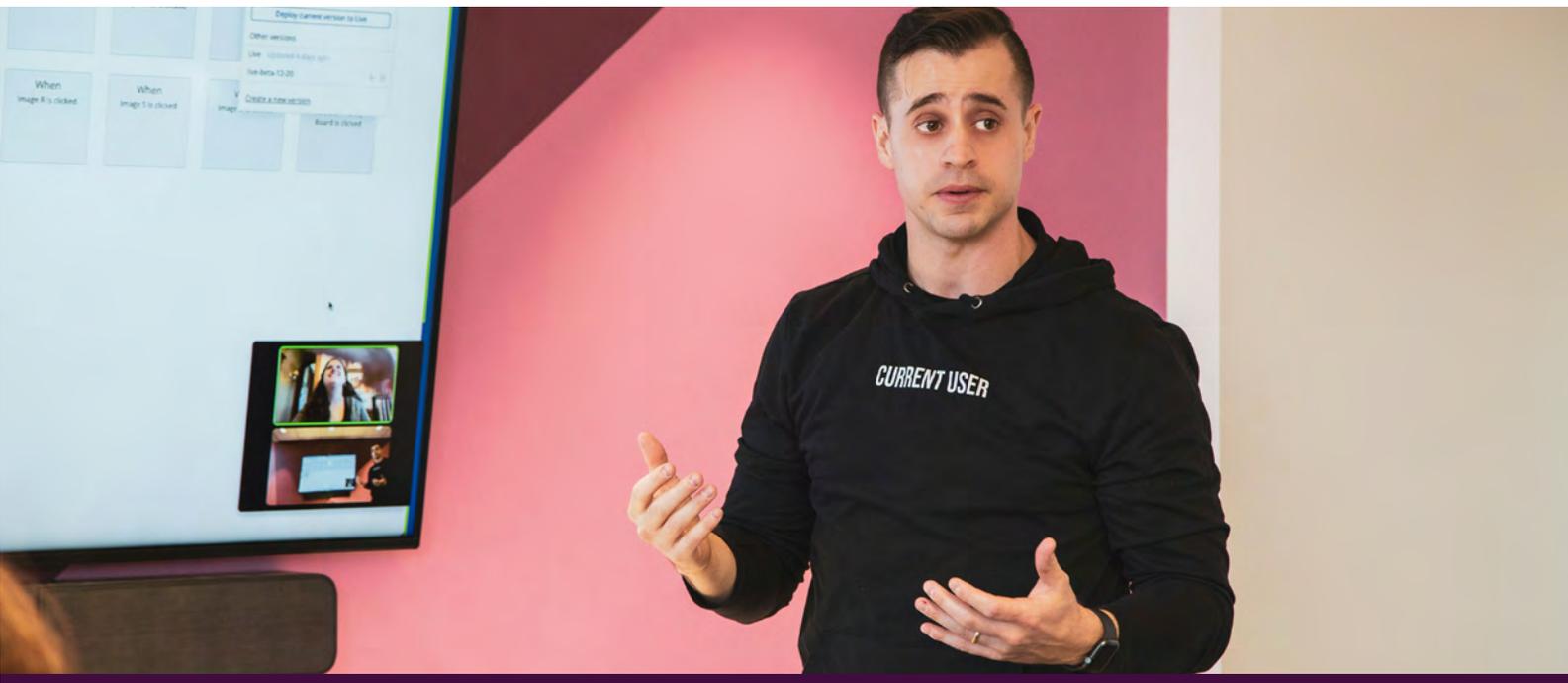
Who is an educator in the Age of AI? Who facilitates learning, and how might we recognize that larger community of educators?

Merita Irby, Partner at Knowledge to Power Catalysts (KP Catalysts)

Educators are not only found in classrooms. They are anyone – youth or adult – who engages young people in powerful learning experiences that spark curiosity, deepen knowledge, build skills, and help young people make meaning of who they are and how they can contribute.

We've long known that learning happens everywhere. What's different now – in the Age of AI – is the urgency to act on this knowledge.

As new technologies continue to transform work, **the pathways from school to career are becoming more fragmented, unpredictable, and uncharted.** Entry-level jobs are disappearing or changing faster than systems can adapt. In this landscape, young people need to learn not only how to acquire content, but how to navigate complexity. They need trusted adults and near-peers who can help them develop the durable skills, sense of direction, and social capital needed to explore existing pathways and forge new ones.

Especially for adolescents – youth and young adults ranging from ages 12 to 25 – this makes the definition of educator much broader to include:

- **Classroom teachers** who connect foundational academic content to real-world applications and help young people explore the advanced courses, electives and extracurricular activities that fuel their spark.

- **Community-based educators, youth work professionals, and program staff** who design learning that's reality-based, relationship-rich, and purpose-driven – especially for those who feel disengaged from traditional schooling.

- **Professional Support staff** – including nurses, counselors, coaches, librarians, safety officers and other support staff who are essential for making schools and community organizations vibrant and supportive places for learning and engagement.

- **Employers, trainers, and mentors** who help young people build competencies in their places of work – especially in internships, apprenticeships, or paid programs.

- **Service corps leaders and team supervisors** who challenge youth to contribute meaningfully to their communities, developing leadership and character along with transferable skills and knowledge.

- **Peers and near-peers** who develop projects and reinforce learning through shared experience, cultural connection, and social capital.

While many of these educators may not hold a teaching degree, they absolutely facilitate learning. And their role is essential to how youth and young adults explore interests, take risks, make meaning, and enter into adulthood.

As we note in _When Youth Thrive, We All Thrive_ , we must:

Explicitly name the people and places that create anywhere/anytime/never-too-late learning possibilities. The simple act of naming highlights the abundance of opportunities we have to optimize learning experiences for youth throughout the ecosystem if we design a new architecture that prioritizes giving the people who work with youth the trust, time, training, tools and technology they need to make and help youth make connections across boundaries.

So what do we do? We make a new commitment – to recognize and support a broader community of educators.

This means:

- **Naming and legitimizing the full range of youth-facing adults as educators** – across schools, community programs, service corps, libraries, arts and cultural organizations, job sites, and beyond. This includes adopting inclusive language and messaging in policy, research, and public communications.

- **Expanding educator preparation and professional learning** – ensuring that youth workers, mentors, community educators, and others have access to high-quality training and development opportunities, just like classroom teachers. And creating shared spaces for learning together about the most powerful ways to engage young people in learning.

- **Creating new roles and career pathways** – especially for those who work at the intersection of learning, work, and community. We need credentialing systems and job categories that reflect the actual learning ecosystem – including roles like learning pathway navigators, success coaches, and ecosystem stewards.

"The primary focus should be on whether the adults employed by the separate systems that support youth thriving have the capacity and motivation to see themselves as interconnected actors and whether they are supported and valued for their diversity, not just in terms of race, gender, or generation, but also in terms of training, titles, and temperament."

Too Essential to Fail: Why Our Big Bet on Public Education Needs a Bold National Response (Pittman & Irby)

- **Building systems for shared measurement and learning experience design** – so that educators across settings can design, evaluate, and continuously improve experiences that are rigorous, relevant, and youth-centered.

- **Integrating real-world and out-of-school learning into formal education systems** – including giving credit for community-based learning, aligning goals across settings, and ensuring these educators are part of student support and learning planning processes.

- **Investing in relationship infrastructur**e – the staffing, scheduling, and collaboration time needed for educators across systems to build trust, coordinate efforts, and co-design learning pathways with youth and families.

Much of this work is underway but rarely connected. Afterschool systems have spent decades building professional development and continuous quality improvement systems that focus on creating

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relationship-rich learning environments and personal agency. Service corps, opportunity networks, and STEM networks train adults to work with young people in designing and implementing projects that tackle real-world challenges. We must scaffold these ongoing efforts into more intentional and vibrant ecosystems at the community level, where young people live, learn and explore. This is not simply about scaffolding together the existing systems at an institutional level but actually zooming in to strengthen the capacity and interconnections in the mesosystem – the people, places and possibilities that young people navigate everyday.

This is not a tweak – it's a rethinking. The educator of the future isn't defined by their title, but by their role in shaping powerful learning experiences that help youth thrive – across all of the places young people spend their time.

In the Age of AI, what young people need most is not just more content – it's more connection, meaning-making, and human guidance.

And that makes educators – in all their forms – more important than ever.

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How do we need to reimagine the role of educators and leaders? What does a healthy talent pipeline for the future of learning look like?

Frances Messano, Chief Executive Officer at NewSchools, and **Dr. Pete Fishman,** Senior Partner at NewSchools

Today, schools are being asked to do more than ever at a time when educators are stretched thin. Students' needs have become more complex, and the expectations placed on schools – from addressing mental health to preparing students for emerging careers – continue to grow.

The role of the educator, once bounded by the walls of a classroom, can no longer stay static. To prepare students for a rapidly changing world, we must reimagine the roles of educators and leaders – not by replacing them with technology, but by organizing teaching as a dynamic, continuously learning profession. The future of learning will depend on communities where adults and students learn in parallel.

Education innovators have been building toward this future for years. What's different now is not the aspiration but the moment: declining student outcomes, rising teacher dissatisfaction, and expanding expectations make change unavoidable while emerging technologies make it achievable.

What does the future look like, and how do we get there?

Elementary: Foundational Learning, Distributed Expertise

Imagine a bright elementary classroom where an expert teacher facilitates debate among a large group of students about the writings of Malcolm X. Nearby, a smaller group of students huddles around tablets, guided by an AI coach as they complete a close read and an apprentice teacher responds to questions. A team leader floats in and out of the room, jotting down notes as she prepares for the team's studio day, a weekly teaching team meeting where they discuss student work and develop

plans to support each learner, while a second shift of community educators engages students in multiweek, real-world projects.

In these environments, adults model the same curiosity, reflection, and feedback-driven learning that are being developed in students. A veteran teacher, a part-time reading specialist and a tutor aspiring to become a teacher might collaborate much in the way a medical team would support a patient – the attending physician, medical resident and nurse each contributing something different. New AI-powered tools complement the teams' expertise: speech recognition systems trained on young readers' voices provide real-time feedback to multilingual learners and students with dyslexia, while interactive math platforms encourage students to verbalize their reasoning, building both skill and confidence. These tools don't replace teachers; they amplify their impact and free up time for the human work of connection and guidance.

Middle and High: Distributed Learning, Expanded Ecosystems

Now, let's head across town. A high school chemistry teacher and an environmental engineer are co-leading a project where students design and test water filtration systems. Students are using AI to analyze real-time data from sensors as they develop a procedure to clean water from a local river. Later that week, students will present their findings to a community advisory group, who will share feedback with the students and their teachers. The chemistry teacher will use that feedback to apply for an interdisciplinary team teaching credential from the state, while the environmental engineer will include the experience on her resume.

In middle and high school, learning expands beyond the classroom walls. Many new schools are already connecting learning to opportunity by integrating early college, paid work-based learning, and industry credentials in fields ranging from healthcare and maritime to aviation and technology. These models also redefine what it means to be an educator. Teachers, industry professionals, and community

educators now work side by side to help young people gain both academic and practical skills. The "one teacher, one classroom" model is giving way to dense networks of expertise. Educators are becoming facilitators, mentors, and designers of learning ecosystems – roles that demand collaboration, adaptability, and deep empathy.

Leadership must evolve alongside these changes. The education leaders of tomorrow will be facilitators of adult learning ecosystems. They will align educators around a shared vision for student learning, recruit and develop exceptional teams, and align structures for adult feedback, practice and accountability to deliver on the vision. The best leaders will be learners among learners, modeling openness and continuous improvement.

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A Healthy Talent Pipeline for the Future

To sustain this vision, talent systems will evolve. Future pipelines will recognize that educators can move in and out of the profession, taking new learning with them and bringing new perspectives back. In these ecosystems, a veteran teacher might spend part of the week in a classroom, part mentoring novice educators, and part collaborating with community educators on real-world projects. Professionals from the private and public sectors might rotate in as adjunct educators or advisors, developing meaningful projects while discovering their own capacity to teach and learn. Everywhere, teaching will welcome a range of people into education and invite them to keep learning throughout their careers.

This will require fluid talent pipelines. The goal must be not simply to recruit and retain teachers but to develop a system that enables continuous adult learning. Shifting generational attitudes towards work, the high cost of traditional degree programs and emerging technologies will lead more people to pursue stackable credentials. These credentials will capture an educator's specialized expertise and signal their readiness to support students in acquiring knowledge, skills or real-world learning experiences.

Artificial intelligence enables this evolution. New AI-powered platforms expand access to coaching, simulations, and expert feedback, and make possible new forms of credentialing powered by multimodal assessment. The same principles that make AI effective for students – feedback, iteration, and adaptability – now shape adult learning as well.

Conclusion: Designing for Reciprocity

With student outcomes lagging and educators demoralized and dissatisfied, we face an urgent need to reimagine the role of educators. The good news is that a reimagined future is already visible in schools and organizations across the country. A maritime engineer mentoring students on ship design. A teacher co-developing curriculum with a game designer. An AI coach helping a reading teacher reflect on her practice.

These scenes aren't science fiction – they're early signs of what's possible when we expand who teaches and who learns. The most effective future schools will embrace a simple truth: everyone is both learner and educator. When adults and young people learn alongside each other, both grow stronger. That future is already unfolding.

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Pillar 3:
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We can imagine a world where human flourishing is the goal, and we can identify the new agents of learning who will guide us there. But a vision without a vehicle is merely a dream. Currently, our learning systems are fragmented, siloed by institution, and disconnected from the real world. To move from a disconnected archipelago of experiences to a seamless, learner-centered ecosystem, we must build a new digital and structural backbone. This section explores the invisible but essential infrastructure required to create coherence and guarantee access for every learner.

The construction of this backbone begins with a common language: a **skills framework**. We must ask what it means to shift to a currency of advancement not as seat-time, but demonstrated capability. Then, once a learner acquires a skill, where does it live? We explore the **learner wallet**, asking what digital infrastructure is needed to ensure learners, not institutions, own their records across the boundaries of school, work, and life.

But ownership is only valuable if there is something valuable to own. We must rethink **learning resources and content,** asking how we design many different kinds of learning experiences not just for learning, but for discoverability and credit-ability. How do we make learning visible wherever it happens? This leads inevitably to **measurement**. We challenge the monopoly of the standardized test, asking how we might capture rich, authentic evidence of growth and learning that truly reflects human potential. To navigate this complex landscape, learners need **guidance**, so we explore the role technology can play to elevate personalization. Finally, we address the glue that holds it all together: **data interoperability**. Why is the ability of systems to "talk" to one another not just a technical detail, but the essential component of a future-ready ecosystem?

These are questions of engineering as much as pedagogy. They ask us to lay the rails for a future where learning is not a series of stops and starts, but a continuous, coherent journey owned by the learner.

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What might it mean to shift to skills-first standards?

Kathleen Farley, Head of Internal Knowledge Platforms at Google

Throughout my career – as a teacher, school board member, university board member, and chief product officer for competency-based universities – I've encountered a persistent challenge: our education and workforce systems lack *interoperability*. They cannot effectively exchange information about what people actually know and what they can do. A student's coursework may transfer to one institution but not another. A worker's demonstrated skills often can't be verified for their next opportunity. Learning that happens outside traditional institutions remains invisible.

This fragmentation isn't just administrative inefficiency – it's a barrier to human flourishing. In the Age of AI, we need a pragmatic 'third way' that transcends old debates: not top-down standardization that stifles innovation, nor fragmented chaos where credentials lack meaning, but *consensus-driven* infrastructure that enables both local innovation and system-wide coherence.

Skills-first standards offer this path, grounded in shared values: *equity of opportunity* (recognizing capability wherever developed), *transparency* (verifiable evidence over opaque credentials), and *merit over pedigree*. If human flourishing is our north star, skills-first standards are the navigation system.

Standards Make the World Work

Think about everyday infrastructure: electrical outlets work with any device, WiFiand Bluetooth connect globally, traffic signals use universal colors. This isn't accidental, it's the result of *standards*.

Standards don't restrict diversity – they *enable* it. The electrical outlet doesn't dictate which lamp you buy. Standards create infrastructure that allows innovation and variety to flourish.

The same principle can transform learning. We need standards for *skills-based interoperability*: frameworks for defining, measuring, and verifying what people can do. The kind that let high school courses, college programs, corporate training, and work experience all communicate about demonstrated capabilities.

The Light Socket Principle

Consider the humble light socket: developed in the late 19th century to support Edison's screw based

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lightbulb design, its development was a crucial step in making electric lighting practical and widely accessible. When fluorescent, then LED bulbs arrived, we didn't rewire buildings nor did we redesign sockets. The standard stayed stable; innovation happened on top.

Skills-first standards can work the same way. Establish frameworks for defining and crediting demonstrated skills, and you've created the infrastructure that enables innovation in *how* those skills develop and can be measured. Schools, community colleges, corporate programs, online bootcamps – all different approaches plugging into the same system of standards for recognizing verified skills. Innovation thrives though-out the ecosystem; everyone agrees on what demonstrating skills means and how they are verified.

Learning from LEED

Want proof this works? Look at LEED certification for sustainable buildings. Since its public launch in 2000, over 111,000 projects worldwide have achieved certification.[1] The buildings look nothing alike: the historic Empire State Building, Apple's spaceship campus, a Kentucky hay shed, Shanghai's twisting tower.

LEED doesn't prescribe architectural styles, engineering design, nor specific materials. It sets rigorous performance standards: energy efficiency, water use, materials, air quality. Buildings achieve these in countless ways – strict about outcomes, flexible about methods. Three features make it work: tiered levels meeting organizations where they are, consensus-driven development by stakeholders, and voluntary adoption.

Skills-first standards can mirror this model: rigorous about verifying demonstrated skills, flexible about how people develop them, transparent about what mastery looks like.

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[1] U.S. Green Building Council. (2024). LEED project directory. As of June 2024, 111,397 LEED certified projects worldwide. https://www.usgbc.org/projects

Why This Matters Now: The AI Imperative

In the Age of AI, skills have shorter half-lives. Today's programming language becomes tomorrow's legacy code. Skills-first standards give us adaptive infrastructure: embrace new skills, revise evolving ones, retire obsolete ones without rebuilding the entire system.

A 16-year-old sees pathways from learning to careers. A 35-year-old reskills with portable proof. A 55-year-old demonstrates decades of expertise. Learners own portable records, navigate multiple routes to demonstrating competence, and build modular capabilities across a lifetime.

It Works: Evidence from the Field

Does this actually work? Western Governors University offers compelling evidence. WGU has awarded over 352,000 degrees with 22% annual growth.[2] The model works because it measures mastery rather than seat time – directly addressing the limitation of the traditional credit hour standard, which measures time (one hour of classroom instruction plus two hours of out-of-class work per week) but reveals little about demonstrated competencies.[3] What matters: 95% of employers rate WGU graduates' critical thinking and collaboration as equal to or better than traditional graduates.[4]

In my work developing competency-based universities, I saw this transformation. We created frameworks showing learners met rigorous, industry-informed standards rather than accumulating credit hours. Students who could demonstrate mastery graduated faster *and* better prepared. When the system recognized learning wherever it occurred, economic mobility became tangible.
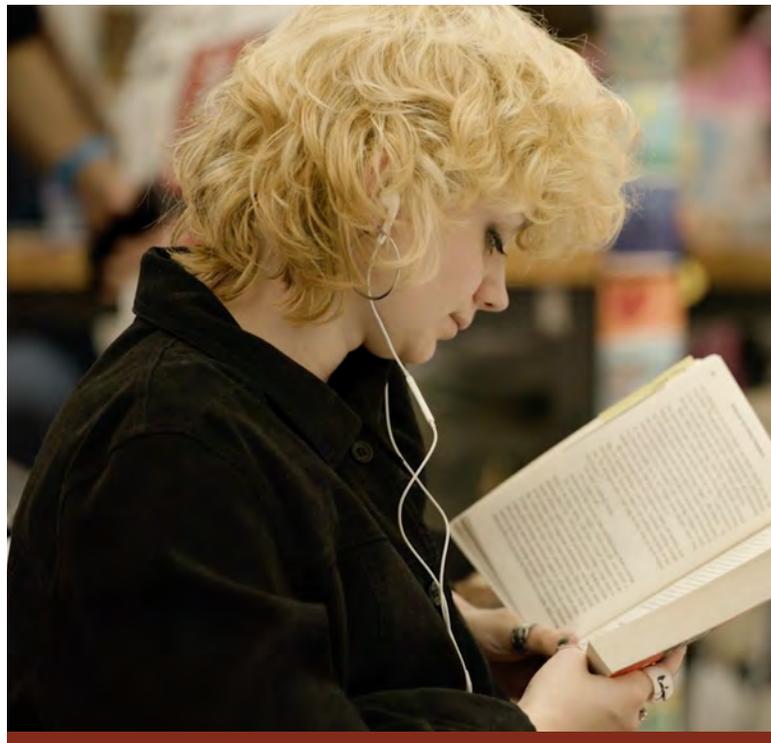
With a K-12 lens, the "Industry-Backward" mapping approach demonstrates this same efficacy. Through California's K12 Strong Workforce Program, curriculum is designed in reverse: starting with skill gaps defined by regional Industry Advisory Councils rather than academic tradition. In San Mateo County, this vertical alignment has tangibly shifted the classroom to match labor market demand. When local employers signaled a critical need for "Big Data" literacy, high schools evolved their math pathways, augmenting traditional Algebra 2 with applied data science. Similarly, after the biotech sector identified a gap in bio-informatics, the curriculum expanded to include software analysis alongside core biology. This approach maintains academic fundamentals while ensuring students graduate with the specific, verified

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[2] Western Governors University. (2023). Annual Report. WGU had awarded 352,368 degrees as of December 2023, representing a five-year compound annual growth rate of 22%.

[3] Lumina Foundation. (n.d.). The Carnegie Unit: A century-old standard in a changing education landscape. https://www.luminafoundation.org/files/resources/carnegie-unit-report.pdf

[4] Harris Poll. (2024). Employers Study 2024. Survey found that 95% of employers rated the soft skills of WGU graduates as equal to or better than those from other institutions.

competencies the modern economy demands.[5]

Building the Infrastructure Together

Without shared frameworks developed collaboratively across sectors, progress stalls. This requires *all stakeholders* at the table: educators, employers, workforce planners, technology providers, policymakers, and learners.

The Skills Professionals Association exemplifies this approach. SPA is developing Skills-First Certification – a voluntary framework modeled on LEED that evaluates organizations across hiring, development, mobility, and outcomes.[6] Standards emerge through consensus among diverse stakeholders, not mandate. Organizations achieve tiered certification (Silver, Gold, Platinum) with public disclosure creating accountability.

These standards aren't prescriptive about what skills matter or how to develop them – they establish processes for defining, validating, and crediting skills. A community college, corporate program, and workforce agency can use different pedagogies while sharing common language for demonstrated skills.

This is how systemic transformation happens: through network effects, not mandates. When enough organizations adopt skills-first standards, credentials become portable, labor markets become efficient, learners gain mobility. Isolated innovations connect into a coherent ecosystem enabling human flourishing at scale.

A Call to Action

Funders: invest in collaborative infrastructure – multi-stakeholder initiatives developing taxonomies, protocols, and certification frameworks. Not single-institution grants, but investments in connective tissue.

Practitioners and policymakers: engage across boundaries. Participate in consensus-driven standards with colleagues from education, workforce, and industry. Experiment. Create procurement rewarding verified capabilities. Push for interoperability.

The destination? Teenagers see pathways from interests to opportunities. Mid-career professionals pivoting without starting over. Lifetimes of learning recognized wherever they happened. Humans flourish because we developed a collaborative infrastructure that adapts with them.

The socket is ready. Now we need to build the light bulbs – together.

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[5] Bay Area Community College Consortium. (2024). Strong Workforce Regional Plan. Identifies "Biotechnology" and "Data Analytics" as priority sectors for San Mateo County, directing funding to high schools that adopt industry-backward curriculum. https://baccc.net/

[6] Skills Professionals Association. (2024). Skills-First Certification: Building a new standard for workforce excellence. https://www.skillprofessionals.org

What digital infrastructure will be needed to enable learners to own their learning?

Chris Purifoy, CEO and Co-Founder at Learning Economy Foundation

A Passport for Every Learner

Let's be honest – school was never designed to follow us. It's a place you enter, a chapter you close, a piece of paper you file away in a drawer. The diploma. The degree. The test score. And then life happens: the real learning – the messy, surprising, beautiful parts – most of which never make it onto a transcript.

Today, AI can write essays faster than students can read them, and skills are evolving faster than institutions can update a syllabus. The future is no longer a single path but a constellation of routes, detours, shortcuts, and side quests.

The question isn't just: *What should young people know?*

It's: *How can they carry their learning with them – everywhere they go?*

>> That's why we built the Lifelong Learning Passport (LearnCard).

Think of it as something small but powerful – a **digital passport** that grows with every learner. It doesn't expire. It doesn't disappear when you switch schools or countries. Each time you learn something – whether in a classroom, a kitchen, a robotics club, or under a tree in rural Kenya – that learning can be **verified, stored, and shared.** It becomes part of *your* story, written in human skills, not just grades.
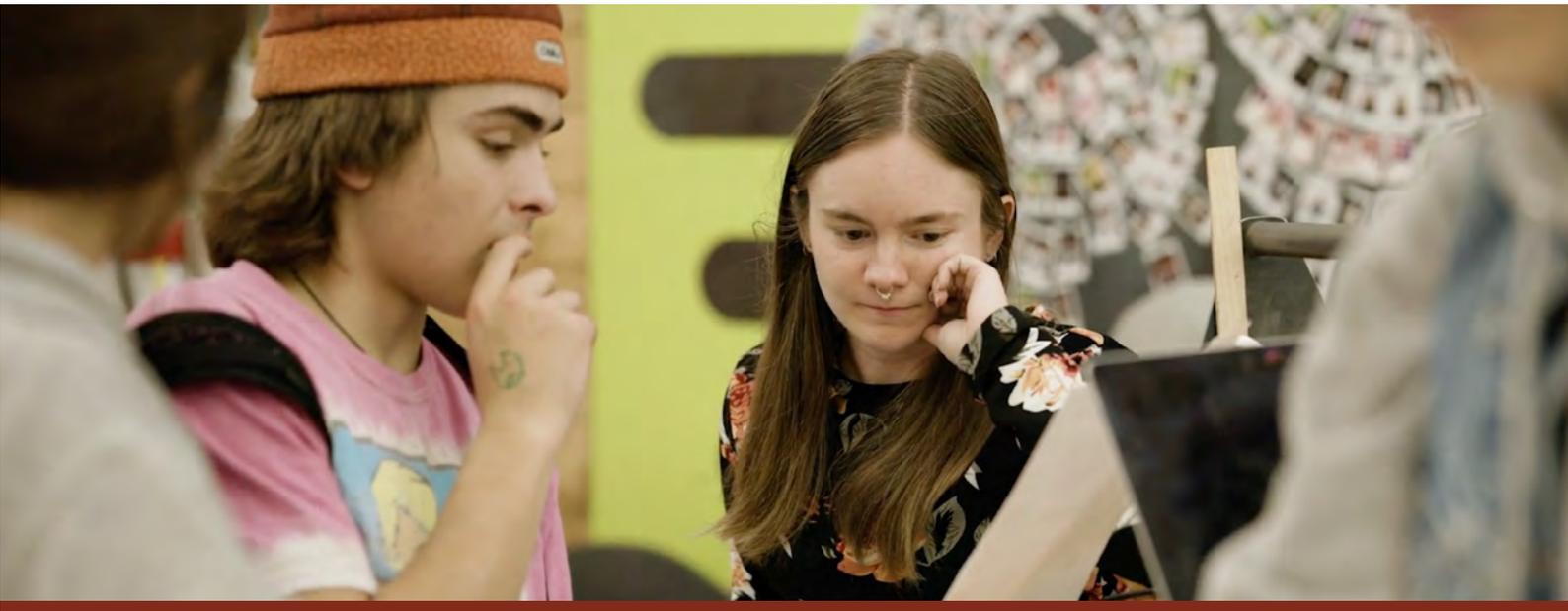
Sovereignty. Portability. Agency.

More than buzzwords – they're prerequisites for learning in the age of AI.

- **Sovereignty** means your learning belongs to you – not to a platform, a school, or a system that might forget you. You hold the keys.

- **Portability** means your skills travel with you across borders, institutions, and to jobs that don't yet exist.

- **Agency** means you choose how and when to use it – whether applying to a university, an employer, or a local co-op or community program.

This shift matters because AI is rewriting the rules of work and citizenship. We're no longer preparing people for "the future of jobs" but for the future of learning itself: dynamic, continuous, and radically personalized.

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The Simple Part

Here's the truth: if it isn't simple, it doesn't scale.

That's why a learner wallet functions like a **digital wallet for skills.** Governments can use it to verify credentials. Schools can issue transcripts or micro-credentials. Companies can recognize real competencies. And learners can better understand themselves and instantly prove what they know. No more lost transcripts or bureaucratic scavenger hunts. And it's not theoretical. It's working.

As one emerging example of a learner wallet, we've deployed LearnCard around the world:

- with school districts in Colorado and Wisconsin, issuing engagement-driven learner credentials,

- with World Scouting, enabling Scouts around the world to connect and share achievements,

- with partners like Roblox and LEGO Foundation, offering added portability and value to informal and game-based learning experiences, and with state partners, enabling the expansion of interoperable, career-connected passport networks.

As of September 2025, we've launched the first coordinated path to scale. And the most exciting part isn't the tech or infrastructure. It's the **journey unlocked for young people.**

>> **For a learning passport to endure, it must matter even if no one else is looking.**

Like writing a song, its value can't depend on external recognition alone. That's why learning passports must be built *with* learners, not just for them – so they become co-authors of their learning story, not merely holders of credentials.

Democracy Begins With Agency

Let's talk about democracy.

A thriving democracy isn't built on test scores – it's built on **informed, empowered citizens** who can learn, adapt, and participate. When learners own their skills, they're not only preparing for work – they're preparing for a v oice. When a young person can demonstrate *what they can do*, rather than justify *where they went*, they become impossible to overlook and easier to include. But before a learning passport opens doors, it should first help learners understand who they're becoming.

>> *This is dignity encoded in a passport.*

In a world where AI may automate many tasks but can't automate purpose, giving learners ownership of their story becomes an act of democratic preservation.

Scaling Equitably

A transformative vision only matters if it works for every student. Scaling learning passports across and beyond K12 requires three clear commitments:

1) **Integrate with existing systems.** Learning passports must align with curriculum, CTE pathways, and district tools so teachers and leaders can adopt them without extra burden.

2) **Guarantee equitable access.** Schools must ensure devices, connectivity, and credentialing pathways reach every learner – not just those with resources.

3) **Connect to real opportunities.** A learning passport is most powerful if employers, colleges, and community organizations value the skills inside it.

This is why partnerships matter most, and the early signals are encouraging.

- Employers are already recognizing career-connected credentials for apprenticeships and early-career roles.

- Universities are beginning to adopt and accept skills passports as integrated tools and supplemental evidence of readiness.

- Youth organizations from clubs to local co-ops are issuing informal learning credentials that count toward real pathways.

These initiatives show what's possible when schools, employers, and communities align around shared standards and shared responsibility.

The Age of AI Could Be the Age of Agency

Imagine a future where every young person – whether in Atlanta or Accra – has a learning passport proving what they can actually do. A teen who learned solar installation from their uncle can show it to a university. A young mother who upskilled online can prove it to an employer. A student who left school can return without losing a single skill they gained along the way. A learner discovers something new about themselves from the constellation of data in their wallet.

It's a quiet revolution: **a world where learning and opportunity follows the learner, not the other way around.**

And as AI reshapes work and society, this matters even more. AI will be a partner, a tool, a mirror – but humans must remain the authors. Authors need more than credentials; they need living passports of everything they've learned, built, created, and become. When learners have sovereignty, portability, and agency, AI becomes not a threat but an amplifier of human potential.

>> The Age of AI is coming fast. But maybe – just maybe – it's also ushering in the Age of Belonging.

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A Call to Action

If we want this future, we need a coalition – not someday, but now.

- **K–12 Leaders:** Start where you are. Issue skills alongside grades in existing programs – CTE, projects, service learning – on learning passports without waiting for system-wide reform.

- **Employers:** Name the skills you actually hire for. Recognize verified competencies for internships, apprenticeships, and early-career roles – not just degrees.

- **Higher Education:** Use skills passports as signal, not substitute. Accept them as supplemental evidence of readiness, persistence, and real-world learning.

- **Families:** Ask a simple question: *Where does my child's learning live?* Demand that what they learn – inside and outside school – travels with them.

- **Policymakers & Funders:** Invest in shared, interoperable infrastructure – so learning belongs to learners, not platforms.

- **Learners:** Claim your learning. Curate it. Carry it with you. Your story doesn't start at graduation – it's already in motion.

We don't need to build a perfect future. We just need to empower young people with the tools to build it themselves – and a learning passport is where their story begins.

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How do we need to shift program design and development for discoverability and crediting of learning?

Al Motley, Founder and CEO at Techademics

Learning happens everywhere. Our systems just don't see it.

Maria learned medical terminology and crisis communication at a community health clinic. Marcus built a working water filtration system in 4-H. James stacked retail leadership, online courses, and library workshops to pivot into healthcare. Each gained real capability. None of it counted when it mattered.

These stories are not edge cases. They are the everyday experience of learners whose growth unfolds across families, community programs, libraries, workplaces, and online spaces—but remains invisible to schools, colleges, and employers.

We have designed a learning system that recognizes effort only when it happens in the "right" places.

The cost of invisibility

Fragmentation extracts a quiet but enormous toll.

Learners waste time and money repeating what they already know. Talent is sidelined because it cannot be demonstrated in institutional language. Inequity deepens as those who rely on community and work-based learning—often working adults and diverse learners—find their achievements discounted. Motivation erodes when curiosity and persistence go unseen.
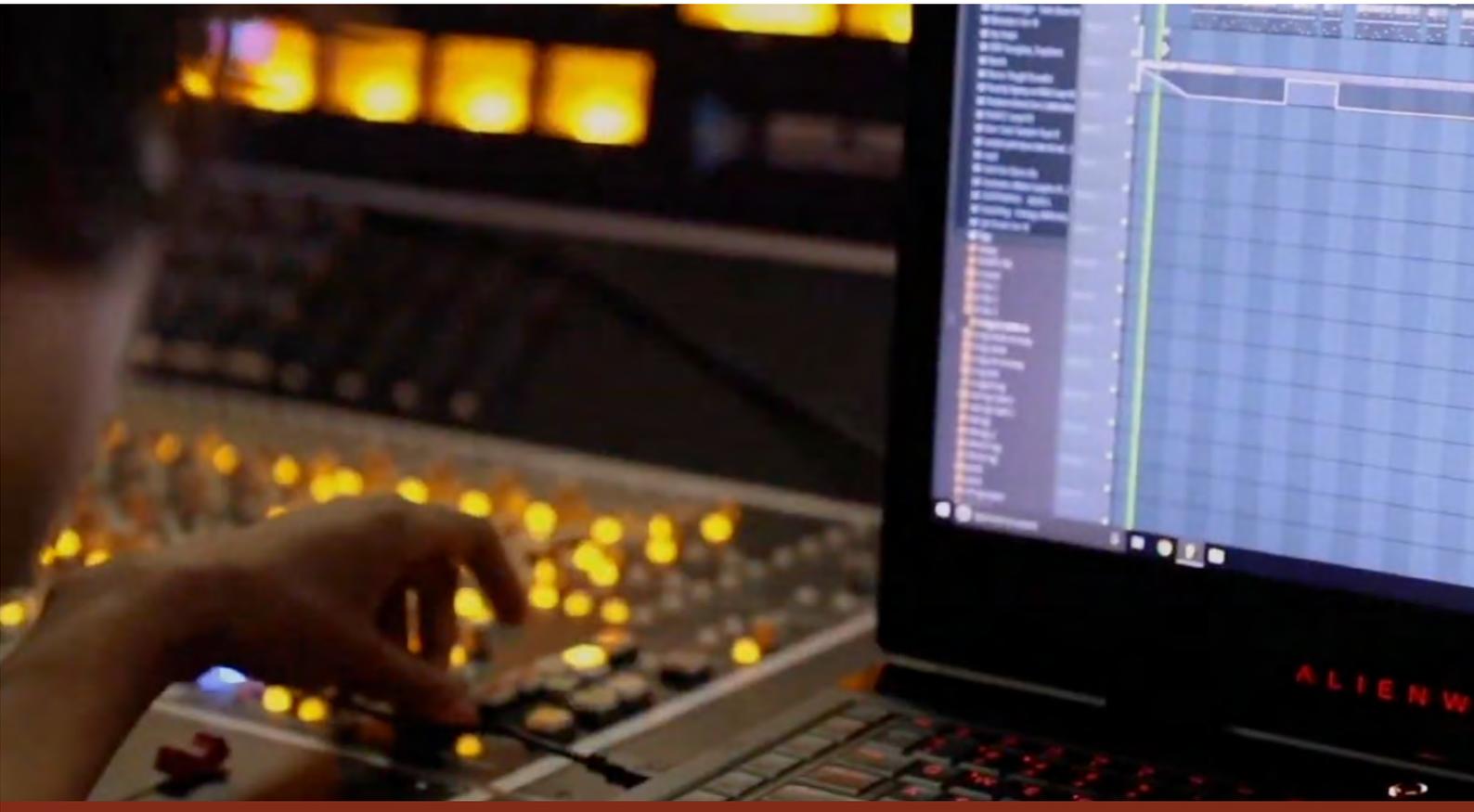
This is not a failure of learners. It is a failure of design.

We built programs in silos: schools with transcripts, employers with résumés, nonprofits with narrative reports. Each uses its own vocabulary. None interoperate. So learning becomes stranded.

And the system keeps reproducing itself. Credentials lock learners in. Technology platforms don't talk to each other. Accreditors and institutions protect what they control. These incentives are understandable—but they leave learners carrying the cost.

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What becomes possible when learning is legible

Imagine if every learning experience were designed to be **discoverable** and **recognizable** from the start.

That shift requires two things working together:

1) **Intentional design** — mapping experiences to shared competency frameworks, describing skills with precision, and issuing credentials learners can own.

2) **Enabling infrastructure** — systems that can exchange, verify, and interpret learning data across contexts.

This is where the vision of a Future Tech Stack becomes catalytic: a modular, interoperable backbone built around learner agency, not institutional convenience. At its core are components like a **Learner Wallet** to store and share verified achievements, a **Skills Framework** to describe competencies in machine-readable ways, and open data infrastructure so systems can connect without lock-in.

Think of email: different providers, shared standards, universal reach. Learning needs the same.

The technology already exists—Open Badges, verifiable credentials, interoperable skills frameworks. What's missing is the choice to design learning around them.

A different future for familiar learners

In this future, Maria's clinic maps volunteering to recognized healthcare competencies and issues digital credentials into her learner wallet. When she applies to nursing school, she chooses which to share. The admissions system recognizes them automatically. She places into advanced coursework—and saves a semester of tuition.

James's leadership becomes legible: "budget management under $500K," "team leadership for 10+ staff." His community college and employer see verified evidence, not just claims. Doors open that once required degrees he could not pause his life to earn.

Marcus arrives at middle school not as an unknown, but as a capable systems thinker whose filtration project lives in his wallet, ready to shape his pathway.

These are not science fiction. They are early pilots already gathering momentum—wallets, skills frameworks, open standards—signaling this is real and building.

Designing for the whole learner journey

This approach reframes schooling as part of a broader learning ecosystem. It honors that people move fluidly between roles—student, volunteer, worker, caregiver—and that infrastructure must move with them.

It also recenters power. Learners control what they share. Human relationships—mentors, peers, community guides—remain core, with AI serving as connective tissue rather than replacement.

Most importantly, it treats learning as cumulative across a lifetime.

Starting where we are

This is not about rebuilding everything at once. It is about practical steps that bend the system toward coherence:

For program designers:

Map experiences to shared frameworks. Issue portable credentials.

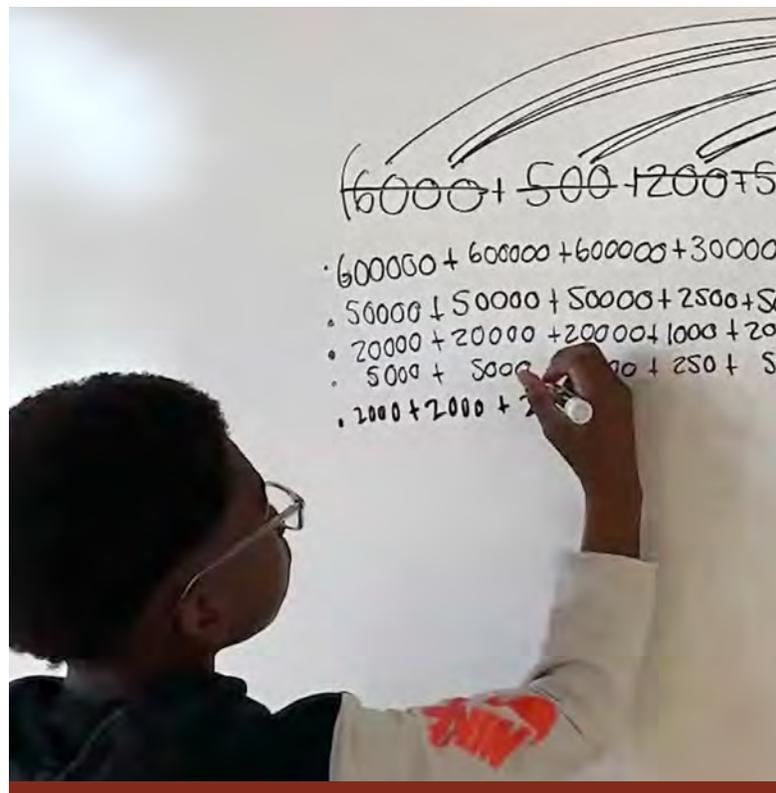**For schools and colleges:**

Accept one external credential this year. Publish equivalencies. Train advisors.

For community programs:

Document skills in the same language schools use—and ask for credit.

For employers:

Write job descriptions for verifiable skills, not degrees. Issue credentials.

For policymakers and funders:

Require open interoperability. Invest in shared infrastructure, not just tools.

Each action is small. Together, they change what counts.

Start tomorrow

We can keep designing systems that work for a narrow slice of learners—or we can design as if whole lives matter.

The tools exist. The stories are real. The momentum is building.

The choice is ours: make learning legible, portable, and human—or keep asking learners like Maria, Marcus, and James to prove themselves again and again.

BACK TO TOC ›

How might we capture evidence of growth and learning beyond the "test"?

Samantha Maskey, Director of Admissions at Minerva University

In an era of accelerating technological innovation, especially with the rise of artificial intelligence in the workplace, the limits of traditional, content-focused education models have become clear. Economist and futurist Linda Nazareth believes people must cultivate an 'armor' of uniquely human skills resistant to automation to ensure future-proof careers.[1] This perspective has prompted higher education institutions to reevaluate their foundational objectives, shifting focus from the mere acquisition of knowledge to the holistic development of human capacities. Consequently, it will be argued here that educational institutions must not only identify and prioritize essential human competencies – such as leadership, adaptability, and ethical reasoning – but also implement new assessment strategies that meaningfully capture these dimensions of growth. Such a transformation

is imperative. Only through this change can graduates obtain the proper skills to thrive in professional landscapes constantly reshaped by technological change.

With the shift to a skills-based educational framework centered on individual learner development, assessment must move beyond traditional content-focused examinations and embrace more holistic methods. Approaches include performance-based assessments, where students demonstrate practical skills in real-world contexts; reflective assessments, which use structured prompts to encourage self-evaluation and critical reflection on personal growth; and portfolio assessments, which allow students to curate and present evidence of their achievements over time. These methods promote active engagement in the learning process and encourage students to

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[1] https://economictimes.indiatimes.com/news/international/us/how-to-save-your-job-from-ai-the-human-skills-that-automation-cant-replace/article-show/124347256.cms?utm_source=contentofinterest&utm_medium=text&utm_campaign=cpps;t

articulate their reasoning, capturing aspects of learning that conventional examinations often neglect. Furthermore, content-based tests fail to address the presence of artificial intelligence in academia and the reality that it can generate correct answers to such tests. This further underscores the importance of process-oriented assessment methods for cultivating and evaluating the complex skills required in the contemporary world.

Let's first discuss how practical application is a vital mechanism for assessing holistic student development, as it requires learners to transfer theoretical knowledge to complex, everyday situations. When students engage with real-world

scenarios, they not only demonstrate cognitive understanding but also their capacity to synthesize, adapt, and implement learning effectively. Empirical research supports this by showing how assessments emphasizing application and inference, rather than mere recall, yield moderately positive effects on transferable learning (effect size ~$d = 0.40$).[2] At Minerva University, applied learning is a key component of the education model and culminates in a Capstone project in which students integrate interdisciplinary knowledge, skills, and personal interests into a deliverable of substantive value within their field. One alumna cited her experience contributing open source code to a World Policy Analysis Center[3] project during her capstone as instrumental in obtaining her position at UC Berkeley's Data Science and Environment Center. This case illustrates how assessments grounded in practical relevance can more accurately predict professional success, as they align closely with the competencies required in contemporary careers. It is important to acknowledge that applied assessments may face challenges of standardization and objectivity, so institutions must work to ensure all students have access to real-world application opportunities. But when viewed comprehensively, engaging in applied work fosters essential problem-solving skills and cultivates the reflective, adaptive mindset that graduates need to become change-makers ready to address today's evolving challenges.

Structured self-assessment is another valuable approach for evaluating a range of personal and professional competencies, as it requires students to analyze their strengths and identify areas for further development. Examining how individuals navigate challenging situations allows teachers to observe essential traits such as resilience and adaptability. Reflective practice encourages not only recognition of existing skills but also stimulates ongoing growth. Research on engineering employability highlights that the effective integration of theoretical and practical knowledge is contingent upon students'

[2] https://www.mdpi.com/2071-1050/16/17/7826

[3] https://www.minerva.edu/blog/alumna-highlight--magali-de-bruyn/

capacity to act as "agentic partners in their personal development".[4] Individuals who possess well-developed metacognitive awareness and engage in critical self-reflection are generally better equipped to direct their learning trajectories, respond flexibly to dynamic workplace demands, and continually enhance the competencies vital for success today. Moreover, artificial intelligence can augment self-reflection by providing objective feedback and targeted learning resources. Once students identify areas of weakness, AI-based tools can offer customized strategies to address these deficiencies, thereby supporting more accurate self-evaluation and skill development.

Portfolio assessment provides another critical framework for evaluating student expertise. It requires individuals to document the evolution of their projects, capturing their creative and cognitive processes rather than merely displaying results. This approach is validated by Prof. Jason Gulya at Berkeley College, who notes that traditional assignments offer instructors limited insights, whereas portfolios enable students to "string together separate, distinct assignments into a single narrative of personal growth."[5] The emphasis thus shifts from isolated outcomes to the progression of competencies, fostering metacognitive awareness and highlighting resilience in the face of challenges. Portfolio development also often incorporates opportunities for discussion, feedback, and iterative revision, which further support meaningful learning. AI can play a role in portfolio development if students are asked to reflect on their use of AI tools in creating their portfolios and to include artifacts that showcase how they have integrated their AI workflows into their academic journeys. As a whole, portfolio assessment offers a multidimensional and authentic means of assessing students' abilities to synthesize, adapt, and innovate, making it a valuable evaluation tool.

With the advancements being utilized in digital technologies today, including artificial intelligence applications such as ChatGPT and various project management tools, task completion and cognitive management rely less on a person's critical thinking. However, while AI excels at automating data analysis and routine processing tasks, resolving complex societal challenges will require genuine collaboration between human intellect and technological systems. Humans contribute uniquely through qualities such as curiosity, adaptability, and creative reasoning – capacities that remain beyond the current scope of machine automation. To effectively cultivate these uniquely human competencies, educational

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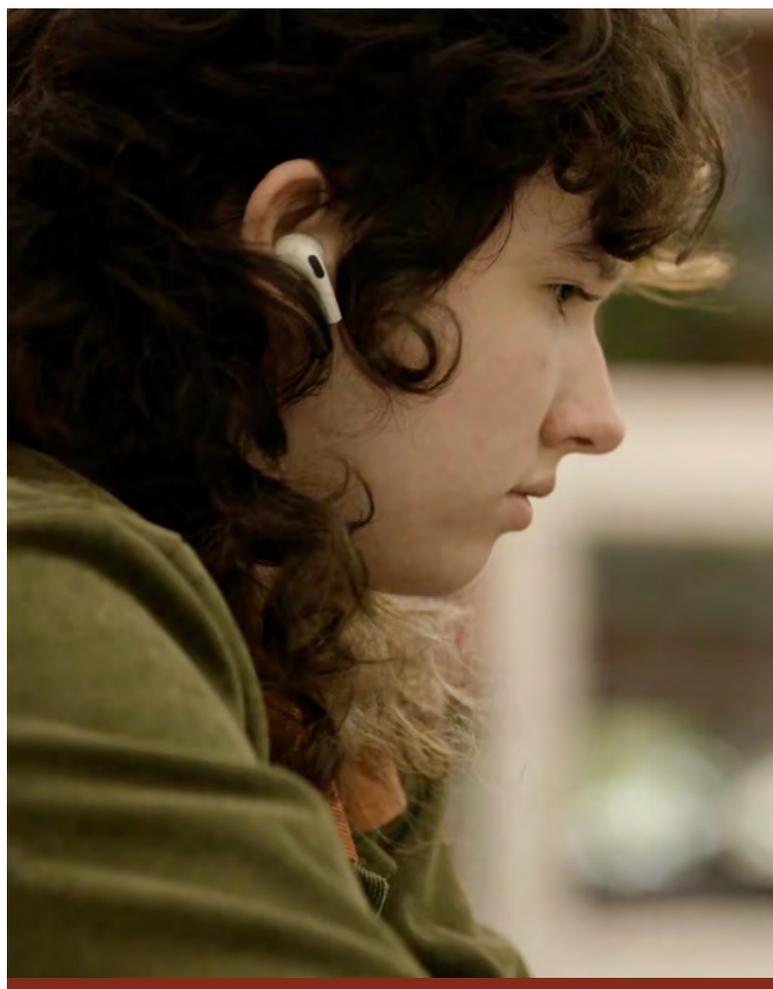
[4] https://aaee.net.au/wp-content/uploads/2018/09/AAEE2017-Bennett-Employability_through_the_lens_of_self_and_career_literacy.pdf
[5] https://www.scribd.com/document/939153177/Trends-Report-2

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institutions must undertake a comprehensive reexamination of curricula, assessment methodologies, and evaluation criteria. This change should not only happen in higher education; it should begin early, so that students learn from a young age to frame their learning journey through the lens of holistic development. The adoption of performance-based, reflective, and portfolio assessments directly addresses the limitations of traditional content-focused models, emphasizing comprehensive growth and the development of adaptable, ethically grounded professionals.

Collectively, these assessment strategies serve not only to differentiate human cognitive capabilities from automated outputs but also to guide the ethical integration of AI within academic and professional environments. By systematically documenting and reflecting on students' cognitive processes, educational programs will promote self-awareness and lifelong learning, ensuring that graduates are equipped to thrive in an environment increasingly shaped by technological innovation.

BACK TO TOC ›

How might we capture evidence of growth and learning beyond the "test"?

Brooke Stafford-Brizard, Senior Vice President at Carnegie Foundation for the Advancement of Teaching

As the Age of AI unfolds at an astounding rate, questions like this continue to emerge focused on the power of AI to catalyze and accelerate innovation. Yet, too often, we answer these questions through a lens of reform – making the current structures and systems better, instead of transformation – changing the system. A reform-oriented answer here would accept far too many of the traditional definitions and methodologies that we hold within the assessment field. That reform-oriented answer might suggest faster and efficient ways to measure traditional academic knowledge, and maybe even propose approaches to testing beyond multiple choice. However, if we do not interrogate what we measure, how we measure, and when we measure on a deeper

level as we think beyond the "test", we will squander an opportunity to transform our education system toward one that is engaging, relevant, and effective for every young person.

What We Measure

We currently assess a scope of K-12 academic standards that have remained the same for over a century. In 1894 the Committee of Ten introduced the vision of commencement-level success as defined through a high school diploma. Although our workforce and society have evolved significantly, requiring an expanded set of skills and knowledge, we have never revisited the diploma at scale. Until now. Growing demand for durable skills from community, industry and higher education, has led to almost half of our states developing Portraits of a Graduate. These Portraits include core academic skills, as well as durable skills like curiosity, critical thinking, adaptability, and collaboration, which are grounded in the science of human development and predictive of multiple measures of success from high school and college attainment, to happiness. As we imagine how AI can effectively capture learning and growth, it is important to align on the purpose of our education system in service of this broader set of skills and knowledge because these constructs cannot be measured within the traditional paradigm of assessment. Prioritizing durable skills means evolving beyond the traditional concept of mastery. "Mastering" collaboration is not the same as mastering algebraic knowledge. There are indeed core skills required for collaboration that an individual can develop and demonstrate like goal-setting and active listening. However, effective

collaboration does not simply rely on a number of individual skills, but contextual factors as well. How long has the team been working together? Is there a power dynamic to navigate? What levels of prior knowledge and expertise exist on the team? Successful capture of learning and growth connected to collaboration will need to include these contextual factors in order for the insight and feedback to be meaningful, which presents myriad implications for how we measure.

How We Measure

Our traditional assessment infrastructure holds a number of assumptions about knowledge and skill acquisition as a fixed and final achievement. With regard to durable skills in particular, AI will provide the opportunity to capture and present learning and growth along a trajectory, painting a more meaningful picture of development in multiple content areas and contexts. Imagine feedback on effective collaboration in both chemistry class and orchestra, with insights from both that will inform application and transfer to other contexts. In addition, when it comes to a student's trajectory of growth, we also rely on normative scores that compare students to a "normal" trajectory. All of this reinforces the *ages and stages* (i.e., grades K-12) structure of our education system – a standardized and rigid approach to child and adolescent development, which science continues to reject. Whether it applies to reading or recovering from trauma, individuals do not follow one "normal" trajectory; rather, multiple pathways for development have been demonstrated within the research (Stafford-Brizard, Cantor & Rose, 2017). The potential for AI to capture and represent these multiple pathways to inform instruction and assessment at scale will make personalized learning grounded in the science of human development possible.

When We Measure

Finally, a truly transformative approach to assessment will end the concept of testing as an event. This doesn't suggest that high stakes, high

reward milestones like the completion of a complex project or public presentation of work should not exist. However, if the purpose of testing is to gauge understanding of a concept or demonstration of a skill, then AI can support the capture of this through artifacts and behaviors drawn from authentic contexts. Measurement of a student's learning and development can occur while it is happening and demonstrated. Blurring the experience of learning and assessment will mean an end to the disruption and wasted time of educators who are traditionally forced to make space for summative and high stakes assessment. Reclaiming this time back means unlocking hundreds of hours for effective teaching and learning. As important, for the student, removing the high stakes assessment event means reductions in anxiety and stress.

The biggest opportunity we face in capturing evidence of learning and growth beyond the test, is not simply innovative assessment methods, but the potential to place the vast share of our resources toward learning experiences that make school the supportive, joyful, and purposeful place it should be – a place that prepares youth to thrive and lead beyond commencement.

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How might we capture evidence of growth and learning beyond the "test"?

Dr. Temple S. Lovelace, Executive Director at Assessment for Good, AERDF & Founder and CEO at Oluko Learning

At this moment in time, machine learning has evolved where most of ed-tech is operating in a post-generative space, when artificial intelligence (AI) has already fundamentally reshaped the landscape of educational tools. This means that not only are students and educators learning in a technology-mediated way, but where tech-free explorations show up are vastly different. For example, a child's first encounter with self-guided reading of a novel or chapter-book might be on a screen rather than a printed page and with one click, they may be able to generate different versions of that text that increase relevance or provide a more personalized approach to how they are understanding foundational literacy skills. Even more, assessment is now embedded in such a way that it has become embedded and indistinguishable from discrete learning tasks.[1]

Educators are also utilizing a more AI-informed approach for how they prepare instruction[2], even as we are still trying to optimize how to leverage these capabilities to retain the flow that educators hope to see during a lesson arc.[3] This expands to beyond the classroom, for the use of frontier models (i.e., Anthropic, Google, and Open AI) have made it even easier to integrate AI into your daily decision-making, such as through meal planning, travel, and daily prompting for mental health, whether you are 13 or 98.[4] This means that a third horizon most certainly will include the need to grapple with *how* AI is impacting education, not *if* AI will impact education.

Even in the race to include generative capabilities in our tools, a call remains, "How might we truly capture the full spectrum of young people's growth and learning in ways that prepare them for this transformed landscape?" Assessment for Good, a research and development program supported by the Advanced Education Research and Development Fund (AERDF), in partnership with Knowledgeworks,

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[1] https://www.the74million.org/article/drawing-on-video-games-educators-land-on-unlikely-idea-playful-assessment/

[2] https://news.gallup.com/poll/691967/three-teachers-weekly-saving-six-weeks-year.aspx

[3] https://www.timesunion.com/news/article/ai-generated-lesson-plans-fall-short-on-inspiring-21230485.php

[4] https://ihpi.umich.edu/national-poll-healthy-aging/national-findings/how-older-adults-use-and-think-about-ai

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asked of the field "What are the Futures of Assessment?" In this interactive report[5] contributors forecasted To begin to tackle this, we must also question the role of "the test." A time-honored ritual of bubbled answer sheets and standardized metrics, that even now in its computerized form, captures only a narrow slice of human capability. With the time assessment takes, including the preparation by teachers[6], that precious instructional time is being taken by a practice that is not telling us all we should know about student experience and learner development. It is akin to trying to understand the ocean by examining a single drop of water, standardized testing reduces the rich complexity of learning to isolated data points that only sample our academic standards, which tells us very little about each learner, let alone if we've truly been accountable to them as facilitators of their future (insert reference). As we prepare young people to flourish, despite the Age of AI, we need assessment approaches that mirror the multifaceted, dynamic, and deeply human capabilities they'll need to thrive.

The Limitations of Testing in an AI Age

The irony between AI and assessment is stark. As AI becomes increasingly capable of performing routine, replicable tasks, such as quickly finding predictable patterns and connections amongst data, our assessment procedures continue to ask learners to perform similarly narrow tasks, such as recall information and execute procedures to show their skill mastery. What AI cannot do, and what will become increasingly valuable as we try to capture more dynamic learning, are the uniquely human capacities that come from experience — creativity, emotional intelligence, cultural understanding, ethical reasoning, and the ability to navigate ambiguity and build meaningful relationships. Thus, our assessment practices are both enhanced and held back by the promise of AI if we are not careful. As a field, absent this capability, we have yet to capture growth in such a way to promote learning that is rich, real-world relevant, and connected to a learner's experience.

A choice remains, to stay in the limitations of traditional testing, which endangers a future of learning that perpetuates what we name as a "deficit view" of learners, particularly those furthest from opportunity, such as learners situated in poverty and learners with disabilities. Our assessment practices often ask students to prove their worth against narrow, biased standards rather than revealing their unique brilliance and potential.

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[5] https://futureofassessment.org/
[6] https://www.k12dive.com/news/how-do-you-get-the-right-amount-of-testing/448207/

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Asset-Based Assessment: A Path Forward

The concept of asset-based formative assessment offers a compelling alternative.[7] Rather than focusing on what students lack, this approach seeks to unveil strengths and build upon them. Explored through the Futures of Assessment forecast, this approach to assessment, when implemented thoughtfully, can create conditions for capturing evidence that reflects learning that is connected, dynamic, and reflects how learning occurs, naturally. In our call for a new era of assessment[8], we must think beyond core content knowledge and imagine an experience that brings learning to life.

- Feedback and Dialogue: Assessment that includes ongoing conversations among learners, educators, and caregivers—a continuous exchange that informs all parties simultaneously.

- Customized Support: Recognition that each learner's journey has its own rhythms, responding to their unique needs, interests, and goals while honoring the fuller context of their lives.

- Agency: Developing learners' capacity to act on the world, expanding how, when, and where they engage in discovery and assessment.

- Expanding beyond the Content: Attending to holistic learning, fostering development, connection, and engagement to learning environments.

- Life-long learning: Creating pathways that extend learning opportunities into communities, breaking down artificial barriers between school and life.

Capturing Evidence in New Ways

So how might we actually capture evidence of growth and learning beyond the test? This requires a reimagination of what we measure and how that relates to student learning. Think about this dichotomy within portfolio assessment: A student brings together all of their assignments into a folder in their cloud-based classroom account. They upload all of their assignments and then, an embedded LLM summarizes the assignment for each teacher, automating the teacher review of materials and suggesting a grade. Conversely, the same capability could be utilized in a more connective way. That same portfolio assessment could be a chat-based interface that helps learners document their own learning journeys through self-reflection and peer assessment on classroom assignments, building crucial metacognitive skills. As students upload an assignment, they are asked to examine patterns in

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[7] www.futureofassessment.org
[8] https://ascd.org/el/articles/the-future-of-assessment-is-now

their individual or group-mediated learning. As the quarter continues, they develop the self-awareness needed to direct their own growth as they explore connections across their assignments.

These twists on capability integration will be critical for us to not only monitor, but to engineer towards a future that is not just plausible, but preferred[9], to position AI as a facilitator of learning that is more "customizable and transparent" rather than "prescriptive and opaque." The plausible goal is a re-imagined future that automates assessment. However, a preferred future could be the opportunity for us to understand learner development, to understand the contexts across which that development occurs, and capture that learning in such a way that allows trusted adults to see their brilliance more fully and make decisions that are rooted in facilitating that learner's maximized potential.

When we think about the technological surprise that we could garner under this era of fast-moving innovation, we should be courageous to move farther than just an agent that summarizes, to generative and traditional AI applications that could help us recognize patterns across diverse forms of evidence—from project portfolios to community service, from creative expressions to collaborative problem-solving. Breakthroughs in this vein can help translate rich, multifaceted learning experiences into meaningful insights, without reducing them to simple scores of learner status and proficiency—preserving instead the complexity that makes each learner's journey meaningful.

A New Era Imperative: Building Trust and Community

This means that the definition of assessment and the role of "the test," has to move beyond sitting in front of a computer within four school walls. It has to involve families and communities as genuine partners in the process of assessment in service of

learning[10], recognizing the funds of knowledge that exist outside school walls. It means creating the opportunity for young learners to see themselves as part of a larger narrative of growth and contribution.

By moving beyond the test, we move toward an assessment and learning process that honors the full humanity of our learners and prepares them for a future where their uniquely human capabilities—creativity, empathy, wisdom, and moral reasoning—will be their greatest assets *expanding* our understanding of what constitutes core content knowledge across the school-age lifespan. Even more, they likely become the best levers in powering learning that exceeds beyond what we imagined as the field absorbed and ran with Bloom's two sigma discoveries. In the age of AI, reimagining assessment isn't a nice to have;it's an essential step for finally supporting individual flourishing in a customized way towards maximized lifelong success and opportunity.

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[9] https://knowledgeworks.org/resources/tool-exploring-plausible-probable-possible-preferred-futures/
[10] https://onlinelibrary.wiley.com/doi/10.1111/emip.12370

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How does transparency in AI infrastructure build trust and enable true personalization and agency?

*Yusuf Ahmad, Co-Founder at Playlab AI, and **Betsy Corcoran**, Senior Advisor at Playlab AI*

Will learners trust AI systems? Should they?

Innovation moves at the speed of trust, especially during complex times of change. So for innovation to flourish – for the changes that we're proposing to schools and systems of learning to take hold – we need to build in authentic signals and measures that instill trust.

"Black boxes," or systems that we're told cannot be understood, are mysteries by design. We may be told to trust them by advocates or spokespeople. But that confidence is deservedly shallow. We build trust in systems we understand. So core to building trust-inspiring AI systems is to make them transparent, subject to questioning, critiquing and ultimately reshaping by the people who use them.

The chatty, familiarity of generative AI apps gives them a veneer of personalization: They address us by name, remember our comments, and weave those points into additional questions. But commercial AI systems are too often like the chattiness of a stranger. Especially in learning environments, chattiness isn't true personalization.

The best teachers know that true "personalization" of learning braids together learning objectives, quality curriculum, an understanding of what the learner does – and doesn't – understand, and encouraging challenges for learners to do more. When teachers can build those kinds of environments for their students, using elements that time has shown will lead to better outcomes, trust soars.

Over the past two years, as Playlab has built out its AI infrastructure, educators have told us what foundational elements they need to have to build effective AI learning apps. They want:

- The technical means to fortify their apps with content they know is high quality and objective;

- Time to develop the practical know-how around app building, supported by many examples of similar, proven apps;

- Support in collecting and analyzing where learners have gaps in their understanding of content;

- AI tools that can review whether the apps they build achieve their goals.

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When those elements come together, we see powerful results.

In New York City, we've seen instructional designers fuse high-quality curriculum, such as Illustrative Mathematics, with the richness of student-chosen projects to build responsive and finely tuned AI apps that help students and teachers apply math concepts to real world problems. The leading coach there says she has iterated her tool more than 80 times, continually evaluating its relevance and effectiveness.

Her tool, in turn, has become an exemplaire for other math coaches and teachers. With a few clicks, they can see literally all the instructions and background materials she has used – and then make choices about whether their students need different resources.

Similarly, the chief academic officer of a network of charter schools in Texas spent a summer writing 260 distinct AI apps for the teachers in her schools, drawing on her decades of experience. She embedded into the apps she built detailed curriculum, rubrics and scores of instructional steps. Once school was in session, her teaching staff first saved hours of work by using those apps to create lesson plans. Then they began building their own apps using her apps as models. A science teacher described how she built an app that queried her 80 ninth-grade students about their interests and then suggested potential topics for science fair projects. Instead of getting 80 projects about volcanoes and elephant toothpaste, her students began investigating questions that interested them: How much bacteria accumulated on gym equipment and how different natural disasters might affect their school buildings. "I'm honestly blown away, these projects are a huge step up from last year. Our kids really leveled up," she said.

Another education leader felt his confidence in the apps he built soared when he integrated what's called a "knowledge graph," a detailed topology of how concepts are connected. As a result: when he introduced students to new skills, the embedded knowledge graph helped pinpoint gaps in their understanding and design exercises to develop the

skills they needed. The knowledge graph made the AI apps uniquely relevant to individual students (and additionally kept the AI from hallucinating about "possible" next steps, untethered to reality).

In these and many more cases, educators are purposefully building "guidance" into their applications. They are not relying on black boxes to do the work. Instead they are purposefully choosing the content, the knowledge graphs and the assessment tools to build applications that respond to the unique needs and context of their students. They can only do this in a transparent environment, one where they can peer into applications and make changes. That environment builds trust.

Teaching and learning are inherently human activities: Students are motivated by teachers who are interested in them. When teachers and their students know how to manage and build AI systems, when they have access to quality content and tools, they can build systems that are responsive to individual learners. Those systems are truly personalized and will become the building blocks of a quality learning ecosystem.

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How is interoperability the essential infrastructure for human-centered, future-ready learning?

Erin Mote, *Founder and Chief Executive Officer at InnovateEDU*

I'm often asked about the future of education. For a long time, my answer revolved around improving the components of the system we already have: smaller class sizes, more project-based learning, and better technology integration. I spoke about creating more humane, inspiring versions of schools.

But my perspective has fundamentally shifted. As the realities of the information age, accelerated by artificial intelligence, have crystallized, I've realized that optimizing the current model is like putting a

faster engine in a horse-drawn carriage. The chassis is wrong.

The future isn't about iterating on the industrial-age structure of "schooling" – a system designed for efficiency, standardization, and compliance. It's about moving beyond it entirely and architecting a true *learning system*.

A learning system is an ecosystem designed for agency and adaptation. It meets learners where they are, charting personalized pathways based on mastery, not seat time. It shifts the educator's role from a "sage on the stage" to a coach and facilitator. It moves beyond asking, "What do you know?" to asking, "What can you create with what you know?"

If we are serious about this transformation – about moving from an industrial model to a true information-age ecosystem – we must address the unseen architecture that holds the current system in place. The core and foundational element of this transformation is not a new curriculum or a new device. It is data interoperability.

And it is the only way we can simultaneously personalize learning at scale while upholding our profound responsibility as stewards of learner data.

The Promise of a Connected Ecosystem

Project Unicorn defines interoperability as "The seamless, secure, and controlled exchange of usable data between applications." It sounds technical, but its implications are profoundly human.

Today, a learner's journey is fragmented across dozens of platforms, tools, and experiences. A student's brilliance in an after-school program, their

progress in an online tutor, and their performance on a classroom project often live in separate silos. Educators are forced to spend countless hours manually synthesizing this information, serving as human APIs just to understand their students' holistic needs.

This fragmentation is the enemy of personalization.

Only through data interoperability can we gain a systemic way to understand and support the learner's journey. It is the infrastructure that enables a shift from rigid, time-based measures to mastery-based progressions. It allows learning that happens anywhere – in a museum, an internship, or a classroom – to be recognized and credited through mechanisms like Learning and Employment Records (LERs).

Interoperability transforms complex, disparate datasets into actionable insights. It allows us to build tools that don't just report data but make it understandable and actionable for every educator, parent, and learner. When data flows securely, educators are equipped with the information they need to personalize instruction, intervene effectively, and enhance how we measure growth beyond standardized assessments.

The Non-Negotiable: Trust and Security

When we talk about connecting data systems, the immediate and necessary concern is privacy. In this economy, data is an incredibly valuable asset. Our promise to learners must be that we are vigilant stewards of their information.

It is crucial to understand that interoperability and security are not opposing forces; they are two sides of the same coin. A connected ecosystem *must* be built on a foundation of trust.

In fact, the current fragmented landscape is less secure. Data is everywhere, often duplicated, manually transferred via insecure methods, and inconsistently protected. True interoperability allows us to establish a "SAFE by design" approach – prioritizing Safety, Accountability, Fairness, and

Effectiveness. It allows for the implementation of advanced Privacy-Enhancing Technologies (PETs).

We can leverage technologies such as federated learning, in which AI models are trained on decentralized data without the raw data ever leaving its secure source. We can employ differential privacy and strict data minimization to ensure we collect only the absolute minimum data necessary.

Interoperability provides the framework for controlled access. It ensures that the right people have access to the right data for the right reasons, all while prioritizing the protection of children. Security is not achieved by locking data down in unusable silos; it is achieved by creating secure, standardized pathways for its controlled exchange.

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The Human Element: Liberating Educators

The ultimate goal of this infrastructure is profoundly human. In a world increasingly shaped by AI, the essential human skills – critical thinking, communication, emotional intelligence, and ethical reasoning – matter more than ever.

The current system burdens educators with administrative tasks and content delivery that machines can often handle more efficiently. By leveraging interoperable data systems, we can automate routine tasks and provide educators with sophisticated tools that analyze student progress and suggest personalized pathways.

This doesn't replace the educator. It liberates them to do the profoundly human work that machines cannot: to mentor, inspire, challenge, nurture emotional intelligence, and cultivate wisdom. It allows educators to focus on fostering genuine understanding rather than merely optimizing for engagement metrics. When a connected, secure infrastructure supports educators, they can move beyond being deliverers of information and become true facilitators of discovery.
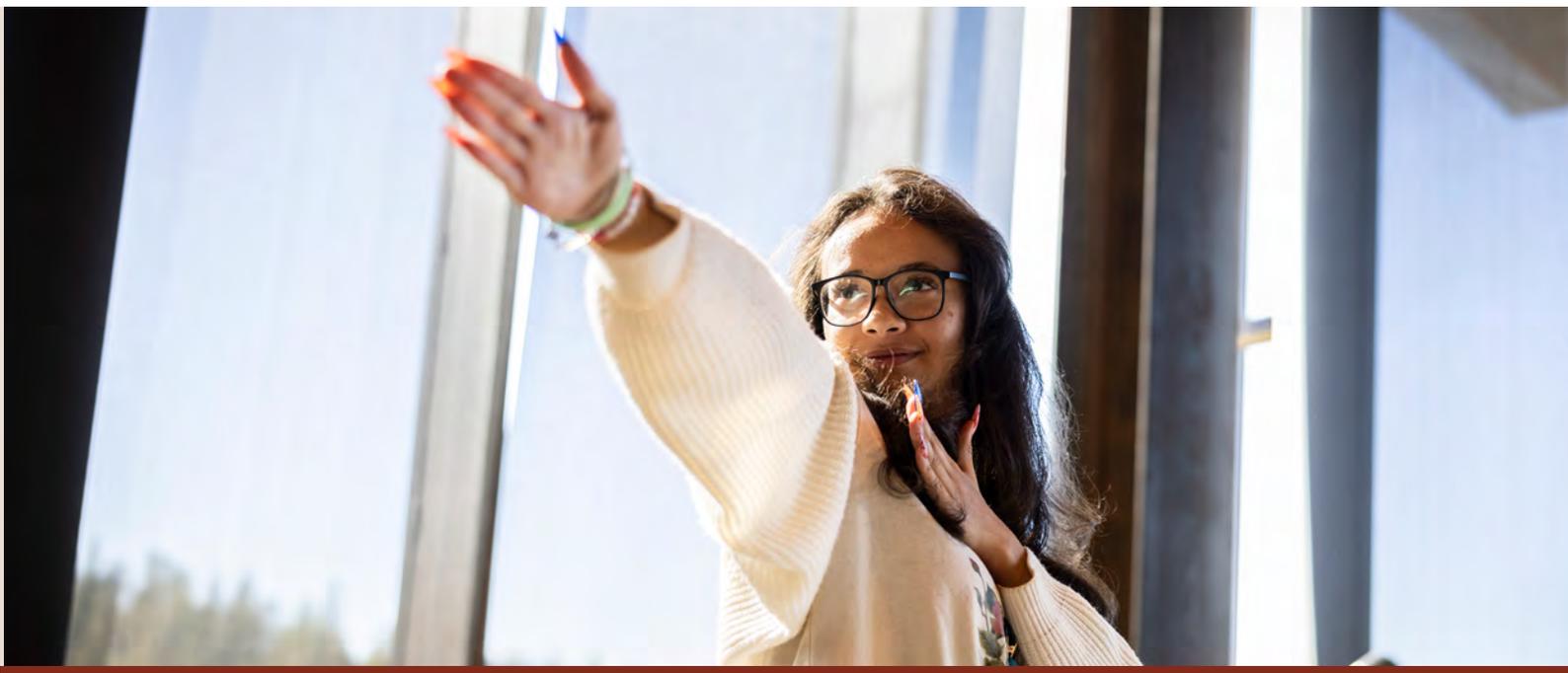
Architecting the Future

Moving from a schooling system to a learning system requires us to confront the obsolescence of our current infrastructure. It demands that we invest in the "public-purpose utilities" needed to underpin an equitable and high-quality future learning ecosystem.

Data interoperability is that utility. It is the essential infrastructure required to personalize learning at scale, drive student outcomes, and improve teaching and learning. And critically, it provides the standardized, secure framework necessary to protect our learners' most valuable asset – their data.

The biggest obstacle we face is not the technology, which is rapidly evolving. It is our attachment to the systems we know, even as we recognize they are no longer sufficient. As a technologist, an educator, and a mother, I believe we have a moral imperative to build the architecture that the future demands. That architecture must be connected, secure, and centered on the learner.

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We have the vision: a learning ecosystem centered on human flourishing. We can see the necessary architecture: a flexible, relevant, human-centered redesign. But a map is not the territory, and the distance between our current industrial model and that future reality can feel vast. This final section of the anthology is dedicated to the mechanics of movement. It moves us from what we must build to how we actually build it, acknowledging that the path forward is not a straight line, but a process of co-creation, strategic risk-taking, and deep capacity building.

The journey begins by radically rethinking who holds the pen. We cannot design the future of learning for young people; we must do it with them. We ask: How do we authentically elevate youth co-design, ensuring their voices shape the solutions meant to serve them? Simultaneously, we explore parent empowerment, asking how families can be transformed from passive consumers of education into powerful drivers of demand for a system that values their children's well-being. This extends to the broader ecosystem, where we must establish a community-engaged design

process that turns transformation into a collective pursuit rather than a top-down mandate.

As we navigate this transition, we must be intentional about our tools. We ask what specific work is required to ensure we are harnessing AI for human flourishing, steering powerful technologies to expand human potential rather than diminish it.

Finally, we turn to the leaders navigating the messy middle of system transformation. We look at what it takes—at both the school and state levels—to break inertia. We introduce the critical concept of the split-screen strategy: How can leaders manage the necessities of the current system while simultaneously incubating the models of tomorrow? And, perhaps most importantly, we ask about capacity building toward change. What new muscles must our schools and educators build to sustain this shift?

These questions form the blueprint for action. They remind us that getting "there" is not about a single leap, but about the courageous, deliberate work of redesigning our systems, one decision at a time.

How can we think about the role and voice of youth in designing solutions for the future of learning?

Daren Dickson, Executive Director of Innovation at Valor Collegiate Academies

Something is shifting in the world young people are inheriting, and they feel it with an immediacy that adults can sometimes miss. In Compass Circles, hallway conversations, and our recent Student Joy work at Valor, students describe a shared experience: deepening disconnection – fragmentation, overwhelm, and the sense that life is moving faster than their hearts can process.

Adults feel this too, but young people often name it first. They see disconnection – within themselves, between people, and across systems – with a clarity adults have learned to filter out. Their reflections suggest that much of what feels frayed traces back to disconnection, and that beneath it all lives a deep longing to feel connected again.

To help make sense of this moment, we recently introduced the Three Stories framework to our entire community, including students. Developed by Joanna Macy, a scholar of systems thinking and deep ecology, the framework describes our era as shaped by three stories: The Great Unraveling, Business as Usual, and The Great Turning. It resonated across generations and gave us a shared language for naming the forces shaping our lives.

The Great Unraveling: Young People Feel the Fracture Most Clearly

When we share Macy's first story, *The Great Unraveling*, students respond with immediate recognition. The story names ecological destabilization, social fragmentation, political polarization, and rising mental health challenges – not as isolated events, but as symptoms of a deeper breakdown. Young people don't react with surprise. They react with relief: "This is what it feels like."

They describe the emotional texture of the era with nuance: climate grief, digital fatigue, isolation, fear about the future, and the constant pressure to hold more than their nervous systems can manage. Their clarity isn't cynicism. It's truth-telling.

Business as Usual: Students See Its Contradictions Before Adults Do

Macy's second story, *Business as Usual*, describes an operating system built on growth, speed, and optimization. When students hear it, they immediately identify its parallels in school – pressures to perform rather than learn, efficiency prioritized over humanity, and metrics overshadowing meaning.

In our Student Joy Initiative, students named something deeper than individual interactions. They described feeling bound inside systems designed by adults long ago – systems that rarely pause to ask young people what actually works for them. What surfaced wasn't just interpersonal adultism, but a structural pattern in which youth wisdom is left out of the very systems that shape their lives.

This was one expression of a broader issue: educational systems organized around disconnection - from student experience, from relationship, and from the purpose of learning itself. As we began addressing disconnection directly, classrooms softened. Students and teachers re-engaged. Connection changed the environment.

The Great Turning: Youth Know What They're Longing For

The third story, *The Great Turning*, names a global shift toward reconnection – toward more life-giving ways of learning, relating, and living. The Turning is rooted in practices that restore connection: to self, to others, and to the larger world.

When students encounter this story, something in them opens. "That's what school should be," one senior said. "A place where we're connected. A place that cares about who we're becoming." For over 12 years, Valor's Compass model has attempted to do exactly that – help students practice presence, empathy, accountability, and community in ways that strengthen connection. Compass Circles and commitments were never "soft skills"; they were an antidote to fragmentation. The Great Turning is not new for us. It is the through-line of our work – but it might be time to go even deeper.

Connection as Multi-Layered Practice

If disconnection lies close to the roots of what's unraveling, and connection keeps emerging as what students long for, then education becomes, at its heart, a relational practice. That practice has many layers: connection to self through grounding and emotional clarity; connection to others through trust, attunement, and mutual responsibility; and connection to the wider world through purpose, ethics, and systemic awareness.

Young people feel these layers viscerally. They sense the inner fragmentation. They navigate the relational ruptures. They live inside digital systems that shape attention, identity, and meaning. Adults bring something essential as well – wisdom, context, developmental understanding, and what philosopher-educator Zack Stein calls *teacherly authority*, the responsibility to guide and protect young people's growth. Neither perspective is sufficient alone. Together, they form the relational ecosystem this moment requires.

One of the most powerful expressions of that ecosystem that we've been integrating more at Valor has been intergenerational partnership – students and adults (and parents!) working side by side to understand problems, redesign systems, and build community. When approached with mutual respect and shared purpose, this becomes more than a school strategy; it becomes a small-scale model of the intergenerational cooperation society itself will need to rebuild coherence, belonging, and trust. This

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is not youth takeover, and it is not adult control. It is the Great Turning in practice.

AI: A Crucible for Connection and Disconnection

Artificial intelligence intensifies the stakes of the Three Stories. If absorbed through Business as Usual, AI risks accelerating disconnection – speed, optimization, surveillance, and the outsourcing of human capacities.

But if held through the lens of the Great Turning, AI becomes a mirror and catalyst. Students already ask the deeper questions:

- *"How will AI change what it means to know something?"*

- *"What kind of world is AI learning from?"*

- *"How do we stay human in a digital world?"*

Their digital fluency gives them insight adults often lack. Their perspective must inform how schools integrate AI – not as the only voice, but as an essential one.

A Call to Connection

So what do we do? We begin by telling the truth about the moment we're in. We acknowledge the

pressures of the Great Unraveling and how easily schools can slide into Business as Usual. And then we choose differently.

We commit to building learning communities that actively participate in the Great Turning— places where connection is strengthened, where relationships are centered, and where young people and adults practice the human capacities that lead toward coherence, belonging, and responsibility. We create environments where students and adults practice connection intentionally – within themselves, with each other, and with the wider world, including the increasingly AI-infused digital landscapes they inhabit. We design systems that invite multiple generations to share insight and responsibility. And we remind one another when we slip back into Business as Usual.

In the Age of AI, this kind of connection is not a luxury. It is essential to ensure we do not begin mistaking AI companionship for human relationship—and to build a true foundation for wisdom, agency, and flourishing. The future of learning - and the future of society - will be shaped not by speed or optimization, but by how well we reweave the relational fabric that holds us. This is the work of the Great Turning. And we will need to do it together.

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How can we envision the role of parents in driving toward the future of learning?

*Natasha Kamrani, Founding Director at Organizer Zero, and **Kathryn Sisa**, Chief of Staff at Organizer Zero*

Here at Organizer Zero, we know great organizers lead with one question: "Who are my people?" You want to understand *who you are organizing*, and why, because how they experience the day-to-day problems in their lives will shape the solutions you're striving for together and the campaigns that will get you there. In this work of defining the future of education, we need partners at the table whose answer to the question, "Who are my people?" will, every time, without fail, be "Children." Because the implied but perhaps unstated assumption beneath these questions about the *future* of learning is that the present state of learning is a broken system that is struggling to serve young people well. And there is only one group of adults in the ecosystem who (a) know this reality deeply and intimately, and (b) have no other incentives but serving kids, and that is parents.

During past moments of disruption and rebuilding, we have turned to stakeholders labeled as "experts" – instructional experts, technology experts, or "future of learning" experts – none of which describe the majority of parents most impacted by the failures of the system. Consequently, we have failed to benefit from parents' leadership, insights, and expertise. So how do we make this moment different? What role can and should parents play? In our work, parents are unmatched as **learning partners** and **advocates for student-centered change**. We will focus here on their role as advocates.

Parents as Accountability Holders

While many actors in an education ecosystem are, by necessity, thinking in strategic planning cycles, legislative cycles, or school board election cycles, parents have an immediate incentive to think and plan with urgency: their own children. As Sarah Carpenter, Executive Director of the Memphis LIFT, often reminds us, "Our babies are in school now. They need change now. They deserve the best now." When parents are informed, engaged, and activated, they move with urgency and purpose to ensure the system is working on behalf of kids.

In Midland, TX, Ebony Coleman is building a movement of parents across the city advocating for child-centered policies and learning. When a fight erupted around whether a local school should be renamed, Ebony was a lone voice in the landscape reminding the community that, school names aside, less than half of the districts' scholars were reading on grade level, and less than 40% were on grade level for math, and that the community's time, focus and leadership should be centered around solving that problem above all others. Parents can and should be vital leaders and partners in keeping systems accountable to children's needs.

Parents as Boundary Pushers

Incremental change is the default setting for most systems, but incremental change will not suffice in this moment – the window for transformational change is open, wide, and sweeping.

Parents, particularly parents from communities where the education system has long underserved their children, have been pushing that window open for a long time. They have seen firsthand that outdated ways of teaching and learning are leaving their children behind, excluding them from a rapidly changing economy and set of opportunities. As we consider the big, bold ideas for what's needed to create the conditions for the future of learning, parents can uniquely contribute to those ideas and be unassailable messengers for why incremental change is unacceptable.

In Fort Worth, TX, they are considering a big, bold change that has many folks, understandably, worried about too much disruption: a state takeover of the district. Trenace Dorsey-Hollins, Executive Director of Parent Shield Fort Worth, had this to say: "We must ask ourselves: Has the fear of a state intervention overshadowed the fear of our students continuing to receive a substandard education?" Because of her experience and that of the thousands of families she organizes, she comes at this dilemma not from a lens of needing to preserve an outdated system that no longer serves her or her community, but from a lens of what could be possible if we act now. She

is uniquely qualified to make that case because her evidence is grounded in real families, real stories, and real data about the current state of education in her city. And she is fearless in doing so because she is clear-eyed about the opportunity cost of inaction: her community's future.

Parents as a Community's Institutional Memory

Administrators and elected officials come and go, but long after these groups have left, the community – the parents, grandparents, aunts and uncles, community leaders – remain, grappling with the consequences of policies that succeeded, failed, or just fell out of fashion. Activated and engaged parents can serve a vital role as a community's institutional memory, ensuring mistakes are not repeated and promises are fulfilled.

Terana Boyd, an incredible parent leader in Cincinnati, OH, stood up at a Cincinnati Public Schools board meeting focused on setting goals and accountability

metrics for the district and superintendent. The latest draft of goals moved away from disaggregating data, all but ensuring the district would have no incentive to talk about the progress of its Black and Brown learners. Terana reminded them in public comment that they had already made concrete commitments to disaggregating data, and they needed to follow through on those goals rather than setting new ones that moved the goal posts once again. Parents must be leading voices and champions for changes that will most directly impact their children.

What do parents need to play all of these roles well

So if we want families to play all these roles well – accountability holders, boundary pushers, and a community's institutional memory – in service of a more learner-centered, future-oriented educational system, how do we ensure families are well positioned to do so?

First, families need to be brought in early. As with any group, parents are most effective in their role as advocates and agents of change when they are also contributors to the change itself. So the time to invest in parent leadership on the future of education is well before their advocacy is needed; it's rather when they can also serve as thought partners and co-designers.

And second, families need support, training, and capacity-building. The families who have the most to gain from a fundamental reimagining of learning are also the families who keep themselves at arms-length from an educational system that has repeatedly failed their communities for generations. As the incredible movement leaders we've worked with and highlighted throughout this piece will attest, their greatest and most important work is to support families to see their voices *do* matter, their children can expect more, and they have the power to fight for that future. That requires real investment in their leadership, and training in core skills around strategy, organizing, policy and advocacy, story-telling, and resource management.

As we set a shared vision for the future of learning and ask ourselves "Who are our people?" for that system, we know we must answer clearly and unambiguously, at every turn: the learners. As we consider the coalition and tent needed to make that the answer now, in the near future, and in the distant future, we hope and believe parents can lead the way.

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How can we envision the role of parents in driving toward the future of learning?

Bibb Hubbard, Founder and CEO at Learning Heroes

K–12 education is entering one of the most transformative moments in its history. Artificial intelligence is reshaping what—and how—children learn. Personalized tools can now analyze student progress, simulate human tutors, and generate content faster than ever imagined. Yet even in this era of extraordinary innovation, human connection remains at the heart of learning, with families as the anchor.

For ten years, Learning Heroes has listened deeply and been responsive to families and educators—through national surveys, focus groups, ethnographies, and community partnerships—revealing their hopes, aspirations, and challenges. Learning Heroes' new report, Centering Families in the Future of Education: Insights & Perspectives from 10 Years of Research, distills a decade of insights into one powerful conclusion: when families are engaged as true partners, stronger, more learner centered systems emerge where trust is a catalyst for lasting change.

Listening to Families in an Era of Reinvention

Parents and teachers want the same thing: for students to thrive academically, socially and emotionally. But, too often, families lack timely, clear, and actionable information about their child's academic progress. In our Gallup–Learning Heroes 2023 study, nearly nine in ten parents (88%) believed

their child was at or above grade level in reading and math. National data tell a different story:

only about one in three eighth graders reach the "proficiency" level on NAEP/The Nation's

Report Card (given that grade-level standards are inconsistent across states, NAEP "proficient

or above" offers a national standard representing solid academic performance for the given

grade level). This "perception gap" stems in part from report cards that often send false signals to parents, reflecting attendance, effort and behavior in addition to mastery of content.

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Yet, when parents see multiple, clear data points—classroom assessments, state test results, teacher feedback and more—their understanding shifts, and so does their engagement. In our Parents 2022 study, when parents were shown multiple data points with conflicting data about their performance, their confidence that their child was at grade level dropped by more than half. Awareness sparks action. Families ask more questions, seek out interventions and supports, and partner more actively with teachers.

Evidence for Partnership

The Family and Community Engagement (FACE) Impact Study, conducted in partnership with TNTP and Dr. Karen Mapp of Harvard, provides further evidence that strong family-school partnerships drive results. Schools with robust family engagement practices saw significantly smaller increases in chronic absenteeism and smaller declines in reading and math proficiency during the pandemic. In fact, schools in the top 10 percent for family engagement experienced a 39 percent smaller rise in absenteeism than those in the bottom 10 percent—amounting to more students in class each day and hundreds of additional instructional hours each year. The lesson is clear: family engagement isn't a "nice to have." It's a core driver of student and school success.

Partnership Rooted in Trust

Families remain the one constant amidst the evolving learning ecosystem, yet too often their role is overlooked. This is a unique moment to ensure families are centered in the changes shaping the next horizon of learning and human flourishing in the age of AI. Technology, teachers, out-of-school time providers offer extraordinary tools—but it is the relational triangle of family, educator, and learner that gives those tools meaning.

During the 2023-24 school year, Prodeo Academy in Minneapolis, MN conducted a pilot to boost student achievement through family engagement. They centered their approach on building trust and helping teachers shift mindsets to view families as true partners. After the pilot, a principal reported that while he previously felt teachers "had to hold all of the learning" and not burden families, he challenged that mindset and saw families step forward as academic partners – co-creating learning plans, asking rich questions, and supporting learning at home. "We exceeded several strategic goals this year," he said, attributing it in part to deeper family partnership grounded in trust.

As AI takes on more cognitive tasks, the qualities that define human flourishing—empathy, creativity, critical thinking and connection—will only become more vital. Family partnerships cultivate these traits. When children see adults—at home and at school—working together with respect and shared purpose, they learn what it means to belong and to contribute.

Set Human Flourishing in the Age of AI as our north star

Modernize the "what": Create a new K12 "Humanics" curriculum

Reframe the "how," "when," and "where" of learning

Rearchitect the "who" of learning and human development

Develop an aligned learning infrastructure

Stepping Forward: How do we get from here to there?

Language as Connection

Even our words can either bridge or widen the gap between home and school. In our focus

groups, parents have told us that terms like "school culture" can feel exclusionary, or that

"proficient" sounds like "barely getting by." By translating professional jargon into accessible,

affirming language—"meeting expectations," "academic progress," "helping children overcome

challenges"—educators open the door to genuine dialogue. Human flourishing in the age of AI begins with communication that honors the people at its center.

From Insight to Action

To build a learning system worthy of this moment, we must treat family engagement as a core instructional strategy for school and student success. Learning Heroes' report, Unlocking the 'How': Designing Family Engagement Strategies That Lead to School Success suggests three pillars for effective family engagement:

- Placing trust at the center of the home-school relationship

- Anchoring family engagement strategies in student learning and well-being

- Investing in building the infrastructure to enable this work.

This moment of rapid innovation only elevates the importance of the work families and educators do together. AI may change the tools available in classrooms, but it cannot replace the relationships that help children make sense of those tools and use them well for learning.

By ensuring families are meaningfully engaged in the shifts ahead in education, we create a future of learning where technology supports human connection rather than weakens it. The systems that will thrive are the ones grounded in partnership, trust, and shared purpose. That is the opportunity in front of us.

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How might we envision a process for community-engaged design and transformation toward future-ready learning?

Aylon Samouha, CEO at Transcend

We are living through a transformation as fundamental as the industrial revolution – a moment when the baseline assumptions about work, knowledge, and human capability are being rewritten at once. The classrooms my children attend may not exist as we know them in fifteen years. Neither might the job my neighbor trains for, or the college I attended, or the idea that information is scarce rather than infinite.

This is the moment we're in – not approaching, not coming soon. Now.

Most of our schools, though, were built for a different world. A century ago, education was designed for stability and control – standardized subjects, schedules, and roles meant to produce predictable results. That architecture served an industrial

age. So much of what we assume school should be comes from this time–that learning happens in dedicated buildings, during set hours, supervised by credentialed adults. This made sense when information was scarce and concentrated in schools. But when learning resources exist everywhere – libraries, online, internships, community spaces – confining learning to a single school building limits what communities can imagine and build. But we now live in a time defined by continuous change. And we're still trying to run a system designed for permanence.

At Transcend, I've spent years with communities determined to break free from that inheritance. And I've learned something that upends what I once believed: the breakthrough doesn't come from

getting the model right – it comes from building the *capacity* to keep redesigning the model, together.

In a world that changes faster than any expert can advise, resilience lives closest to the ground. But that doesn't mean communities should be left to figure everything out alone. The real strength lies in partnership – *a third way* that combines the best of two different approaches: the coherence, evidence, and expertise of top-down systems with the ownership, relevance, and creativity of bottom-up efforts.

Top-down systems bring discipline: clear standards, codified knowledge, and access to evidence-based practices that make learning more effective. Bottom-up energy brings humanity: insight, creativity, and lived experience that keep learning relevant. Community-based design weaves these together. It's not rejecting expertise or codified models; it's using them in service of the people who know their young people best.

When we say *community*, we mean something specific: young people, educators, administrators, caregivers, and local partners working as co-designers from the very first conversation. They bring wisdom about what works in real classrooms, families, and neighborhoods. The process brings research, design tools, and learning science to help them turn those insights into disciplined local innovation.

At [Launch High School](#) in Central Brooklyn, families, educators, and students came together for real design work – asking what their graduates should truly be able to do, what this community believes matters, and how to align that vision with the academic standards and expectations of the state.

The result was a school they call an *Evolutionary Learning Community* – a place intentionally built to keep evolving. The community designed a learning system where environmental science happens in local ecosystems, workforce skills develop through industry apprenticeships, and civic engagement connects directly to community needs. The building itself is just one learning site among many – classrooms, yes, but also partner organizations,
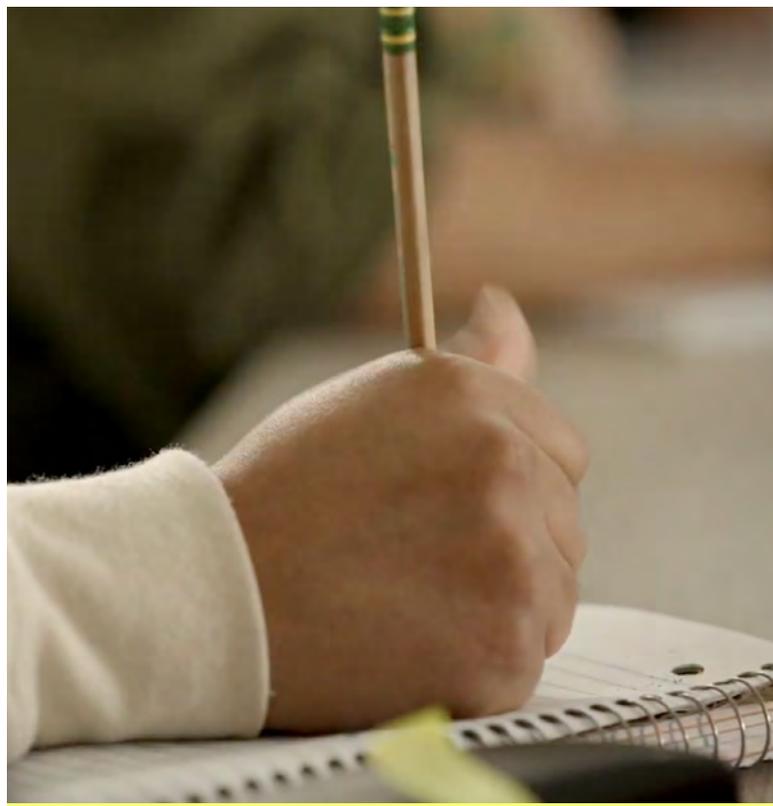
green spaces, and local businesses because learning doesn't stop at the building's edge. At the same time, the design team drew from the expertise and evidence of others, adopting codified curricula and competency-based approaches developed by other communities and trusted providers. This balance of local creativity and shared knowledge is what allows Launch to keep evolving with both rigor and relevance.

More important than any single feature was the process. The community strengthened what we call the five **enabling conditions**: conviction, clarity, capacity, coalition, and culture. When those grow together, design becomes something communities do continuously – not an event or an initiative, but a way of operating.

Across hundreds of design journeys, one insight has become unmistakable: the clearest signal that a learning system is working is how young people experience their days. When students feel known,

challenged, and engaged, everything else follows. In schools where students describe their learning as meaningful, supportive, and stretching their thinking, we see stronger academic results – higher GPAs and test scores, lower absenteeism, and fewer disciplinary incidents. These patterns reflect what learning science confirms: emotional safety, strong relationships, and authentic challenge fuel deeper learning and well-being.

Extraordinary learning environments reveal themselves in how young people experience their days – their sense of purpose, challenge, and belonging show us whether learning systems are truly working. If we want young adults to thrive in an age shaped by artificial intelligence, we need students who are deeply engaged during the 15,000 hours they spend in school. Engagement is not only a predictor of future success – it's a vital part of what it means to live and learn well in the present. As John Dewey reminded us, education is not preparation for life; it is life itself.

Stories like Launch are inspiring – but isolated examples aren't enough. What we need now is the *infrastructure* that allows every community to design this way: to access usable evidence, adapt proven models, and learn from one another.

That's what the third way looks like in practice: communities shaping their own futures, supported by codified knowledge, research-based frameworks like the Leaps, and shared learning platforms that make continuous improvement possible at scale. Other sectors have long understood this – technology, medicine, even agriculture. Education is only now beginning to see that transformation isn't a one-time reform; it's a learning system that learns.

This work is bigger than school reform. We live in a moment of fractured trust, where people feel designed *for* rather than *with*. Democracy itself depends on our ability to listen, test ideas, and evolve together.

When communities learn to design together – when they experience what it means to have a real voice in shaping their future – they're not just improving schools. They're rebuilding civic trust. They're practicing how to renew institutions from the inside out.

This is the work of our time.

The question isn't whether schools will change. It's whether communities will have the power – and the partners – to shape that change themselves.

This invitation is for everyone: educators, families, students, system leaders. Invest not only in new programs, but in the relationships and processes that help communities learn their way forward. Bring together local wisdom and rigorous design. Build the conditions where the people closest to students hold the authority – and the tools – to lead.

The future of learning won't be invented once. It will be co-created, again and again, by communities that know how to learn – and leverage ever more useful resources – together.

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What has it taken at the school level, and then at the state level, to drive toward the future of learning?

Scott Bess, President and CEO at Indiana Charter Innovation Center, and Board Member for Indiana State Board of Education

For decades, education reformers have described a "perfect" world where students are able to receive a strong academic experience that is personalized specifically for each person in an environment that allows for each student to reach their full potential. In this world, all learning experiences, whether they happen inside or outside the classroom, are counted and included in the measures of student proficiency. Students progress at the pace most appropriate to them and have exposure to careers in which they have interest and aptitude.

Far from being a dream, there are many of these schools that exist today and have been profiled in almost every education-focused publication and in other media outlets. One example of this is the Nature's Gift charter microschool, part of the Indiana Microschool Collaborative located in rural Hancock County in Indiana. Nature's Gift was designed from the ground up to be a next generation school. The school, the first of what will be a network of microschools around the State of Indiana, is multi-age, hands on, and fully competency based. Founded by George Philhower, who is also the current Superintendent of Eastern Hancock Schools, the overriding mission of the Collaborative is to create a school where each student feels like it was designed specifically for them.

The Nature's Gift school, with 62 students ranging from kindergarten through eighth grade, is located in a campground, taking advantage of buildings that are empty during the school week. Two teachers and four "guides" support students by crafting individualized learning plans that take maximum advantage of the multi-age environment. Next year the Collaborative will launch more sites, including

a micro high school focused on apprenticeships in partnership with local businesses.

This is just one example of what is possible in terms of coming close to the long imagined perfect world. There are hundreds of other schools across the country that provide similar experiences. Nature's Gift is unique in that it is public, is part of what will eventually become a network of public microschools, and has a strong connection to the local school district and community. This creates potential for overcoming the primary shortcoming of unique school models, which is that they are not scalable.

If we are going to truly move to a new horizon of education, we have to move to a world where unique educational experiences are the norm, not just examples that are on the reform movement tour guide map. To get there, we must start with

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examining state level policies that reinforce the status quo. Over the years, well intentioned policies have been passed within every state that are designed specifically to make the traditional school model the best it can be. The problem is those policies put innovative school models in a position of having to "hack" the systems to do what they feel is best for the students in their schools. One of two things happens as a result - either the school stays true to its vision but cannot scale, or the school grows but compromises the vision to better adapt to the policies.

In Indiana, we have been working on state policy to encourage innovation that can scale to serve all 100,000 plus students in the state. We streamlined all of our grade level and content standards, focusing on those that have a high impact on student outcomes. In other words, we asked "what are the most important things at this grade level or in this course that predict success at the next level". This has allowed our teachers to dive deeper, with more rigor, into content that matters. In addition, it also allows teachers to focus on those "durable skills" that lead to students being ready for life after school, which heretofore had been impossible because teachers were sprinting just to give minimal coverage to

hundreds of content standards.

Based on feedback from teachers, we changed our assessments from a single end of year test to a series of through year assessments with results delivered in time for instruction to be adapted to each student. Our high school diploma was redesigned and implemented to provide maximum flexibility for students while also providing clear steps for students, no matter which pathway they choose to follow after high school. Because of that clarity, Indiana's universities and businesses have fully endorsed the diploma and its accompanying seals ([Indiana Governor Announces Direct Pathways](#)), providing students with direct access to future possibilities. And our new accountability system provides alignment with all of the above and incentivises schools to maximize each student's outcome.

Now the challenge in front of us is to take full advantage of these policy changes and move aggressively forward with examples like the Collaborative. We believe that in a few short years, we will have thousands of students in education settings like the initial Nature's Gift microschool. A local philanthropy has a goal of seeing 50,000 Indiana students have an apprenticeship experience within the next 10 years, and the industry-focused micro high school will play a huge role in that.

It will take intentionality on the part of all parties to get to this point. Legislators and state boards of education, along with the state departments of education, must keep their eye on the north star of eliminating barriers to innovation. Local school boards and district superintendents must be willing to take some risks (responsibly) and either create next-horizon schools themselves or partner with those who are doing it.

The final message is that we do not need to invent the next horizon of schools. They exist all across the country and are thriving. With the right investments in policy and infrastructure we can greatly expand the existing innovative and successful models and begin the transition of traditional schools into the next horizon.
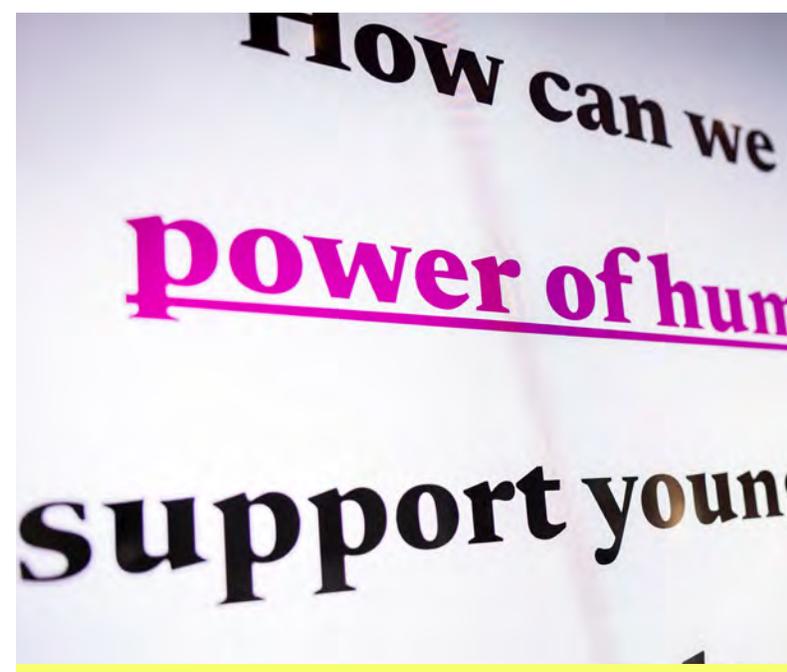
How can organizational leaders begin to take a "split-screen" strategy, investing in new approaches alongside their existing work?

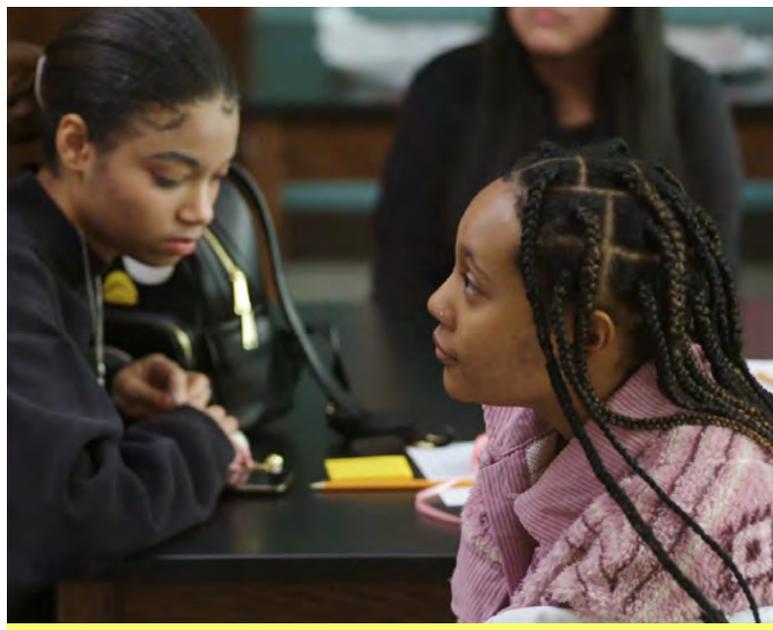*Dr. Tequilla Brownie, Chief Executive Office at TNTP*

America intends its education system to be the cornerstone in our nation's success — the mutual success of each of us individually and all of us collectively. Most Americans recognize the system as integral to the enduring idea of *every generation doing better.* We expect it to be attuned to what the future requires. To maximize nature *and* nurture. To activate in all young people the agency that creates choices, so they thrive throughout life.

Trying to move the American education system closer to that intention has been the focus of so many of us for so many years. And yet we still have a system where a young person's race, household income, and ZIP code remain among the best predictors of their socioeconomic fate. Where the likelihood of someone earning more than their parents has dropped by nearly half over the past two generations.

Economic mobility, academic performance, workforce readiness, civic engagement, personal agency—pick your metric: too many students graduate unable to secure meaningful work or direct their own futures toward a meaningful life. Precisely when the demands of the future — economic, technological, civic — ask more from education,not less.

We face a strategic dilemma. Traditional improvement strategies are too slow to close these gaps at the pace students need. But pure disruption — abandoning existing systems to build something new from scratch — means writing off the 50 million young people in schools today.

To meet this challenge, we need a fundamentally different approach—one that refuses the false choice between improving the system we have and designing the one we need. We must pursue both, with clarity and urgency.

The Logic of the Split Screen Strategy

We're not alone in confronting this reality. Across every sector, leading organizations are wrestling with the same tension: how to deliver results today while building the systems the future demands.

A year before McKinsey published Dual Transformation—its call for businesses to strengthen the core while simultaneously creating new engines of value—TNTP was already putting that theory into practice.

Our split-screen strategy, Better + Bolder, is built for this moment — when economic uncertainty, technological disruption, and a changing workplace require both stability and bold reimagining.

For nearly thirty years, TNTP has helped define what's possible in public education, shaping national policy, advising state and district leaders, and partnering with schools to turn ideas into measurable outcomes. We've built a reputation for marrying insight with execution—research that reframes debates, policy frameworks that enable action, and classroom tools that deliver results.

Better + Bolder is the next evolution of that influence. For us, Better operates inside the system. It works with the structures, policies, and stakeholders that exist today. Success here is measured in changed practices, shifted mindsets, improved student outcomes within current school populations. This work builds trust, demonstrates impact, and reveals exactly where existing structures help or hinder what students need — insights that directly inform our Bolder work.

Bolder operates outside current constraints. It asks, "what would we build if we weren't bound by compliance, seat time, or inherited structures?" This work requires different partnerships (including families, civic leaders, non-traditional educators), different timelines (longer runway for R&D), and different success metrics (proof of concept, not scale). It creates the models and evidence that fuel a
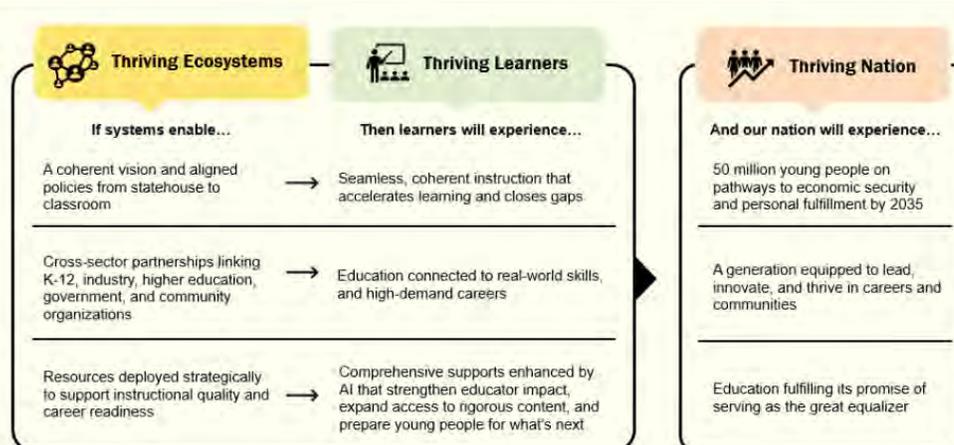
movement for fundamental redesign.

Both are critical. Students in schools today can't wait for the perfect system to emerge. But they also can't afford incremental improvements to a system that's fundamentally misaligned with their futures. Better keeps us accountable to urgency. Bolder keeps us focused on transformation.

There is real discipline involved in leading a split-screen strategy. Better requires asking at every turn, whether a decision will make transformation easier or harder later. Improvement should loosen the system's constraints—not deepen them—so the shift to Bolder is accelerated, not obstructed. At the same time, there are equal risks on the Bolder side: ideas can easily drift beyond the reach of the system they're meant to transform.

Navigating the tension between urgency and reinvention can't be left to instinct. It requires explicit structure—our solution was to develop dual theories of action.

The first theory of action — our TOA — will build on what we know works: changing policies, practices, and pedagogy in classrooms, districts and states across the country to ensure young people enter adulthood prepared for mobility and agency.

Our Theory of Change

Thriving Ecosystems	Thriving Learners	Thriving Nation
If systems enable...	**Then learners will experience...**	**And our nation will experience...**
A coherent vision and aligned policies from statehouse to classroom	Seamless, coherent instruction that accelerates learning and closes gaps	50 million young people on pathways to economic security and personal fulfillment by 2035
Cross-sector partnerships linking K-12, industry, higher education, government, and community organizations	Education connected to real-world skills, and high-demand careers	A generation equipped to lead, innovate, and thrive in careers and communities
Resources deployed strategically to support instructional quality and career readiness	Comprehensive supports enhanced by AI that strengthen educator impact, expand access to rigorous content, and prepare young people for what's next	Education fulfilling its promise of serving as the great equalizer

The other is a theory of different action — our TODA — which represents a fundamental shift in how we create change. It will be designed to support our goal – 50 million young people on a path to economic security and individual agency. Rather than convincing existing systems to change, we'll build a national movement of educators, families, and civic leaders to co-create the schools America needs to transform at scale. We'll prototype solutions with communities, prove what's possible, and create pressure from the grassroots up and the grasstops down to redesign the system itself.

A Model Built to be Shared

One organization operating this way creates proof points; dozens create a movement. That's why we're actively urging leaders to adopt a split-screen approach—not as a theory, but as the mindset this moment demands.

The approach isn't proprietary — it's portable. Any district, state, nonprofit, or funder can adopt Better + Bolder principles to navigate this moment. The question isn't whether your organization should operate on two timelines — it's how.

The core principles are straightforward:

Define your Better work clearly. What can you strengthen, improve, or scale within the current system that will materially improve outcomes for students now? This isn't about small tweaks — it's about meaningful transformation of what exists.

Define your Bolder work with equal clarity. What needs to be fundamentally reimagined? What would you build if you weren't constrained by existing structures, policies, or assumptions? This isn't about abandoning reality — it's about creating proof points for what's possible.

Protect both. Create separate teams, funding streams, and success metrics. Better work will face pressure to be more transformational. Bolder work will face pressure to be more "realistic." Both pressures will kill the strategy if you let them.

Develop two Theories of Action—one that delivers results within today's paradigm, and one that builds the new paradigm the future requires. The Better framework must be just as strategic as the Bolder, capitalizing on the learning and innovation potential of the current moment.

Learn across timelines. Your Better work will reveal what's most broken in the current system. Your Bolder work will generate insights about what students actually need. Let each inform the other without collapsing into a muddled middle.

Build for the handoff. Eventually, your Bolder prototypes will need pathways to scale. That only happens if your current infrastructure is prepared to adopt fundamentally new approaches – in our case, coherent learning experiences that include mobility factors, new career pathways curricula, real world projects powered by AI. It's important to design for that convergence from the start.

TNTP will model this approach and share what we learn. But we're not waiting for perfection before inviting others in. The sector needs multiple organizations testing dual strategies, sharing lessons, and creating the momentum that makes systemic transformation possible.

We offer this approach as an invitation: to try it, adapt it, lead with it.

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What are some of the capacities that need to be built for schools and the people who are part of them to begin to move toward future-ready learning?

Chong-Hao Fu, CEO at Leading Educators

What a challenge to be future-ready in a volatile world with so many unknowns: changing technologies, changing work requirements, changing politics, ever-increasing global competition with ever-shrinking funding for education. Our educators must prepare young people for a future they have never experienced, in a world where the pace of change continues to accelerate and where disruptions are more frequent.

Combine this with divergent views on the purpose of education – from workforce development to civic engagement – and a complex bureaucracy, and it's no mystery that many Americans have waning faith in our public education systems.

What would it take to ensure that all of our schools become places of future-ready learning? What new skills might they need? From my work with many districts and innovative schools across the country, here are eight capabilities that seem essential, each of which reinforces the other.

1. Schools must become organizations that learn rapidly and continuously.

Given the number of unknowns, we need schools that can rapidly learn and generate new models. This requires places of testing, iteration, and codification – where methods for learning and improvement are built directly into the work. We must double down on promising practices and release harmful ones, supported by data and systems that accelerate actionable research such as rapid cycle feedback and fast pilots.

Gwinnett County Public Schools offers an example,

known for setting up an ambidextrous organization that explored innovation while maintaining strong implementation district-wide through clear governance and intentional structures for learning.

2. Schools must re-center their purpose to support young people to flourish in the age of AI.

This reimagined purpose may involve a narrower set of core academic standards and many pathways that support each learner's aspirations. Schools must honor student agency while modernizing content to ensure relevance. The Dana Center's Mathematical Pathways provides a model for such redesign. Flourishing in an AI age also demands cultivation of curiosity, collaboration, and ethical judgement.

3. The role of educators must evolve toward mentorship, coaching, and community-building.

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Set Human Flourishing in the
Age of AI as our north star

Modernize the "what":
Create a new K12
"Humanics" curriculum

Reframe the "how," "when,"
and "where" of learning

Rearchitect the "who"
of learning and human
development

Develop an aligned
learning infrastructure

Stepping Forward: How do
we get from here to there?

Educators will need the skills to act as guides and mentors – building authentic relationships, motivating students toward their best selves, and creating communities of learning and belonging. They must help students find passions and professions while mastering skill progressions. This more expansive view of "educator" encourages flexible staffing and intergenerational learning – leveraging community wisdom while exposing older generations to youth perspectives and emerging technologies.

4. Schools must leverage learning technologies for more relevant and personalized learning.

Technology can help achieve goals like 100% literacy by meeting individual needs, and it can empower young people to solve real community problems. For example, in summer learning pilots, Leading Educators partnered with LearnerStudio, Boston Public Schools, and the Denver School of Science and Technology to help students use AI to solve community-based challenges. Such use must be paired with safety guardrails and privacy protections to ensure responsible implementation.

5. Schools need systems for tracking learning and mastery.

These systems must assess essential content as well as emerging skills linked to opportunity. Mastery should connect to credentials and qualifications that matter beyond traditional school to preparing students to access real opportunities. This aligns

with the broader shift toward skill-based hiring in the modern workforce.

6. Schools must embed the science of learning and development (SoLD) into everyday practice.

To serve all learners well, educators must have access to current research on how humans develop. The Science of Learning and Development Alliance provides an open-source synthesis, but the gap between research centers and classrooms remains too wide. Schools must adopt practices rooted in SoLD and ensure educators receive support to use them consistently.

7. Schools must bridge the distance between the world of work and the world of education.

Preparing young people for evolving careers requires deeper collaboration between educators and those in emerging fields. This might include joint learning design, educators embedding in workplaces, or professionals taking fractional or virtual roles inside schools. These partnerships also enable authentic career connected learning, helping students understand how learning translates into opportunity.

8. Schools must build the discipline of foresight and prepare for multiple possible futures.

Finally, in a world defined by constant change, schools must adopt foresight practices – scenario planning, horizon scanning, and structured imagination – to prepare for varied future states. Programs like the University of Houston's Masters

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in the Science of Foresight train leaders in this discipline. Importantly,students themselves can participate in foresight work, strengthening agency, imagination, and civic engagement.

Such a vision may seem idealistic, but it is necessary given the magnitude of societal change underway. We are a country capable of building bold things, with tremendous assets that can be leveraged for the development of young people. Educators and students alike know instinctively that current systems are insufficient. At Leading Educators, we've repeatedly seen transformative changes in teaching practices, mindsets, and student learning. These shifts require strong vision, strong leadership, and strong implementation.

A brief coda

This year, hundreds of billions of dollars will flow into AI data centers, representing roughly half of U.S. economic growth. Around 60% of these costs go to GPUs – hardware that will be obsolete within 30 months – yet few consider this wasteful because of an assumption that relentless technological investment will always drive progress.

Imagine if we invested even a fraction of that in people – in educators and in students. Human intelligence doesn't depreciate every two years; it compounds across generations. The return on investing in human capacity far exceeds the lifespan of any technology.

Perhaps it's time to rebalance our priorities: to invest as boldly in human-based intelligence as we do in silicon-based intelligence. If the future of work, democracy, and society depends on our ability to learn, adapt, and care, then the people who cultivate those abilities – educators – must be our most vital investment.

BACK TO TOC ›

An Invitation

The voices in this anthology have offered us something rare: a collective act of imagination grounded in deep expertise and lived experience. They have shown us what is possible when we let go of the constraints of the current system and design for what young people actually need to flourish in the Age of AI.

You have seen the destination – a Future-Ready Learning Ecosystem built on human flourishing, learner-centered design, and modern infrastructure. You have explored the pillars that must be re-architected: what we learn, how and where we learn, and who supports that learning. And you have heard from diverse perspectives about the pathways forward, from the voices of youth and families to the system-level levers of policy and funding.

Now comes the essential question: What will you do with this?

This anthology is not a conclusion. It is a provocation and an invitation. Whether you are an educator reimagining your practice, a parent advocating for your child, a policymaker shaping regulation, a funder directing resources, or a young person

demanding better – there is a role for you in this work. There are many questions, from how we govern to how the new system is fairly funded, that remain. The window for re-architecture is open, but it will not stay open forever.

We are not waiting for permission. We are not waiting for perfect consensus. We are building the future of learning right now, in communities and classrooms across the country. The question is whether you will join us.

If these pages spark questions, push your thinking, or surface new possibilities, we want to keep learning alongside you. Continue the conversation by emailing **anthology@thelearnerstudio.org**

Come build with us. The work begins now.

For more on the strategic framework and policy recommendations that informed this anthology, see our companion paper: Flourishing in the Age of AI

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Al Motley is Founder and CEO of Techademics, a technology company focused on innovation in education, social impact philanthropy, and the nonprofit sector. Based in Philadelphia with offices in Buenos Aires and Gaborone, Techademics has served over 100 clients, impacting hundreds of thousands of students, teachers, and social impact leaders. Previously, Al served as Chief Technology Officer for Matchbook Learning and provided information technology leadership for Philadelphia's Mastery Charter Schools. He also served as a technical advisor for the Congressional Black Caucus Foundation from 2013-2016. Al is a Pahara-Aspen Institute Fellow and NextGen Fellow, and holds certifications in Agile CSM project management. He serves on the board of trustees for the Learning Accelerator and mentors through the University of Pennsylvania's Capstone Education Entrepreneurship Program. Al holds a BS in Management Science and Information Systems from Pennsylvania State University.

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Charles Fadel is founder and chairman of the Center for Curriculum Redesign and a global education thought leader, author, futurist, and inventor. He serves as a member of the OECD AI Experts Group and chair emeritus of the Education Committee at BIAC/OECD. Charles is co-author of Education for the Age of AI (2024), Artificial Intelligence in Education (2019), Four-Dimensional Education (whose framework is translated into 23 languages), and 21st Century Skills. He has worked with education systems and institutions in more than 30 countries and spent 25 years in technology management, including founding Neurodyne AI. His prior roles include Global Education Lead at Cisco Systems, visiting scholar at MIT ESG and Wharton/Penn CLO, and project director at the Harvard Graduate School of Education. Charles holds a BSEE and an MBA and has been awarded seven patents, with one pending.

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Karen Pittman is a founding partner of KP Catalysts, where she synthesizes research, policy, and practice on when, where, how, and why learning and development happen. Her work centers on bringing insights from youth development into K–12 systems, helping educators see themselves as part of a broader learning ecosystem that supports young people across settings and stages of life. Karen also serves as Creative Director of CTO Remix, where she translates complex science into accessible tools and narratives that fuel stronger, more equitable learning environments. A longtime field-builder and thought leader, she advocates for whole-child and whole-community approaches that recognize learning as a lifelong, multi-context experience.

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Natasha Kamrani is founding director of Organizer Zero, a national parent power incubator that helps families build infl uence and shape the systems that serve their children. She began her career as a Teach For America corps member teaching English as a Second Language, then led Teach For America's Houston region. Natasha later won a seat on the Houston Independent School District Board of Education and ran a startup national foundation focused on education reform. After seven years as a civil litigator, she returned fully to education and community work, dedicating the past 15 years to elevating underrepresented voices in local education decision-making. Through Organizer Zero, Natasha supports parents and caregivers in designing campaigns, building coalitions, and sustaining organizing efforts that drive meaningful change.

Pamela Cantor, M.D., *Founder and CEO at The Human Potential L.A.B.*

Pamela Cantor, M.D., is a child and adolescent psychiatrist and the Co-Founder/CEO of The Human Potential L.A.B. She is a trusted voice on the science of human possibility: how experiences, relationships, and environments shape development and expand what young people can become. She has spoken at Aspen Ideas, Harlem Children's Zone, and the Smithsonian. Her work has been featured by national media including The New York Times and NBC News. Dr. Cantor is writing a book on how human potential is cultivated—through biology and the people we trust, and by the environments we design. Her previous books include Whole-Child Development, Learning and Thriving: A Dynamic Systems Approach and The Science of Learning and Development. She founded Turnaround for Children, is a Governing Partner of the Science of Learning and Development Alliance, and is a strategic science advisor to the Carnegie Foundation for the Advancement of Teaching.

Dr. Pete Fishman, *Senior Partner at NewSchools*

Dr. Pete Fishman is a Senior Partner at NewSchools, where he leads the Teaching Reimagined investment strategy, committed to creating the conditions in which children and adults can thrive. Pete champions solutions that evolve how educators work, honor people's humanity, and use technology as a catalyst, not a replacement, for connection, joy, and rigor. Previously, he co-founded Deans for Impact, a national nonprofit dedicated to transforming teacher preparation, and has advised foundations, nonprofits, companies, and higher education institutions on leadership, culture, and strategy. Pete holds a BA from Yale University and an EdLD from Harvard University.

Contributing Authors

Samantha Maskey, *Director of Admissions at Minerva University*

Samantha Maskey is Director of Admissions at Minerva University, where she is dedicated to building diverse, dynamic learning communities from applicants around the world. She leads an innovative, holistic review process that looks beyond test scores to understand each applicant's potential, character, and unique contributions. Samantha believes the future of admissions lies in strategic, human-centered decision-making that aligns talent, opportunity, and institutional mission. Her work supports Minerva's global, experiential model and helps create cohorts of students prepared to tackle complex challenges across disciplines and borders.

Sarah Field, *Parter of Instructional Design at REvX*

Sarah Field brings over two decades of experience designing curriculum and professional learning with and for K–12 learners and educators. She has led collaborative teams and complex projects under fast-moving timelines while staying grounded in organizational vision and values. Sarah's expertise lies in developing research-based, high-quality instructional materials and professional learning experiences that advance liberation, justice, and joy for all communities. Through deep partnership and ongoing inquiry, she helps systems implement meaningful, equitable practices that support both students and educators.

Saskia Op den Bosh, *Co-Founder at RevX*

Saskia Op den Bosh is a leadership and systems-change practitioner who believes you cannot create externally what you have not embodied internally. After 15 years in education research and development, she saw that lasting change requires inner transformation as much as new strategies. Saskia helps leaders and teams operate with integrity—defined as alignment between stated values and daily behaviors. Through self-leadership, breathwork, and reflective dialogue, she supports people in reconnecting to themselves so they can lead from truth rather than tension. In parallel, she works with organizations to create coherence between strategy, systems, and culture, ensuring that aspirational values can actually be lived. Her approach marries the heart of transformation with the practical planning needed to sustain it.

Contributing Authors

Scott Bess, *President and CEO, Indiana Charter Innovation Center, and Board Member for Indiana State Board of Education*

Scott Bess is president and CEO of the Indiana Charter Innovation Center. An education entrepreneur, he has founded two innovative school models and advises organizations on reinventing the high school experience through his consulting firm, EdLead. Scott led the creation of Purdue Polytechnic High Schools, designed to increase the pipeline of underrepresented students to Purdue University by redesigning high school around student voice, choice, rigor, and equity. With just three graduating classes, PPHS has more than quadrupled underrepresented minority enrollment at Purdue from Indianapolis. Previously, Scott led Goodwill Education Initiatives, growing the Excel Center from a single adult high school into a multi-state network serving over 7,000 students and improving graduates' earnings by over $10,000 within two years. Scott serves on the Indiana State Board of Education and is a Pahara-Aspen Fellow. He holds a BS in Mathematics Education from Purdue University and an MA in Teaching from Marian University.

Shereen El Mallah, *Research Assistant Professor at the University of Virginia*

Dr. Shereen El Mallah is a former K-12 teacher, trained developmental scientist, and current Research Assistant Professor at the University of Virginia's School of Education and Human Development Center to Promote Effective Youth Development (Youth-Nex). Her work integrates participatory design processes and rapid cycle evaluation to position youth as co-researchers and leverage both quantitative and qualitative data in challenging dominant narratives. Through long-term partnerships with schools, districts, and youth-serving organizations, her collaborative efforts have included designing innovative learning pathways, developing frameworks for equitable intergenerational collaboration, creating immersive experiences addressing complex societal challenges, and building assessment tools that honor locally-defined success over standardized metrics. El Mallah recently served on the design committee for the Portrait of a Thriving Youth, an evidence-based framework for adolescent development, and co-leads the Youth Participatory Action Research (YPAR) Nexus and Youth Engagement Resource Hub (YERC), two comprehensive resource repositories aimed at reimagining how institutions value expertise—ensuring those most impacted by systems become architects of their transformation.

Contributing Authors

Dr. Temple S. Lovelace, *Executive Director at Assessment for Good, AERDF & Founder and CEO at Oluko Learning*

Dr. Temple Lovelace works to reimagine the future of learning – co-creating leading-edge innovation that is tuned for human thriving. As Executive Director of Assessment for Good, a program at AERDF, she leads a five-year, multi-stakeholder effort to redefine how learner potential is recognized, measured, and supported, with the ultimate goal of serving those who sit farthest from opportunity. This vision has taken shape across her work, including through Oluko Learning. Olùkọ́, rooted in the Yoruba verb kọ́, speaks to teaching as an act of cultivation—building understanding for learners through context, relationship, and lived experience. As a third-generation educator and now founder and CEO of Oluko, Temple is committed to building tools that disrupt, not support the status quo. She has published extensively on assessment design and student-centered learning approaches so that educators, caregivers, and even learners themselves can co-create a future where learning is expansive, adaptive, and unconstrained.

Dr. Tequilla Brownie, *Chief Executive Officer at TNTP*

Dr. Tequilla Brownie is CEO of TNTP, one of the nation's leading education nonprofits, where she oversees vision, strategy, operations, and growth. TNTP works across more than 40 states and territories to ensure all young people are prepared for multiple pathways to academic, economic, and social mobility. A licensed therapist and former school social worker, Tequilla brings a unique perspective shaped by her own journey from rural poverty to Yale and executive leadership. Before becoming CEO, she spent a decade at TNTP building the organization's business and leadership capacities, elevating its national profile, and expanding philanthropic support. Previously, she led human capital reforms in Memphis City Schools that improved teacher effectiveness and student outcomes. Tequilla holds a BA in Psychology from Yale University, an MS in Social Work from the University of Tennessee–Knoxville, and an EdD in Education Leadership and Policy Studies from the University of Memphis.

TeRay Esquibel, *Founding Executive Director at Purpose Commons*

TeRay Esquibel is a social entrepreneur focused on community development and collaborative action. He is the Founding Executive Director at Purpose Commons and formerly co-founder and executive director of Ednium: The Alumni Collective, which mobilizes Denver Public Schools alumni to transform the local education ecosystem and increase socioeconomic mobility. At Ednium, TeRay led participatory research efforts that helped shape new graduation requirements in financial literacy and ethnic studies and secured more than $10 million to expand postsecondary opportunities. He has also held roles at RootED, Gary Community Ventures, and the Joyful Impact Social Entrepreneurs Accelerator. A current Pahara Fellow, TeRay serves on several boards and has been recognized as one of Denver Business Journal's 40 Under 40.

Contributing Authors

Tim Taylor, *Co-Founder and President at America Succeeds*

Tim Taylor is co-founder and president of America Succeeds, bringing a blend of executive, nonprofit, and public policy experience to the organization. Before launching America Succeeds, he served as founding president of Colorado Succeeds. Tim began his career on Capitol Hill as a senior legislative assistant to Congressman Saxby Chambliss, then moved to Colorado, where he worked as an independent political consultant and founded Open Fairways, a nonprofit serving at-risk youth through golf. He has been named one of Getting Smart's "60 People Shaping the Future of K–12 Education", is a Pahara-Aspen Fellow and member of the Aspen Global Leadership Network, and serves on the Aspen Institute's Education & Society Cross-Partisan Workgroup. Tim frequently speaks at national conferences including SXSW EDU and ASU+GSV, National Governors Association, SHRM, and America Succeeds' work has been featured in major outlets such as Forbes, Fortune, Inc., and BBC.

Tyler Samstag, *Director of Instructional Innovation at Allegheny Intermediate Unit and Executive Director at Remake Learning*

Tyler Samstag is Director of Instructional Innovation at the Allegheny Intermediate Unit and Executive Director of Remake Learning, a network that sparks engaging, relevant, and equitable learning opportunities across the Pittsburgh region. He began his career as a special education teacher in New York City, implementing research-based literacy interventions in traditional and alternative settings, including juvenile correctional facilities and psychiatric hospitals. While in Boston, Tyler interned at CAST (Center for Applied Special Technology), advancing Universal Design for Learning, and joined IDEO's Bits + Blocks Lab at the Harvard Innovation Lab to explore ventures inspired by blockchain technologies. He has facilitated design thinking and rapid prototyping workshops at Harvard Kennedy School, Harvard Graduate School of Education, and MIT. Tyler holds an MA from Teachers College, Columbia University, and completed the Mind, Brain, and Education program at Harvard University.

Tyler Thigpen, *Co-Founder and CEO of The Forest School: an Acton Academy in Atlanta, The Forest School Online, and the Institute for Self-Directed Learning*

Dr. Tyler Thigpen is co-founder and CEO of The Forest School: an Acton Academy in Atlanta, The Forest School Online, and the Institute for Self-Directed Learning. He serves as Academic Director at the University of Pennsylvania Graduate School of Education and guest lecturer at Harvard. Previously, he was a founding partner at Transcend and co-founder of MENTOR Georgia and Chattahoochee Hills Charter School. His writing on the future of learning has appeared in the Washington Post, Getting Smart, Education Week, Atlanta Journal and Constitution, and others. Tyler holds advanced degrees from Harvard University and the University of British Columbia.

Contributing Authors

Vriti Saraf, *Co-Founder and Chief Executive Officer at Ed3*

Vriti Saraf is co-founder and CEO of Ed3, a nonprofithat helps educators understand and apply emerging technologies through research-based pedagogy. She began her career as a Teach For America teacher in Brooklyn and has since served as a professor, dean, and director across public, private, and charter schools in both K–12 and higher education, locally and internationally. Vriti advises organizations including XPRIZE, Full STEAM Forward, and Mi Primer Bitcoin, and writes widely about the intersection of Web3, education, and equity. Her blog, Ed3 World, explores how decentralized technologies can empower learners and educators and reshape systems for a more inclusive future.

Yusuf Ahmad, *Chief Executive Officer at Playlab*

Yusuf Ahmad is CEO of Playlab, a tech nonprofit that empowers educators, schools, and nonprofits to build or adapt AI tools that meet their communities' needs. Prior to founding Playlab, he led new product development at Teach For America, contributed to Scratch, the creative coding platform used by millions of children, and conducted research at the MIT Media Lab. Yusuf was also on the founding team of the African Leadership University (ALU) and ALX, a pan-African network of universities and alternative higher education pathways. Outside of his core role, he mentors startups through MIT's Sandbox Fund and angel invests in AI edtech companies such as LitLab and Recess.

Zarek Drozda, *Executive Director at Data Science 4 Everyone*

arek Drozda is Executive Director of Data Science 4 Everyone, a national initiative based at the University of Chicago that advances data science and data literacy education in K–12 schools. He helped launch DS4E in 2019, building a coalition of more than 3,000 education leaders across 35+ states. Zarek also contributes to AI education policy with the Federation of American Scientists and previously served at the U.S. Department of Education's Institute of Education Sciences, where he led research on emerging technology and helped coordinate data analytics for the federal COVID-19 response alongside the White House, Department of Education, and CDC. Before federal service, he helped build the Center for RISC, a social impact incubator founded with economist and Freakonomics co-author Steven Levitt.