Skills Visibility

Why and How a Skills-Based Economy can be More Equitable

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Education
Design Lab

About The Education Design Lab

The Education Design Lab (the Lab) is a national nonprofit that co-designs, prototypes, and tests education-to-workforce models through a human-centered design process focused on understanding learners' experiences, addressing equity gaps in higher education, and connecting learners to economic mobility.

The process helps higher education leaders consider the needs of employers, using curriculum and program design as a gateway to make skills more visible to students and employers alike.

The Lab also helps employers, cities, and states organize their response to the vision that hiring and developing talent based on skills (versus degrees) is better for employer ROI, for regions' GDP, and certainly for learners left out of the current system.

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Defining Key Language

(L)earners: This merging of **learners and earners** is to acknowledge we are in an era in post-secondary education that we call “the weave,” where individuals almost always wear both of these hats. 75% of all college students now work at least part time, and everyone else needs to “upskill” or “side-skill” for most of their professional lives. To not design school at work and work at school is to ignore this reality and to not capture the learning in both places does a disservice to all.

New Majority Learners: Based on today’s enrollment numbers, and certainly population trends, the once thought “nontraditional” students are the new majority of learners today. College was never designed for students of color, those who are likely older, working while in school, or supporting a family, those who might be under-resourced, or have time commitments related to work or childcare that prevent a traditional route to college. For a full explanation, visit eddesignlab.org/newmajoritylearners

Equity: When we close economic, resource, and opportunity gaps across the learn-to-work ecosystem, and in turn, outcomes are not predictable based on someone’s identities (adapted from Creative Reaction Lab).

A Note on Context, Bias, and Perspective

The ideas we present in this paper hope to address discrimination and bias in learning and hiring and the resulting wealth, skills, and opportunity gaps that emerge. The Lab, alongside our many partners, is committed to co-designing and rethinking what a truly equitable system and future world might look like—one that aligns with the visions of the learners, institutions, and organizations we work with.

The (l)earner perspective we share here is informed by thousands of interviews we have conducted with students and community members through our work over the last eight years. These (l)earners are of vastly diverse identities and many have been failed by or faced barriers to success within the existing system. The emerging ecosystem and ideas described in this paper, constituted by hundreds of interviews with ecosystem leaders, is largely led from a white perspective. The Lab and many leaders in the learn-to-work space are working to diversify and be more inclusive of the vast perspectives that exist.

The conversation and visioning shared here is just getting started, and we welcome and need all voices in shaping what this future can be.

The Next Frontier of the Learner Revolution

A Letter from Kathleen deLaski, Founder and CEO, Education Design Lab

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It's been eight years since we introduced the construct of the Learner Revolution with the Lab's first white paper. We predicted technology and changing learner attitudes would force the unlocking of degrees to empower all learners to disintermediate their education, choosing their learning pathways on their own terms. By 2019, our second Learner Revolution white paper named the beginning of the shift from degrees to skills as a more equitable, inclusive currency for being hired and promoted and suggested how colleges could transform to serve learners in this new paradigm.

Now it's 2022, and the Learner Revolution has joined forces with the Skills Revolution.

Who would have predicted then a global pandemic? Or the national racial reckoning after the murders of George Floyd, Breonna Taylor, and many others? Both sets of events accelerated the pace of interest toward more inclusive, skills-based learning and hiring models. They coincide with the readiness of a set of national standards and technology capabilities that still need "human trials" before being ready for prime time. If you haven't heard about "learner wallets" yet, several major pilots are coming online by the end of 2022. If we can get those trials right over the next few years using the equity vision of many players, we could begin to close the wage and skills gaps that plague this country.

Do we understand this opportunity?
Do we see the potential?
Are we mitigating the risks?

This paper attempts to organize that thinking as more than the sum of the interesting parts that are emerging. We attempt to organize it into a new talent ecosystem vision made possible by the skills-based learner revolution. And to urge that we act now to consider the promise and the risks as these tools, standards, and practices begin touching humans. And to design accordingly before it is too late.

Think about it. We move away from a world where a $200,000 history degree gets me a job interview because blue-chip companies only come to the best campuses to interview candidates. We are now tantalizingly close to a world where my skills are telegraphed digitally to any employer around the nation, or even the world, looking for that skills cocktail. And it works the other way: all employers looking for certain skills can feed into a real-time skills ticker tape, signaling to learners and the learning providers that serve them what combination of skills will yield employment.

The magic of this vision, coming to a job market near you in the next two to five years, is “visibility.”

You may not see it happening, but several sectors are leaning in. Technologists are creating the data infrastructure and “digital wallets.” Machine learning companies are scaling skills translation and assessments. Learning institutions are ramping up micro-credentialing strategies with competency-based stacks and one-off badges, attempting to translate their degrees and learning outcomes to a language that speaks to employers. Employers are open to looking at talent differently; in fact, they have to, with the labor shortages and 10-year outlook for new entrants to the workforce. And perhaps most importantly, to enable all of this, learner views about degrees are changing.

The COVID-19 pandemic has accelerated these changes with millions of people leaving lower-wage jobs and positions that do not align with their career goals or economic needs. The call for more skills training and programs that closely align to employer needs is being heard at local, regional, and national levels. Without a shift to skills, politicians see the economic growth drag that is predicted to slow the economy down by $1.3 trillion by 2030.

Before we turn to the paper, let us honor the degree and its important signal value for a learner’s confidence and (for now) required entry to regulated fields such as medicine, teaching, and law. Nothing we have said should be construed as disrespecting the degree. We simply recognize that expecting it as the gateway to professional success has been an exclusionary practice for so many, and we need alternatives.

These alternatives must be driven by the needs and goals of learners most harmed by the existing system, and not just by their needs and goals, but by these learners themselves. People are incredibly resilient, and many of the learners we’ve worked with over the last eight years have solved for their problems despite operating within a system setting them up to fail. It is on us as systems leaders and decision-makers to change the system itself, and to capture this turning point, this moment, so that all people have what they need to succeed on their own terms.

This paper addresses what that will take at the ecosystem level. And, it calls us all to action.

Introduction

The tip of the iceberg for the skills-based economy was the Great Recession (2008). That's when pollsters began documenting that learners were becoming laser-focused on job preparation and hireability, because the landscape was suddenly more competitive.

The shift influenced learning providers to focus more on skills offerings, rather than the "whole person" approach of a liberal arts education. And to start asking employers, "What skills do you need?"

Meantime, particularly desperate employers were getting very vocal about the skills gap, skillifying their cybersecurity or data analysis job postings, and searching for "talent pipeline" partners, either bootcamps or colleges that could churn out coders or computer scientists.

Opportunity@Work found that up to 30 million American workers have the skills to earn up to 70% more in pay, but don't know they qualify for roles or they don't have the required credentials, even if their skills match the job requirements.

Fast forward to 2022.
These changing attitudes and the responsive innovations are beginning to really reset the relationships among the three critical actors in the emerging skills-based economy.

- Learning Institutions
- (L)earners
- Employers

> "We are in the middle of a profound shift that's similar to when we went from agriculture to manufacturing.
>
> LARRY GOOD
> Corporation for a Skilled Workforce

Why Now:
Skills are Reshaping the Relationships Among Three Key Stakeholders

LEARNING INSTITUTIONS

(L)EARNERS

EMPLOYERS

SKILLS ARE RESHAPING THE RELATIONSHIPS AMONG THREE KEY STAKEHOLDERS

Learning Institutions and Credentialing are Changing

Competition and declining enrollments are pushing many colleges to test and adopt new models, even two years into a pandemic that forced all institutions to accelerate online and shorter-term credential modalities.

Learners now have to navigate some 1 million credentials when choosing a program or certificate. Only perhaps the top 100 exclusive colleges feel insulated from needing to change many aspects of their strategy. For the rest:

1

Colleges and universities are mapping and translating their course catalogs to skills, accelerating their use of credit for prior learning and competency-based models that recognize and validate a learner's skills and abilities.

> **Learners should be able to take work and volunteer skills and have them assessed for credit. Skills and competencies are the new currency. We have to future-proof the learner for the workforce of today and tomorrow.**
>
> **ADRIAN HAUGABROOK**
> **Southern New Hampshire University**

2

Learning institutions are embracing micro-credentials as a means to better signal job readiness to (l)earners and employers.

SKILLS VISIBILITY IN ACTION

Alamo Colleges District in San Antonio issued 850 badges in Fall 2021 for 21st century skills mastery inside their traditional courses. 64% of students surveyed felt increased confidence in their employability. In a similar pilot with front-line Goodwill workers, employees and supervisors reported significant gains in skill and productivity.

3

Learning institutions are deepening employer partnerships to increase industry alignment and career readiness; expand work-based learning, apprenticeships and internships; and solve employer pipeline challenges.

SKILLS VISIBILITY IN ACTION

Wichita State University has infused 90 badges into their non-degree programs since 2015 and works with associations to identify trends where skills and badges are needed, such as a new physical therapy technique that cuts therapy costs, but is not yet integrated into traditional programs.

4

Learning institutions are engaging "nontraditional" student populations and designing stackable pathways that are flexibly delivered and provide a clear return on investment to their learners.

SKILLS VISIBILITY IN ACTION

Ivy Tech Community College created Workforce Ready Stackable Credentials to offer transparent pathways and show (l)earners how certificates can stack to technical certificates, which can then stack into associate degrees.

SKILLS ARE RESHAPING THE RELATIONSHIPS AMONG THREE KEY STAKEHOLDERS

(L)earner Attitudes Toward Learning and Work are Shifting

Colleges, universities, and newer competitors, such as bootcamps, are responding to changing (l)earner demands.

This comes more than a decade after the Great Recession, when college prices were skyrocketing and most of the employment gains were made in low-wage, part-time work.

1

(L)earners are increasingly questioning the value of a college degree. A Strada Education Network survey found 62% of Americans in 2020 preferred shorter-term skills training and non-degree credentials to degree programs. The pandemic accelerated the demand shift to "just-in-time" training, particularly for those used to facing uncertainty and instability in housing, food, transportation, money and income, and/or childcare. Community colleges have seen declines in enrollment of 20% over the last two years.

"

I definitely worry about if my degree will help my career. Like what if I've put in all this time and money and my business doesn't take off?

LEARNER INTERVIEW
Single Moms Success

I realized that in the job market, they are more focused on certifications than the bachelor's and a master's — the real world focuses on what you can do.

LEARNER INTERVIEW
Community College Growth Engine Fund

2

(L)earners are looking for more fulfilling and purposeful experiences where they have a strong sense of belonging. In 2021, 47 million people quit their jobs as part of the "great resignation." (L)earners are holding institutions and employers more accountable to equitable practices and lack of representation.

"

Get better at supporting single moms by letting them know that they can do it and that there are resources out there. Let single moms know they are not alone.

LEARNER INTERVIEW
Single Moms Success

3

(L)earners want more personalized learning experiences and are prioritizing mobility and flexibility that allows them to weave learning and work with their life.

The way that I look at it is if I'm taking an in-person class, I'm losing money because I can't work that day.

LEARNER INTERVIEW
Single Moms Success

I couldn't work and finish my mental health degree. I could take my general classes. I got all of my general classes done, but I couldn't actually finish my degree without committing to be there, two days a week for a whole day. This is not flexible, and I'm sad I couldn't finish my course. I wish that was different.

LEARNER INTERVIEW
BRIDGES Rural

SKILLS ARE RESHAPING THE RELATIONSHIPS AMONG THREE KEY STAKEHOLDERS

Employer Practices are Evolving

Employers as a group are slower to this party, but they are making strides, partly because they have to, with the looming demographic cliffs and skilled talent shortages.

The Society for HR Managers reports that 70% of HR professionals want to use skills-based hiring to expand talent pipelines, diversity, and internal promotion, but their own tech systems and time and skill to convert job descriptions are the biggest barriers.

Changes include:

1

Employers are increasingly replacing degree requirements with proof of skills and competencies in their job descriptions and hiring processes. A 2022 Burning Glass Institute report found that employers are eliminating bachelor's degrees as a requirement for many middle skill jobs and that this "emerging degree reset" could lead to 1.4 million jobs that no longer require a college degree.

"

We changed our job descriptions to remove unnecessary barriers. We found that more than 50% of the jobs didn't require a college degree, so we pulled it out of the job description.

DAVID LEASER
IBM

We are seeing an explosion of companies using their own assessments.

KAREN ELZEY
Workcred

2

Employers are driving new technology solutions that are shaping system-wide standards and functionality of the skills-based economy. A Wellspring report by IMS Global Learning Consortium and 1EdTechFoundation found that

SKILLS VISIBILITY IN ACTION

The T3 Innovation Network from the US Chamber Foundation, focuses on emerging technologies in the skills economy. More than 500 organizations

74% of HR professionals say they are using technology or a bank of competencies and roles when creating new job descriptions.

explore efforts such as blockchain, learner employment records (LER), and skills-based hiring.

“

Skills-based hiring will make leaps and bounds in the next five years. We need to train millions of firms to do this and they need the technology to do it. However, in order for skills-based hiring to become mainstream over the next decade, it will require intentional change management.

JASON A. TYSZKO
U.S. Chamber of Commerce Foundation

3

Employers are joining new equity movements and coalitions focused on closing skills gaps. 62% of HR professionals are focusing on skills-based hiring to improve equity, diversity, and inclusion, according to the Wellspring report. Employers are beginning to acknowledge, identify, and address bias in the hiring and promotion process.

SKILLS VISIBILITY IN ACTION

OneTen Coalition was founded in 2021 to close the opportunity gap for Black Americans without a college degree. Working wIth over 60 coalition members and partnerships with 250 leaders, OneTen applies a skills-first approach

to prioritize skills-based hiring and promotion. They have offered tech education scholarships to diversify the tech space and created a job-matching platform for Black talent.

4

Employers are investing in their own capacity and looking for innovative partnerships to skill-up their workforce and diversify their talent pipelines. Companies like Microsoft and Google are trying to speed up the pipeline by offering tens of thousands of scholarships for their ready-made certificates in hard-to-fill roles. The World Economic Forum estimates that 50% of all employees will need to reskill by 2025.

Skills Visibility Defined

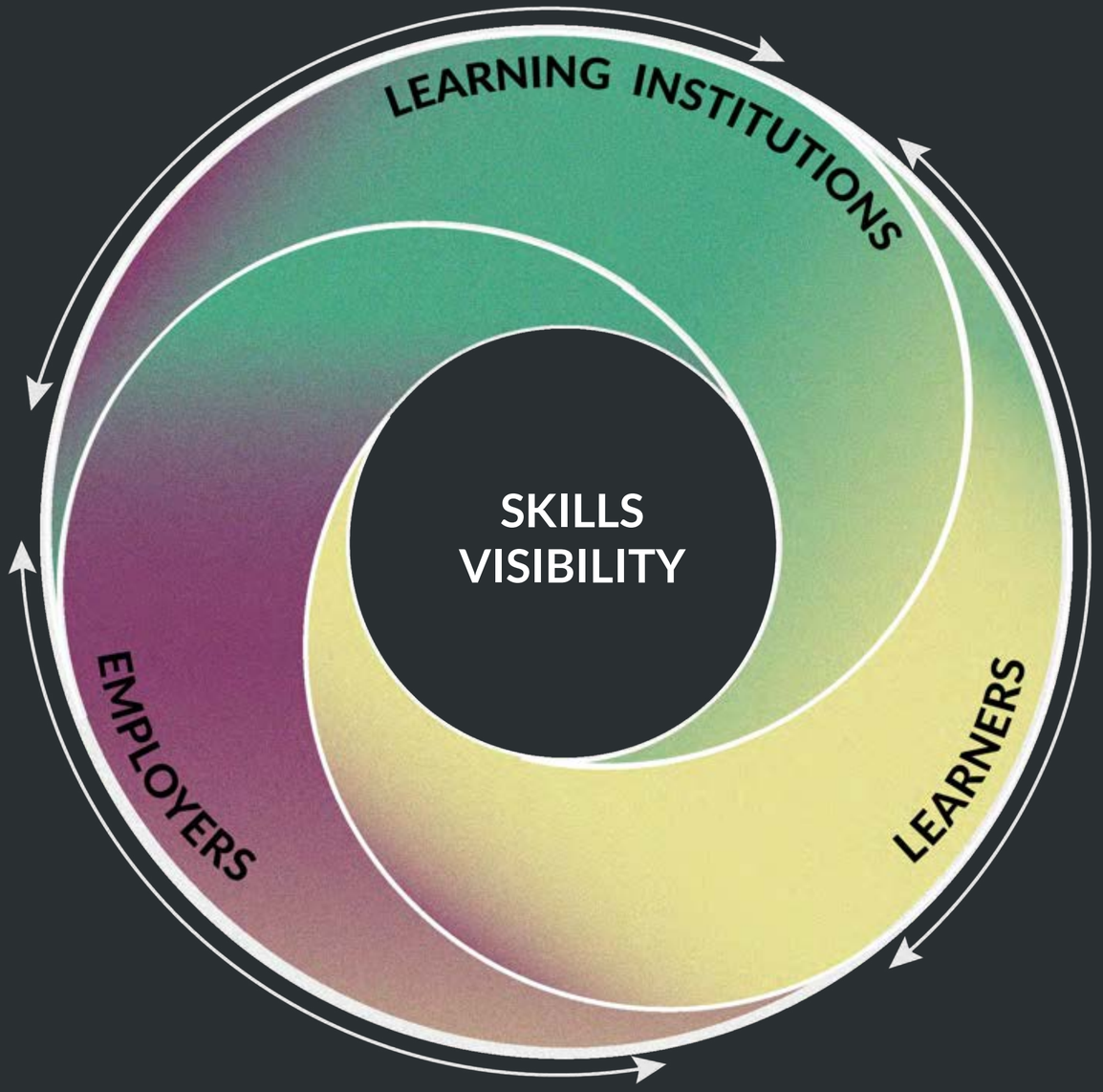
The connective tissue emerging among the three key stakeholders is skills visibility.

Skills visibility is about making the skills a (l)earner has acquired open, transparent, and accessible to the (l)earner, providing agency to showcase their curated skills and competencies to employers in the marketplace.

Skills visibility is about employers articulating the 21st century and technical skills needed for the job, as well as making those skills visible to prospective candidates.

Skills visibility engages (l)earners as co-creators and centers their needs and goals in its design, particularly those we know to be most harmed by the current capital- and degree-driven state.

However, the technologies and the will to connect this talent ecosystem are only just now emerging. The current learning and hiring ecosystem is not based on skills visibility.



Four Parts of the (L)earner Talent Journey That Need Reinvention

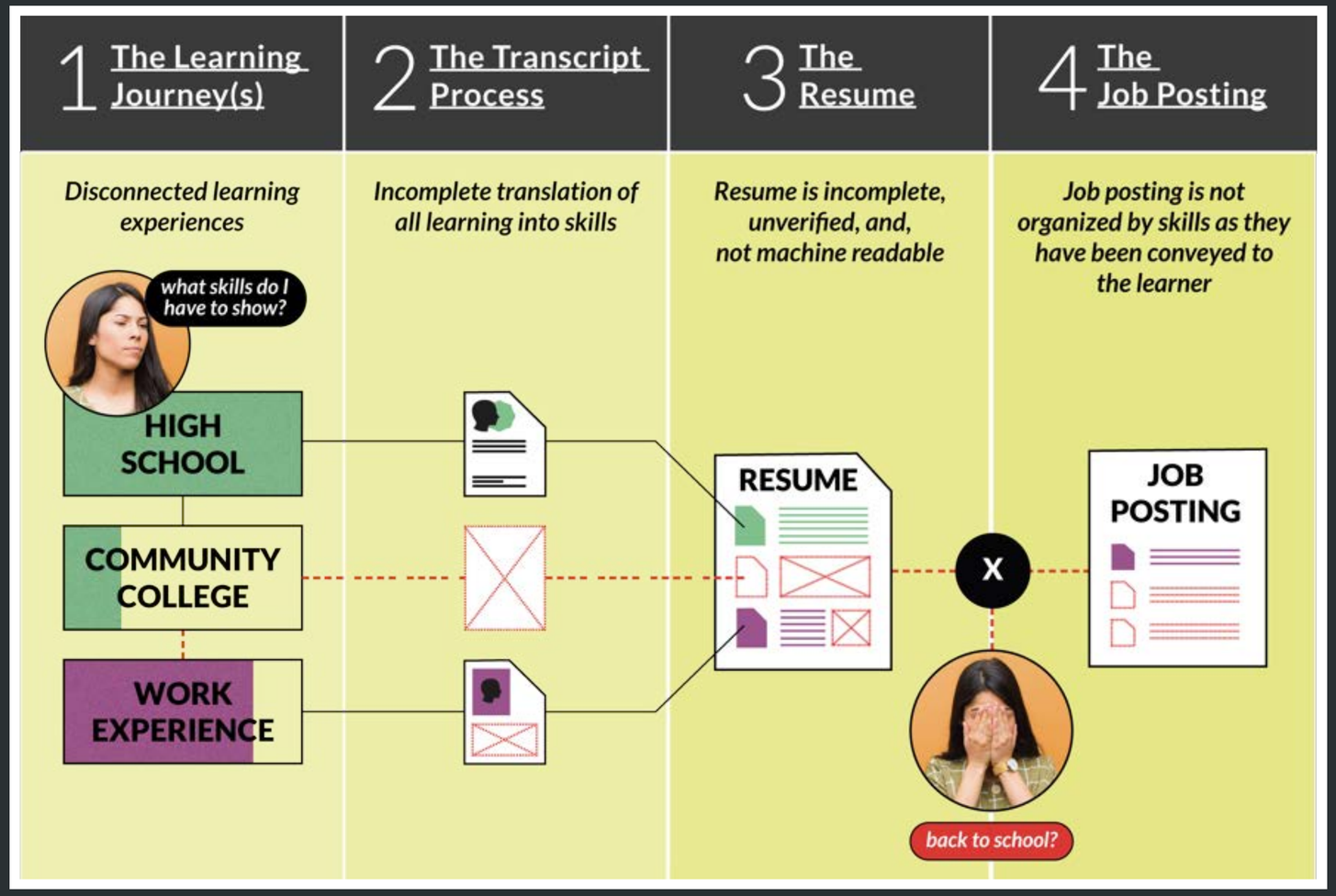
What's wrong with the talent pipeline system today? **We would argue that it is linear, high-stakes, and broken.**

Why does it exclude so many new majority learners? **60% of all American adults do not have a degree and, historically, they have been shut out of most professional track, higher-wage careers.**

There are four key steps in a (l)earner's journey from acquiring skills to landing a job that need reinvention:

1. **The Learning Journey(s)**
2. **The Transcript Process**
3. **The Resume**
4. **The Job Posting**

Here's a visual of how the current ecosystem works through the eyes of Andrea, a potential job applicant.



TALENT ECOSYSTEM

The current ecosystem is linear, high stakes, and broken.

This example is Andrea's journey. Andrea is a persona we've developed after interviews with thousands of learners to understand the journeys and experiences of those who have been excluded by higher ed. Andrea's experiences are that of real learners.

Andrea is a 32-year-old sailor in the Navy, who is trying to plan for her next steps upon leaving the military. Andrea does not have a college degree, so she tracks down her old transcripts from the few college courses she took, and various certificates she earned in the Navy.

Andrea (she/her/hers)

Age: 32

Journey Milestone:
Planning her next steps upon leaving the military

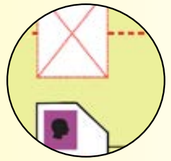
There are four big problems that are particular barriers for non-degree holders, like Andrea, who may not have the professional networks or career advising to translate existing skills when applying for jobs:

1

Disconnected Learning Experiences

It is her responsibility to do the work of connecting all her formal learning experiences.

2



Incomplete Translation of all Experiences into Skills

Her informal learning, such as skills she has honed on the job or from other life experiences, are not recognized because there is no mechanism to validate those skills.

3

Resume is Incomplete, Unverified and, not Machine Readable

The recruiting algorithms that employers use are screening for search terms like "Bachelor of Science degree" and certain skills clusters that Andrea doesn't know wto include on her resume, and she can't verify them.

4

Job Posting is not Organized by Skills as They Have Been Conveyed to (L)earners

The job postings Andrea is looking at may not include language that resonates with her understanding of her skill set, even though she might be qualified.

So while she may apply for a job that she believes she is prepared for, she may well be screened out by a faceless automated filter, or, if lucky enough to communicate with someone, they may suggest she "go back to school." **This is not a visible system for anyone.**

Moving to a Virtuous Circle of Visibility

As we move away from the current linear, high-stakes, and broken talent ecosystem, we need to redesign the hiring ecosystem with a visibility lens towards the four components:

1. The Learning Journey(s)
2. The Transcript Process
3. The Resume
4. The Job Posting

It makes sense that the most equitable design construct might be a virtuous circle.

Here's a visual of a co-imagined future, of the ecosystem as a virtuous circle.

Connecting Learner Experiences

As we move away from degrees as the dominant currency for professional-track career opportunities, we must equip learners to organize what will likely be a greater number of smaller-size credentials in a lifelong learning journey.

So they have access to all their units of learning and can "see" and make sense of their whole learning journey in considering future career paths.

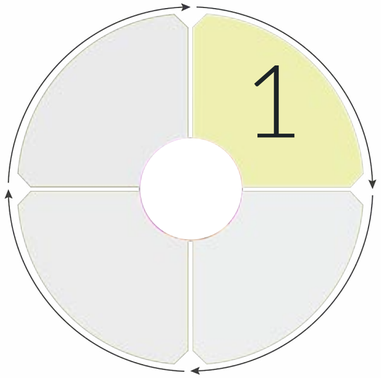
How would this phase of a virtuous cycle change Andrea's journey?

Andrea is leaving the Navy, where she has earned several certificates in logistics supply, and two leadership awards during training exercises. Her promotions over four years required collaboration and leadership training. Before the Navy, she took three community college courses in general studies, and had two AP credits from high school.

As she ponders her career possibilities, how can she easily aggregate her school credits and rich training to tell a verifiable, skills story?

"Lived experience has been incredibly overlooked in the current hiring process, and that specifically impacts disadvantaged communities.

KATIE MCKENZIE
Rung for Women



2. The Transcript Process

Translating Experience into Validated Skills

Most of what we have learned or what we can do will never be on a college transcript.

The emerging skills-based economy and a tight job market should encourage hiring managers to look beyond degrees to the competencies potential workers have earned through work and life circumstances. Universally accepted assessments or demonstration opportunities, particularly for softer skills, could help learners and workers validate any type of skill without being told that they will have to "go back and get a degree" before being considered for professional track careers.

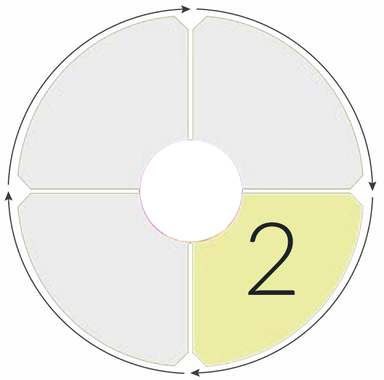
How would this phase of a virtuous cycle change Andrea's journey?

Andrea became known as a "leader without a title" in the Navy, showing initiative and creative problem-solving skills as an organizer of complex collaborative efforts on six-month deployments to the Middle East. For each of three promotions, she scored "outstanding" ratings in her reviews on critical thinking and initiative.

Might she take a scenario-based assessment to show that she has these skills and can apply them to the context of a civilian workplace?

SKILLS VISIBILITY IN ACTION

At the Lab, we're working to make the skills and competencies of learners visible, portable, flexible, relevant, and affordable to unlock the equity promise of a fast-moving, digital, skills-based economy. XCredit will provide new ways of assessing and credentialing the informal learning that occurs both on the job and in life. The initial phase of this initiative is focusing on transitioning military members and veterans, and unemployed and underemployed job-seeking civilians.



3. The Resume

Creating a ‘Learner Wallet’

Increasingly, forward-leaning institutions and states are experimenting with learner education records (LERs), where documented skills are put into a digital format, creating a “learner wallet,” available on an accessible platform such as an iPhone. The first working pilots for these are expected by the end of 2022.

The LER/learner wallet provides all the elements of a digital skills identity for the (l)earner and is controlled by them rather than the institution or employer.

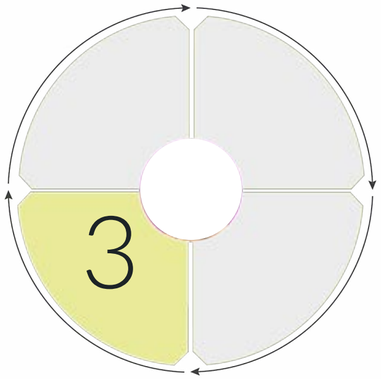
How would this phase of a virtuous cycle change Andrea’s journey?

Andrea can access her wallet through Indiana’s statewide learner wallet initiative once it links data with the military services, community colleges, and K-12 systems. Ideally, the Navy transition team provides her training on the value proposition for accessing her skills portfolio. Andrea is aided in translating her technical skills by MilGears, a career translation tool designed for exiting service members. For her broader skills, she might use one of the validation tools, such as XCredit. All of these skill validations live in her skills wallet.

SKILLS VISIBILITY IN ACTION

Western Governors University, Ivy Tech Community College, and other partners are developing the Indiana Achievement Wallet that includes digital badges and wrap-around student support services.

The National Student Clearinghouse developed My Hub, a platform that includes records for 1,000+ institutions and “transparent learner record visibility” for millions of students. (L)earners can order transcripts, view digital credentials, and integrate digital badges from Credly and Badgr.



4. The Job Posting

Hiring Marketplace of the Future

In the future, the resume and the job posting should become a two-sided marketplace for the (l)earner to create and post an informed digital identity. And it also plays the role of the job posting, where employers name the skills they will be searching for by role, and invite the resume holder to "turn on" their discover mode for roles and geographies that meet their needs.

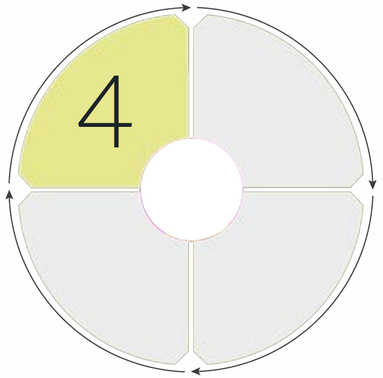
In fact, we hope this marketplace can include a publicly funded advisory function to support (l)earners in navigating and optimizing their digital identities, because, as we mention in the next section, advising becomes less the role of colleges when learning and training is being acquired from many sources.

How would this phase of a virtuous cycle change Andrea's journey?

Andrea is now ready to apply for jobs. She wants to return to her hometown in Indiana. Finding she has an 80% skills match for high-demand roles that meet her salary requirements posted by Indiana employers in automated supply chain, she turns on her "discover" mode for 10 employers.

And why is this conceived as a virtuous circle?

If Andrea is not satisfied with the feedback (or lack of feedback) she receives from employers, she is in a position to see what additional skills she needs to boost her match, or what adjacent fields might be easier to skill toward based on her current competency levels.



The Design Criteria of Visibility

Design criteria provide the functional and aspirational guardrails as we push for a new system that has to accommodate many stakeholders.

A commitment to equity in the skills-based economy requires close attunement to every area where people may experience it differently.

The six criteria below represent “what must be true” for this emergent system to be equitable. The success indicators are not exhaustive, but can demonstrate whether we are headed in the right direction.

DESIGN CRITERIA

Open and Accessible To All

1

All (l)earners can easily access and participate in an open system freely available and used by all.

The visibility of skills functions as an equalizer for all (l)earners as it removes the barriers of pedigree and provides access to social networks that expand opportunities.

SIGNS OF SUCCESS

- ☐ (L)earners don't have to pay to participate.
- ☐ Products, services, and solutions are developed according to principles of universal design, benefiting everyone regardless of resources or ability; opposed to design that focuses on the "average" or "traditional user."
- ☐ Broadband and access to technology are not obstacles for participaction.
- ☐ Individual data is protected but aggregate analysis is democratized to ensure efficacy and equity.

SKILLS VISIBILITY IN ACTION

Central New Mexico Community College (CNM) became the first community college in the U.S. to issue all degrees and credentials via blockchain to give graduates free and open access to their credentials. (L)earners are able to share their credentials more easily with employers and others. CNM is also launching a Blockchain Center of Excellence to connect (l)earners with community partners to address business needs with blockchain solutions.

DESIGN CRITERIA

(L)earners Can See the Value of the Tools

2

Wallets and other visibility tools need to address (l)earners' core drivers of engagement: agency, growth and belonging, and ways that acknowledge their assets and build trust.

A recent study showing that 50% of college students opted out of receiving employer recruiter emails demonstrates the challenge.

✓ SIGNS OF SUCCESS

- ☐ (L)earners increase their access to opportunities and are able to "see" and road test possible career pathways, based on skills they have acquired at work, school or in life.
- ☐ (L)earners can make themselves visible to employers around the country and around the globe by "opting in" to digital sector recruiting networks for internships, gigs, and full-time jobs.
- ☐ (L)earners of all identities, experiences, and backgrounds feel like new tools are designed for them, that they belong in the opportunities they are connected to, and that their communities are represented in who and what they are interacting with and how.

"Members are excited to earn their badge. It is very empowering. Members keep saying, "Oh, I had some of these skills and didn't know it."

RENEE RACETTE
Rung for Women

DESIGN CRITERIA

Employers Can See the Value of Skills Based Hiring And Can Mitigate Current Biases in the System

3

Employers cite a shortage of skilled and diverse workers as their leading talent challenges.

Opportunity@Work shows that four-year degree requirements screen out 76% of Black candidates and 83% of Latinx candidates.

Early employer adopters of skills-based hiring need to document what actions increase access and return on investment.

✓ SIGNS OF SUCCESS

- ☐ Employers and employer associations engage with colleges, bootcamps, and job centers to define stackable skills requirements for high-demand roles.
- ☐ Black, Latinx, and indigenous (l)earners gain equitable access, consideration, offers, and promotions for jobs as their white counterparts; same is true for (l)earners who are working class, speak English as a second language, are immigrants, or formerly incarcerated.
- ☐ Case studies exist to demonstrate “return on investment” for employers to be incented to change their hiring practices.
- ☐ Employer associations drive consistent skills language across job postings in their sectors.

DESIGN CRITERIA

Employers and Learning Providers are Incented to Work Together, and with (L)earners

4

The missing link, which could unlock so much value and efficiency, is that learning providers and employers often have no feedback loop with each other. And little feedback from (l)earners.

Training providers are often forced toward guesswork of what credentials will prepare learners for specific roles, or they hire an industry rep to provide one take on the necessary preparation.

✓ SIGNS OF SUCCESS

- ☐ Employers and learning providers utilize tools, research, and data to have a shared evidence-based understanding of (l)earner and employer needs.
- ☐ Large employers co-create credentials with colleges, bootcamps, and job centers.
- ☐ Small employers endorse industry certifications and skills maps to provide clear direction to learners and teaching partners.

DESIGN CRITERIA

Units of Learning are Assess-ible, Digitally-Discoverable, and Portable

5

It's often guess-timated that 95% of learning happens outside the classroom. How can a (l)earner get "credit" for that learning when they go to apply for a job?

We believe it is the joint responsibility of learning providers, employers, and intermediaries to provide assessments and services that validate all skills.

Further, the (l)earner needs to be able to easily showcase verifiable skills and competencies that are seamlessly transferable and applicable for them to use across open systems.

SIGNS OF SUCCESS

- ☐ A (l)earner's digital skills identity is universally transferable across a single, interoperable system that seamlessly connects to any employer or industry, which requires partnership and collaboration across systems and industries.
- ☐ Learning providers, from K-12 into postsecondary and beyond, are trusted facilitators that support (l)earners to successfully establish, leverage, and maintain their visible skills identity and networks in the skills-based economy with a view to (l)earner agency.

"Every entity in the postsecondary space needs to give learners power and control over their own data.

CHRISTINA LUKE LUNA
Digital Promise

DESIGN CRITERIA

Advising is Available to (L)earners Across Their Journeys

6

Human-touch advising is designed to follow the (l)earner through the virtuous circle. It recognizes that as the college degree becomes less prevalent, the colleges' responsibility to advise the learner diminishes. Yet, the ecosystem will become more confusing. As the number of credentials available to (l)earners continues to increase, advising for (l)earners must become a "social good," much in the way the Affordable Care Act called on the federal government to support health care advising with system navigators. Perhaps it is covered by federal financial aid, but it should follow the learner through all learning opportunities, so it likely won't be tied to a specific college a learner attends.

SIGNS OF SUCCESS

- ☐ Federal pilots exist where learners can use federal financial aid dollars to consult a certified "EdGuide" who can help them navigate a now-fractured learn-to-work ecosystem.
- ☐ State, regional, and private institutions launch initiatives to provide this type of advising in a way that is free and accessible to all.

SKILLS VISIBILITY IN ACTION

Rework America Alliance is developing training for career coaches to support job seekers through a human-centered, skills-based approach. "Coaches will be trained through a series of modules to identify non-traditional job progression and training opportunities," as noted on Markle.org.

Merit America is partnering with Grow with Google to provide coaching, interview prep, and job placement assistance to (l)earners who are pursuing Google certificates at no initial cost. However, once users get a job paying $40k or more, they pay a flat monthly fee for 60 months through the Success Sharing model.

Together, these six design criteria will allow for a system that makes the skills and competencies of (l)earners more visible, giving people the individual power to pursue pathways that increase their economic mobility and allow them to reach their goals on their terms. This power unlocks the equity promise of a visible skills-based economy.

Importantly, while the success indicators that accompany each design criteria represent what a visible skills-based economy can look like if we do it right, there are some serious pitfalls if we don't.

DESIGN CRITERIA

If We Don't Do It Right

We mentioned above the urgency of designing the connective tissue of this emerging ecosystem.

While the promise of realizing a truly visible skills-based economy is exciting, we must understand the risks if we fail to intentionally design, which include:

1 DESIGNING THE TOWER OF BABEL

Skills only become regional or national currency if markets, regions, and professions agree on them via competency frameworks. If we don't ensure all key stakeholders are at the table, skills credentials, platforms, partnerships, and pipelines will quickly proliferate independently; programs may fail to connect to each other; and key definitions, quality indicators, and metrics may fail to translate across the system.

> **The same groups that are going to make the scale happen can also perpetuate the inequities. We have to be asking the right questions with the right stakeholders to ensure that we are not recreating another inequitable system that marginalizes the people we are trying to support.**
>
> **HOLLY CUSTARD**
> **Strada Education Network**

2 SIZE MATTERS

The size, capacity, and resources of an organization or company can influence its ability to participate in skills-based hiring and promotion in such a way that prioritizes skills visibility. We must create industry-wide or regional toolkits that can be turn-key for smaller employers.

> **The biggest challenge is the risk of exclusion. Early adoption will be by the organizations and users who are most easily able to access the technology and tools. We need to get better at using competencies and skill assessments at all levels.**
>
> **LARRY GOOD**
> **Corporation for a Skilled Workforce**

3 CLOSED, INEQUITABLE TECHNOLOGY PLATFORMS

Closed platforms that require users to pay for access and navigate each of the different platforms will widen existing gaps in attainment, wealth, and opportunity for many and create confusion for employers and learners. Likewise, artificial intelligence is becoming the tool of choice to scale assessment and translation of skills, but the current state of the product set is inadequate, as a Harvard Business School study points out that automated resume-scanning software is contributing to a "broken" hiring system that is leaving millions of qualified workers behind.

> **There are not enough equity measures in ed tech. Right now, technologists run the risk of taking the systemic inequalities that exist in society and turning them into algorithms. We have to solve for this problem. This is what led to the creation of the Open Skills Network.**
>
> **WAYNE SKIPPER**
> **Concentric Sky**

4 EXISTING BIASES, PREJUDICES, AND UNEQUAL VALUING OF SKILLS, IDENTITIES, AND PERSPECTIVES ARE WORSENED

Above all, if we fail to ground ourselves in a deep and thoughtful understanding of the problems at hand, the people those problems most deeply affect, and the context and history of how we got here, we can further the very gaps, barriers, and biases that we aim to mediate with this new vision. Existing biases in learning, working, and what we value and who we deem as capable or as experts must be addressed across all tools and processes that become part of the new ecosystem.

DESIGN CRITERIA

If We Do It Right

If we design and implement the skills-based ecosystem while holding the equity promise at the center of the skills visibility work, then the following elements will be true:

1 TALENTS AND AGENCY OF MILLIONS OF WORKERS ARE UNLOCKED

Many workers have more skills than they realize or are able to demonstrate. In a skills-based economy, all (l)earners' experiences, expertise, and knowledge from work, learning, and life can be documented and applied. This will benefit employers, (l)earners, the broader economy, and society.

> **This is an opportunity to engage populations who have experienced low levels of mobility. It is a way to address occupational segregation and value their skills and knowledge in a way that haven't traditionally been valued.**
>
> **TODD GREENE**
> **WorkRise, Urban Institute**

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2 THE GAP BETWEEN INDIVIDUALS' TRAINING AND FAST-CHANGING ECONOMIC NEEDS IS CLOSED

The transition to skills can enable learners to better see how their skills in one sector can be applied to skills in another sector. A skills-based system is built for lifelong learning in ways that are not linear.

SKILLS VISIBILITY IN ACTION

Rung for Women, a nonprofit in Missouri that seeks to empower women to achieve sustained independence, launched a skill-based program of three pathways to employment. Programs lead to badges that are linked to a university credential.

3 DEGREES AS CREDENTIALS DON’T GO AWAY

They are redefined as the skills that make up the degree, and learners can achieve mastery by other means. What does change is the emphasis on proficiency. Being able to demonstrate and validate skills proficiency will provide much more information to employers and (l)earners.

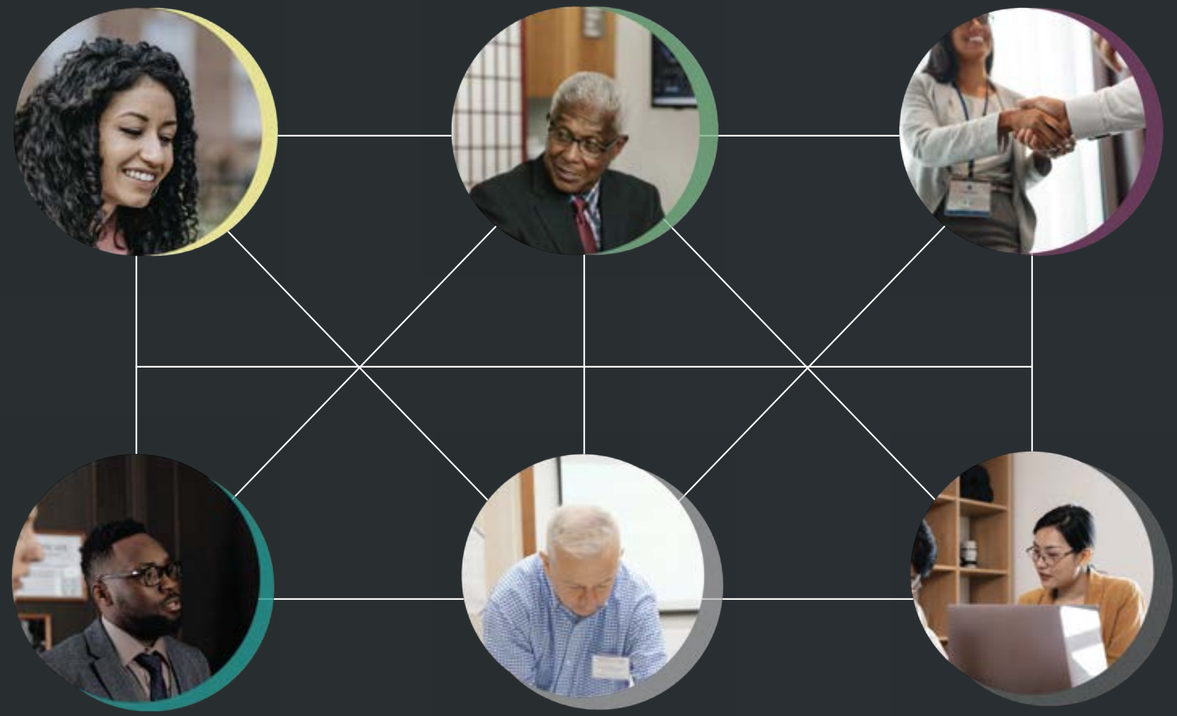
How Do We Get There?

Each Group Has a Piece of the Puzzle

There is much to be done to make skills visibility the standard approach at scale, while ensuring it is equitable in both process and product.

This requires policies, structures, apps, and maps to be built around the components of skills visibility and a keen eye toward how the parts of the ecosystem connect.

Everyone in this system has a part to contribute, and all stakeholders must be engaged as co-creators in the design.



EACH GROUP HAS A PIECE OF THE PUZZLE

(L)earners

(L)earners create demand.
You are at the center of this revolution.

+ Within the next two years, you can begin participating in discussions, planning, and pilots through schools and job centers to establish and maintain your digital skills identity and ask for the participation of your learning and workforce providers.
+ You should push the envelope, ask questions, advocate for ease of use, privacy, and open-access.

> It is so important that we have people who look like the impacted people in the process, not at the end, but all along.

TODD GREENE
WorkRise, Urban Institute

EACH GROUP HAS A PIECE OF THE PUZZLE

Education and Training Providers

Education and training providers expand the current learning system to include a series of shorter, competency-based micro-pathways that add up to degrees, but also provide market-validated credentials at every milestone so learners can come in and out of the skilling system.

+ Make employer validation of pathways a core competency of your design teams.
+ Adopt the same competency frameworks and open learner wallets as your colleagues, not just across the state, but across the nation so learners and employers understand the credentials.
+ Capture and credential learning that happens outside of the classroom.
+ Adopt assessments that validate experience.
+ Design work-based learning that can be credentialed.
+ Track efficacy and workforce outcomes of non-degree programs.
+ Include (l)earners and communities in the design process as co-creators and decision-makers.

SKILLS VISIBILITY IN ACTION

The Community College Growth Engine Fund, an initiative of Education Design Lab, works with cohorts of community colleges to build micro-pathways, which consist of two or more stackable credentials and a 21st century skills micro-credential. The first cohort of six institutions and systems developed 30 micro-pathways in 2021, new credentials for high demand job roles in their regions. The second cohort launched in 2022.

Competency-Based Education Network (CBEN) is a community of institutions, employers, and experts who believe competencies and skills can unlock the future of learning — making postsecondary education and training more transparent, flexible, and valuable. They support stakeholders across the spectrum of learning, from institutions to employers who want to embed competencies and skills to make (l)earner capabilities more transparent.

EACH GROUP HAS A PIECE OF THE PUZZLE

Employers

Employers review recruiting, retention, and upskilling practices to meet (l)earners where they are.

+ Change job descriptions to name technical and soft skill competencies.
+ Work with learning providers and publish broadly the skills maps you will use to hire and promote.
+ Provide the paid, work-based experience that 93% of learners say they need to get onto their preferred career ladders.
+ Promote and invest in a culture of growth, agency, and belonging that fosters trust.
+ Recommend non-biased assessments that an applicant could use to validate a skill you need.
+ Remove unnecessary degree requirements.
+ Make promotion policies centered around skills.
+ Make upskilling opportunities readily available and integrated into the work of employees.
+ Provide professional development to hiring managers to adapt to skills-based hiring.

SKILLS VISIBILITY IN ACTION

U.S. Chamber of Commerce Foundation is leading the Talent Pipeline Management with 2,500 employers across 40 states to address skills gap challenges and create a framework for change management around skills-based hiring. As part of this initiative, employers prioritize skills as
they evaluate and update job descriptions and hiring practices.

EACH GROUP HAS A PIECE OF THE PUZZLE

States

States adopt and incentivize frameworks and standards to accelerate a skills ecosystem.

+ State standards inform the infrastructure for data collection and data evaluation.
+ Frameworks support equitable representation of stakeholders and incentivize collaborative efforts across industry and education.
+ State standards may also provide levels of rigor, portability, prioritization of skills, and name forms of accountability that should be in place.
+ Both standards and frameworks foster transparency and broad stakeholder collaboration.

As an aside, we don't include **national policymakers** as a separate group from states, though they have a key role in redesigning the structures for innovation to be successful. The current federal financial aid should not exclude (l)earners who need to meet their education needs through the skills-based ecosystem. They can solve for the missing link of advising that gets left out of a disintermediated learning world, and which will be DIY unless we design supports along the way. Finally, they can incentivize interoperable systems adoption and protect universal access.

SKILLS VISIBILITY IN ACTION

Idaho developed SkillStack, a statewide badging platform created through a grant from the U.S. Department of Labor. Secondary and postsecondary institutions use the platform to validate (l)earner skills proficiency. Employers use the platform to find talent.

North Dakota and several partners created a data collaborative, as part of an Open Skills Network pilot, to support the development of skills pathways, a learner wallet, and digital credentials in cybersecurity.

Pennsylvania created #Prepared4PA industry competency maps across six high-demand sectors to better align employer needs to training and education programs.

EACH GROUP HAS A PIECE OF THE PUZZLE

Call to Action for Key Stakeholders

We have summarized some of the most urgent actions for three key stakeholders in the Venn diagram on the right.

Two other sets of stakeholders — associations and intermediaries; and technology platforms/ vendors — have very important roles to support the advocacy, implementation and positive societal impact for the emerging skills-based economy.

THE SWEET SPOT

- ☐ Adopt non-biased assessments that validate experience
- ☐ Design and fund work-based experience
- ☐ Set privacy standards

LEARNING PROVIDERS

- ☐ Design flexible, competency-based pathways
- ☐ Track efficacy

EMPLOYERS

- ☐ Adopt non-degree hiring requirements
- ☐ Provide PD to hiring managers

STATES

- ☐ Incentivize adoption of common, open frameworks
- ☐ Enable learner-driven wallets and dashboards

EACH GROUP HAS A PIECE OF THE PUZZLE

Associations and Intermediaries

Associations and intermediaries facilitate the transition.

+ You get members connected to skills. You often are the connective tissue.
+ Communicate broadly.
+ Fill the gaps.
+ Provide professional development and resources to spur a transition to skills.
+ Initiate the investment in related tools and technology.
+ Share the evidence, help test the ideas, mitigate consequences, and translate the new language.

SKILLS VISIBILITY IN ACTION

Jobs for the Future (JFF) acquired Education Quality Outcomes Standards (EQOS) to improve quality metrics for short-term pathways. EQOS works with state departments of higher education and workforce development along with education and training providers to apply the EQOS metrics of learning, completion, job placement, earnings, and job satisfaction to improve equitable economic advancement.

Credential Engine works with hundreds of state, regional, national, and federal partners; associations and nonprofits; and product and service providers to "map the credential landscape with clear and consistent information." Their web-based Credential Registry houses credential information, and their Credential Transparency Descriptor Language (CTDL) provides common language and rules that help all players connect their offerings into the emerging ecosystem to create a shared currency for skills.

EACH GROUP HAS A PIECE OF THE PUZZLE

Technology Platforms/Vendors

Technology platforms/vendors adopt open standards and design with new majority (l)earners. These players range from global platforms like LinkedIn, Indeed, and Coursera to technology enablers who are building the learner wallets, resume and advising tools, and artificial intelligence solutions to scale assessment and skills translation.

+ Adopt a human- and equity-centered design approach.
+ Implement a universal design mindset.
+ Be transparent with your customers and mitigate unintended biases.

SKILLS VISIBILITY IN ACTION

Open Skills Network, an outgrowth of Western Governors University, is a coalition of 750 employers, technology vendors, educators, policymakers, and other stakeholders working to create a national open skills infrastructure to support skills-based hiring and skills-based education. This includes establishing rich skill descriptors, an open skills management tool, and a skill library.

Conclusion

Skills visibility is the next step in the Learner Revolution.

It puts (l)earners at the center of the shift to skills. But can we, as ecosystem stakeholders, take the time to convene the right people to carefully design with this central stakeholder, before disruptors win the spoils?

Rideshare giants like Uber and Lyft disrupted a broken value chain — the taxi industry — with a single phone app that connected the needs for flexible jobs and rides, in no time flat. Social media giants, like Facebook, disrupted the way we consume and share information, and we are now trying to retrofit policy and regulatory solutions to undo real and perceived societal damage. It will take more than one platform to solve the skills gap, equity wage gap, and skills validation problems that drag down our economic and social well-being as a country.

In this case, we still have the chance to design ahead of broad adoption, but there isn't a moment to spare.

As we move now into the "human trials," we must keep our focus on how the component parts, the commercial apps, and the stakeholder incentives come together, or don't come together.

What might go wrong, or also, whether anyone will show up.

Economists explain that markets work best with "perfect information." And visibility feeds this market by translating and sharing skills. But the price of transparency in the modern age is invaded privacy, as well as bias inherent in automated products and services.

We hope to continue to serve new majority (l)earners by having them at the table to tell us where the balance lies between visibility and privacy and respect.

Learn More About the Lab

Get an inside look at our on-the-ground work—delivered right to your mailbox.
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