


# THE NEW LEARNING ECOSYSTEM





# The Idea in Brief

As the future of work continues to evolve, more adults will face career transitions that demand the acquisition and demonstration of new skills—creating cycles of learning and earning throughout life. To enable these transitions and better support workers, we need to transform the education-to-employment system. We need a new learning ecosystem that supports individuals at every phase of education and career discovery, funding, learning, training, and working.

At Strada, we believe that a new learning ecosystem centered on learners will support seamless transitions between education and employment throughout Americans' work lives. It will act like a network of highways with off-ramps or brief pauses in work that lead to educational opportunities and on-ramps that guide us right back to work when we're ready. It will have signposts that guide us in our decision making and a GPS to guide us on our journey. It will have plenty of rest stops, where we can access the exact support we need to get back on track. And it will be flexible, adapting to individuals' needs and the needs of employers as our knowledge economy continues to evolve.

Building the new learning ecosystem and realizing its potential will require a coalition of education providers, nonprofits, businesses, and government working together toward this common vision.

*“The future is already here—it’s just not evenly distributed yet.”*

*—William Gibson*

# The Future of Work Is Here

Look around, and you'll see new industries that didn't exist five years ago creating entirely new jobs like cloud manager, data scientist, and social media specialist. You'll also notice traditional jobs transforming, requiring new skills and new ways of doing business. How we work is shifting, too. There are new ways of participating in the workforce: Remote work, the gig economy, delayed or partial retirement, and "micro-careers" are changing what a work life looks like for many adults. Between new industries, new jobs, new skills, and new ways of working, there is no denying the future of work is already here and evolving quickly.

Despite the rapid changes in work, the pathways to employment through education and hiring have not made as significant or important a leap. Traditional pathways to employment were designed at a time when a degree or certification led directly to a first job, and that first job acted as the foundation for a career with a clear and generally linear path forward. If you chose that path, you could feel confident that success in education would yield long-term employment and promising opportunities.

But today, career paths are much less clear and much less linear. There are fewer guarantees of long-term success from any starting point. The pathways to employment through higher education or vocational training that we've long relied upon are not designed for today's workforce or labor market. They are siloed, opaque, and slow to change in a market that demands connectedness, transparency, and flexibility. The result is a disconnect between education and employment, and more importantly between jobseekers and job opportunities.



# The Gap between Education and Employment

At a macro level, the disconnect between jobseekers and opportunities is evident in current labor market data. At the end of 2019 there were 7 million unfilled jobs<sup>1</sup> in the United States and more than 11 million<sup>2</sup> unemployed or underemployed individuals. Employers seeking to fill those jobs report that they struggle to find skilled labor to meet their needs.<sup>3</sup> Individuals seeking job opportunities may not see a clear path to achieving their employment goals, and as a result, they could remain stuck in jobs that do not meet their needs or give up looking altogether.<sup>4</sup>

At a micro level, the disconnect between jobseekers and opportunities is evident in the stories of individuals struggling to make their way in the workforce. There are 44 million working-age adults in America today who have less than a college degree and earn less than a living wage.<sup>5</sup> These working-class Americans face an outsized risk of being displaced or impacted in their jobs as a result of automation and digitization.<sup>6</sup> They also have less access to resources to help them navigate the job transitions they will undoubtedly face.

Let us introduce you to  
three of them.





## Meet Steve, 51 IT Support Specialist

After determining that college was not for him when he was younger, Steve worked a series of odd jobs before he was hired by a company that provided an opportunity to train himself to become an IT support specialist. As the sole breadwinner for his family of five, including his grandchild, Steve has been proud to be a provider. But, at 51, Steve is finding the physical aspects of his job, like crawling under desks and pushing technology carts, to be a strain on his body. He recognizes that it's time to make a career change.

With his family relying on him, Steve believes that he will need to work for at least 15 more years and wants to make sure that he selects a good path—quickly. But Steve doesn't know what that path should look like, where to get started, or how to make it happen. He's open to going back to school, but doesn't know what or where to study. Steve and his family rely on the health insurance that his job provides, and they can't afford to be without it. Steve doesn't know where to turn for advice on how to learn about new careers and weigh the options available to him.





## Meet Sarah, 32 Aesthetician

Sarah had no sense of direction when it came to choosing a college or a major. Assuming that getting a college degree was the “right thing” to do, she jumped into a business degree after high school. But without an end goal in mind, Sarah went through multiple cycles of starting and stopping college over the course of a decade before maxing out her student loans. Without seeing an option to fund her degree completion, Sarah decided that cosmetology would guarantee a decent wage if she earned her license.

Now living on public assistance while managing the financial pressures of student loans, Sarah is working as an aesthetician and raising her daughter on her own. Crippled with debt, feeling isolated and alone, and living with a nagging sense of failure and disappointment, Sarah realizes that her current situation is not sustainable. But she doesn’t know what to do next. Is completing her business degree the answer? There is no wiggle room for making the wrong choice again.

# Meet Minisha, 44 Childcare Worker

Minisha never pictured herself working for a living. When she was younger, she had a few retail jobs, but married and focused on raising her two children. However, Minisha became a victim of domestic abuse and found herself divorced, homeless, and forced to work to support and protect her family.

Without a particular career outcome in mind, Minisha cycled through various jobs in childcare and at an elementary school. She enrolled in college to earn an early childhood education degree but was unable to complete it due to the demands of working while raising her family. After quitting her job to seek mental health support and move her family into her parents' home, Minisha tried again to return to school. She took a night job at a juvenile detention center so she could work and study at night and then spend the day taking care of her family's needs. Six months

of very little sleep and enormous stress pushed Minisha to leave school again.

Minisha found a new job at Head Start and discovered that she loved supporting families during their hard times. This kindled an interest in social work, and she is now considering potential degrees in the field. But having worked toward a bachelor's degree on and off for the past 14 years, Minisha feels like those last five classes she needs to graduate are out of reach. Minisha has used all student loan funding available to her. She has no idea how she could possibly pay for school—let alone find the time. Without a degree, she fears her annual income won't cover the rising cost of living for her family in Colorado. Is moving to a new town or state a better option? What can she do to get ahead financially in spite of her student loan burdens? She loves her current job, but does she have to leave it?



# A New Learning Ecosystem

These three stories show us that existing pathways to employment are not working for everyone. As transitions become more frequent for all adults due to tectonic shifts in the labor market, stories like these will only become more common. More and more adults will face transitions in their careers and question where to turn for help. They will quickly realize that the help they need isn't available. The result is a widening gap between jobseekers and job opportunities—an economic and social gap already manifesting at local, regional, and national levels.

Although there are many innovations in education and employment that seek to close this gap, they generally do so in isolation and with limited scale. With no end in sight for the rapid changes in work ahead, we should anticipate that we will all cycle in and out of learning throughout our work lives. To do that successfully, we need an education-to-employment system designed for adult learners, which recognizes the cycles of learning and earning. We need a new learning ecosystem.

The new learning ecosystem should offer five critical elements of support to learners:

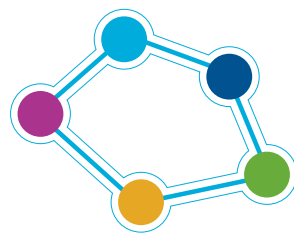
- **Navigation:** People need a bird's-eye view of the current and future job market, including all of the career pathways open to them based on their interests, skills, past training, and experiences. Navigation will give adults better information to guide them through complex systems, and better assessments to help them make sense of their skills and experience and figure out how to translate and transfer their capabilities into better jobs.
- **Wraparound supports:** To stay focused on their education and career goals, learners need comprehensive wraparound supports, be they person-to-person or tech enabled, to help them overcome hurdles and manage multiple commitments and competing priorities. Better support services will foster the success of all working learners, from the beginning of their explorations all the way through their new working lives and subsequent career transitions.
- **Targeted education:** Learners need access to targeted education tailored to their needs: the right skills, the right pathways, at the right time. They also need to know that the education they choose will be worth the investment—and clearly signal value to a prospective employer. More precise and relevant learning experiences must not only provide the knowledge but also the human and technical skills, professional networks, and hands-on practice that equip learners to be ready to work.
- **Integrated earning and learning:** Working learners need the time, the funding, the confidence, and the resources to juggle education and training *on top of* their existing responsibilities. Integrated earning and learning will reduce education friction and make advancement achievable by offering better funding options, new opportunities to incorporate learning and work, and, ideally, more portable benefits.
- **Transparent hiring:** The hiring process must be unbiased, open, and fair, enabling job seekers to prove their competence and skills. When skills become the primary currency of the job market, credential or degree requirements will no longer overlook qualified job seekers. Ultimately, transparent hiring will reduce credential bias and better connect companies to more diverse candidates who have proven they have what it takes for the work ahead.

With this full range of support, learners would have access to the information they need to make informed decisions about their future, plus the resources required to achieve their educational goals and get back to work. Together, these core elements would enable seamless movement in and out of jobs as transitions become more frequent for more adults.





# A Job Transition in the New Learning Ecosystem



The new learning ecosystem doesn't exist yet, but here is a vision for how it could transform the job transition experience for someone like Steve.

## Navigation



Once Steve decides he needs to make a career change, he completes a free skills assessment that he learns about through his local public library. Initially, he thought teaching might be a good, steady path given his affinity for working with kids. However, the assessment reveals that Steve has some of the knowledge, skills, and abilities needed to transition into several different careers—a few that he never knew existed or considered as options. Surprisingly, teaching isn't high on the list, but Steve is intrigued by several of the other options, such as Client Services Product Coordinator, IT Project Manager, and Network Systems Analyst.

In addition to learning about his skills, Steve is directed to a website with information on local and virtual training opportunities, and his local job market. Steve knows that a geographic move is not realistic because his family is well-rooted in his community, so he seeks to understand which jobs are in demand locally and what they offer for compensation. This information equips Steve to make a better-informed decision about his transition and next steps.

## Wraparound Supports



With a clearer understanding of his most viable training and employment opportunities, Steve now needs guidance on how to manage this transition. Throughout the process of exploring education paths, he connects frequently by phone, chat, and text with a trusted adviser. He also uses tech enabled supports to explore information on his own. This support network helps Steve articulate his goals for his transition and decide whether he has the time and resources to take this leap based on the information available on employment opportunities, training, and funding. Having started programs in the past which he never completed, Steve knows that a support network will help keep him accountable in finishing his learning journey. He plans to maintain regular contact with his network through the duration of his program.

## Targeted Education



With the help of his adviser, Steve finds the right learning experience that aligns with his chosen career path. He is going to pursue a combination of locally available face-to-face training and paid online courses. Steve's education providers have partnered with local employers to develop courses and programs that blend traditional education with hands-on practice. Rather than enroll in a comprehensive degree program, Steve is able to select the specific courses that will be most relevant to his career goals. Not only will that shorten the time it takes him to complete training, it will also ensure that everything he learns will be easy to apply on the job, and give him a head start at success in his new role. Together, these learning experiences should prepare Steve for his next opportunity in about 18 months of part-time learning.

## Integrated Earning and Learning



As a busy father who works full-time, it is very important to Steve that his educational endeavor will pay off, and won't put his family's stability at risk. Even though he knows this training program will lead to better opportunities long-term, time and money are currently in short supply. Flexible funding and training options give Steve a direct path to advancement that doesn't disrupt his life. Steve learns about income-share agreements, financing partnerships between schools and students that allow for repayment of tuition over time and are based on a learner's income. He likes that this option aligns the training provider's interests with his own and that he can pay for his tuition over time with this model. Close integration between his current employer and education provider means that Steve doesn't have to take a break from working (and lose health and other benefits) to advance his education. His employer is supportive of Steve's career advancement, and works with his education provider to incorporate learning experiences into his workday. Flexible course scheduling also ensures that his employment schedule isn't disrupted.

## Transparent Hiring



Equipped with his enhanced set of skills, Steve applies for new jobs. His future employer doesn't see a big risk in hiring Steve because there's clear alignment between Steve's knowledge, skills, and the talent needs of the company. Steve's learning program was designed to teach the set of skills his next employment opportunity will require. These skills are clearly noted on his resume, and recognized and valued by his prospective employer. Because Steve can easily demonstrate that he knows how to do the job, he knows his job application won't be overlooked.

At the same time, Steve feels confident in his path because he selected it with an understanding of the job requirements, salary, and potential for advancement with guidance from his support network. Steve also understands that, before he retires, he may engage in another transition just like this—or two—and when that happens, he can leverage resources across the learning ecosystem to stay ahead and remain relevant in the workforce of the future.

# Why an Ecosystem?

The use of the term “ecosystem,” rather than “system,” when describing our vision for the future is deliberate. An ecosystem is defined as “a system, or a group of interconnected elements, formed by the interaction of a community of organisms with their environment.”<sup>7</sup> This definition calls out three components of an ecosystem: the living organisms, their environment, and their interactions and connections with one another.

Recasting our education-to-employment system as an ecosystem better reflects the necessary interconnectedness of the stakeholders in the system (learners, employers, education providers, governments, and more) with their environments (natural, economic, cultural), and the dynamics of change that result from the stakeholders and environments impacting one another. Ecosystems are complex, connected, living, evolving.

To serve people better, a new learning ecosystem will require the foundation of a more robust data infrastructure to strengthen connections between learners, employers, learning providers, funders, and policymakers in any given community. This foundation will be like a root system in a natural ecosystem, allowing for continuous sharing of data between the organisms in the ecosystem and their environment. In the new learning ecosystem, we must have a common language, shared or interoperable technologies, and critical agreements between stakeholders about what data to share and how it can be used. Just like roots, this system will be hard to see from the surface but will be critical to the overall health and functioning of the ecosystem. By connecting all stakeholders and sharing data between them, each individual and organization will be better informed, and the ecosystem as a whole will be more effective.



# Creating an Ecosystem by Transforming a System

The current disconnect between jobseekers and opportunities did not emerge overnight. It is the product of a long evolution of work that has resulted from a combination of new technologies, competitive pressures, policy shifts, and changing employer and jobseeker mindsets, contrasted with the limited evolution of the way we train and hire the workforce. This disconnect will not be mended overnight or by a single organization. It will require systems thinking and action to drive systems change.

Systems change has many definitions. Social Innovation Generation defines it broadly as “shifting the conditions that are holding the problem in place.”<sup>8</sup> To do that in our education-to-employment system, we’ll first need to understand the conditions that are holding the problem in place.

FSG’s model of the six conditions of systems change<sup>9</sup> offers a helpful starting point. The framework highlights that there are different types of interconnected conditions—structural, semi-explicit, and

transformative—that keep a problem in place. Most philanthropic efforts target conditions at the structural level, which are generally the easiest to identify and affect. Changes at this level can be powerful and have observable and measurable results, but they may not produce sustainable change without accompanying change at the other levels.

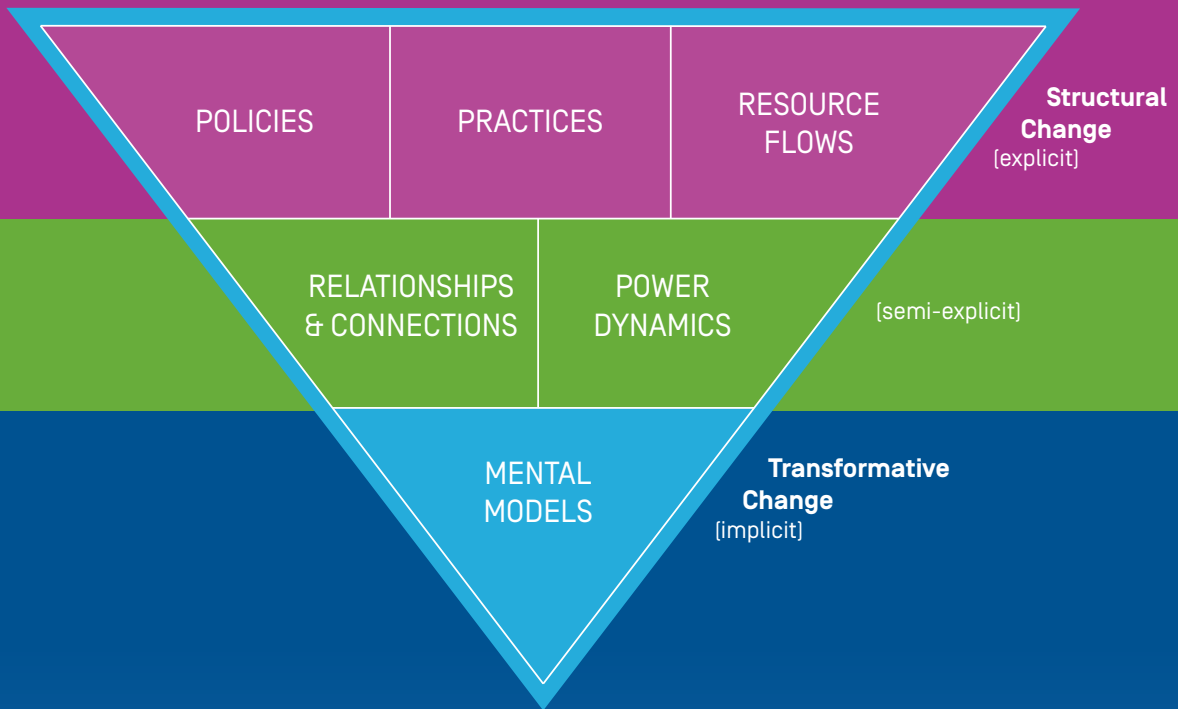
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definitions.**

Our work creating the new learning ecosystem will require change at all three levels. It will require stakeholders from across the education-to-employment system to work together, or at least in alignment, to organize around a common goal, identify the levers of change to push and pull to work toward that goal, and share what they are learning along the way. It will be intentional and long-term work that aims to close the gap between jobseekers and opportunities and keep it closed.





# Six Conditions of Systems Change



Source: Kania et al., *The Water of Systems Change*, 2018.

# It's Time to Get to Work

We are driving a shift from:

confusing to navigable

isolating to supportive

one-size-fits-all to targeted

siloed to integrated

biased to transparent

Discussion of the “future of work” may give a false sense of security today by suggesting that we have time to prepare for that future. The reality is that the future is here. There is urgency to change the way that we educate, hire, work, and support one another for all workers to have a chance to succeed in the future.

Lasting change must be structural and relational before it can be transformative. It involves changing hearts and minds—not only of those who run the systems, but also of those who have sat out or stopped out of the current system. This is hard work. Slow work. Often painful work. But it's work worth doing.

At Strada, we recognize that we cannot do it alone. We must work to build a coalition of willing partners across education, nonprofits, business, and government. We're just getting started.

Join us.

# Authors

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## Endnotes

1 Bureau of Labor Statistics, *Job Openings and Labor Turnover Summary*, 2019.  
<https://www.bls.gov/news.release/jolts.nr0.htm>

2 Includes individuals who are unemployed, employed part-time for economic reasons, and marginally attached to the labor force as defined by the Bureau of Labor Statistics. Strada Institute for the Future of Work analysis of data from the Bureau of Labor Statistics, *Current Employment Statistics*, 2019.  
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4 In September 2019, 1.3 million people were marginally attached to the labor force, meaning that they are not in the labor force, though they wanted to and were available for work and had looked for a job in the previous 12 months. Of those, 321,000 are discouraged workers, who are not looking for a job because they believe there are no jobs for them. Bureau of Labor Statistics, *Current Employment Statistics*, 2019.  
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<https://www.brookings.edu/research/automation-and-artificial-intelligence-how-machines-affect-people-and-places/>

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8 Social Innovation Generation, quoted in Kania et al., *The Water of Systems Change*, 2018.  
[https://www.fsg.org/publications/water\\_of\\_systems\\_change](https://www.fsg.org/publications/water_of_systems_change)

9 Kania et al., *The Water of Systems Change*, 2018.  
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