

The New Learning Economy

Strategies for How Colleges and Universities Can Compete in an Era of Always-On, Anywhere Learning

By Jeffrey Selingo



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Introduction

The economy is undergoing a massive shift not seen since the dawn of the Industrial Revolution and the Information Age that followed. The world of work is being disrupted by automation, artificial intelligence, changing demographics, and now a great reassessment in global supply chains and the workplace itself in the wake of the Covid-19 pandemic.

With entire occupations and industries expanding and contracting at an ever-quicken pace, the skills essential for keeping up in almost any job are rapidly increasing. Over the last century, the need for more and better skills generally meant the expansion in the amount of education required to get a good job. While the 20th century saw a huge surge in higher education globally—in 1900, just one of every 100 young people enrolled in universities; by 2000, it was one in five¹—traditional time-based and place-based models of learning can no longer keep up with the demands of the modern economy.

The pace of change “has accelerated such that jobs are more disrupted today than ever before,” concluded a 2022 report by the Boston Consulting Group and the Burning Glass Institute. In analyzing millions of online job advertisements over a five-year period, the report found that rather than jobs being created and destroyed—the typical narrative about the future of work—what is really happening is what the authors called “The Great Disruption” of skills. In the U.S. alone, 37 percent of the top 20 skills considered necessary for the average job have changed since 2016. One in five skills is entirely new. And certain sectors—including fields that are also popular college majors such as finance, media, business management and operations, human resources, and information technology—have changed faster than others.²

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Jason Wingard, president of Temple University, saw this shift happening while serving as chief learning officer at Goldman Sachs from 2013 to 2015. At Goldman, he told me, “We had very urgent learning demands that we had to solve for, whether it was legal or compliance or the launch of a new product, so our learning needs were measured quarter-by-quarter.” His tenure at Goldman was bookended by stints running professional education programs at the University of Pennsylvania’s Wharton School and at Columbia University where the curriculum “can go unchanged for 10 to 15 years.”

“So how valuable is it to go and hire somebody from Temple who’s had a curriculum that is 15 years old?” Wingard asked. “That’s not going to cut it—and I don’t believe that’s worth it.”

To fulfill the need for always-on, continual education, a New Learning Economy is emerging. It’s appearing in industry-recognized certificates from AWS and Microsoft as well short-term certificate programs at two- and

four-year colleges, such as Pima Community College in Arizona and the City University of New York. It's found online with LinkedIn Learning and Coursera, among other providers outside the traditional system. And it's showing up in job ads at Target, Disney, and Starbucks, as these companies and many others promise education benefits toward a degree as *part* of the job—rather than require the degree upfront.

While this New Learning Economy won't replace the traditional time-based, place-based higher education system that exists today, it has the potential to both outpace the existing structure in size as well as bring many new providers into the postsecondary education ecosystem. But rather than see additional players as a threat, colleges and universities should embrace the move toward continual education as an opportunity to reach different segments of learners, establish alternative business models, and diversify their revenue streams.

With the expiration of some \$70 billion in government pandemic funds to higher education and a demographic cliff in high-school graduates predicted by the middle of the decade, the moment is ripe for institutions to develop an approach for the New Learning Economy. This report attempts to frame those critical discussions for college leaders and accelerate their institutional strategies by considering these core questions:

- Why is higher education out of sync with the labor market today and how does it need to be better aligned?
- What are some key strategies institutions need to put in place for the New Learning Economy?
- How can higher ed leaders shift the mindset of campuses to better serve new learners?

Attributes of The New Learning Economy

The New Learning Economy doesn't describe a single model of higher education like the legacy, four-year residential model. Rather it is a set of design principles that colleges can apply to their own mission and local context. Those attributes and examples of them in practice include:

Flexible

Learners can take a single course within an academic program to learn a specific skill.

Outcome-based

Students can move on when they have mastered concepts.

Optionality

Learning happens online, face-to-face, and in a hybrid format.

Continual

Certifications and degrees are awarded separately as well as paired together.

Stackable

Credentials can be added on top of each other to equal degrees over time.

Just-in-time

Learners can cycle in and out of the institution, accessing education when they need it.

Work-Learn

Learning and work aren't separate; learning is often experiential or happens on the job.

Higher Ed and the Labor Market: A Lack of Alignment

It's been a conundrum that has puzzled labor economists for much of the last two and a half years: why are companies struggling to hire—there were some 11.2 million unfilled jobs as of August 2022—while more than 6 million Americans remain unemployed?³ At first, the disconnect was attributed to people hesitant to return to work during the pandemic. Then, as vaccination rates increased and schools re-opened, there was growing evidence that a lot of people wanted to do something different with their lives than they did before the pandemic.

But now as life begins to settle into a post-pandemic normalcy and labor shortages continue, it's increasingly clear to researchers who study the job market that something else is going on. The most common explanation: a skills mismatch. “You can’t train a one-time courier on a bike to become an IT specialist overnight,” said Bernard Baumohl, chief global economist at the Economic Outlook Group.⁴

Covid-19 only accelerated a trend that had started before the pandemic: technology reshaping jobs. It has happened in every field (i.e., data analytical skills are now asked for in jobs across 70 occupations) and at every level (i.e., the tablet replacing written materials everywhere from the loading dock to the cab of the tractor trailer). When the pandemic hit and forced companies to rethink how work was done, technology was often the answer. According to the Boston Consulting Group and Burning Glass Institute analysis, nearly three-quarters of jobs changed more from 2019 through 2021 than they did from 2016 through 2018.

This rapid technological change hit unskilled or underskilled workers first, often leaving them on the sidelines in the employment game. Such workers make up a substantial share of the economy. There are more than 53 million people, or 44 percent of all workers ages 18 to 64 in the U.S., in low-skilled, low-wage jobs. And nearly half of them didn't complete high school or pursue any kind of postsecondary education after graduating⁵. If they didn't enroll in a traditional college or university at the age of 18, it's unlikely they will now.

In previous generations, when work shifted and required more skills, the U.S. education system expanded in tandem. Starting in the early 1900s, for instance, basic education moved from eight years to twelve years in response to the changing needs of the economy. This high school movement was “truly path breaking,” wrote Claudia Goldin, a Harvard University economist⁶. Now another path-breaking approach is required to meet the economic demands of the 21st century. The New Learning Economy has the potential to do for higher education what high schools did for K-12 education a century ago.

THE NEXT SKILLS MISMATCH: THE COLLEGE EDUCATED. It's not only the unskilled and the underskilled at risk in this new economy. While rapid technological change has impacted unskilled or underskilled workers first, those with college degrees are likely to be affected next.

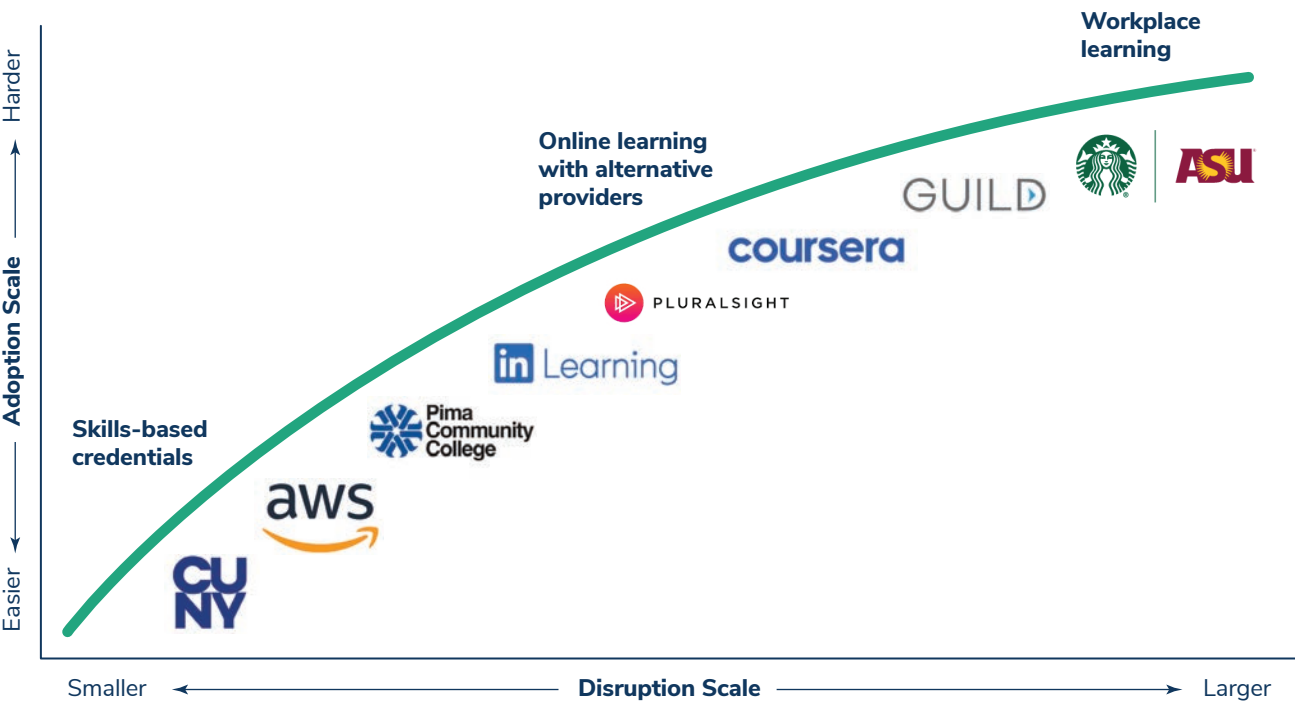
That's because every job now is essentially a tech job. Roles across industries, such as data analysis, digital marketing, social media, and visual communications, increasingly demand technical fluency and abilities. Indeed, the Boston Consulting Group and Burning Glass Institute analysis, found that the four "job families" at high risk of skills disruption in the coming years are also among the most-held jobs among college-educated professionals: information technology, marketing and public relations, human resources, and sales. Workers know this too. Some three in four respondents to an international survey by Salesforce said, "They aren't equipped with the resources needed to learn the digital skills they need to succeed in the current and future workforce."⁷

Continual learning that is delivered in short spurts, is just-in-time, and certified is essential where a college degree alone can't outlast the disruption of skills in a job. For generations, the dominant learning model in higher education was essentially one and done. A bachelor's degree was the ticket to economic mobility; now it's simply the entry ticket

Figure 1

The Landscape of The New Learning Economy

The New Learning Economy has the potential to disrupt the traditional way we think about education as well as bring many new providers into postsecondary education. Here are just three ways the New Learning Economy is already changing higher ed with a mix of new and existing players:



Source: Author analysis



to a lifetime of learning and acquiring more credentials. “The educational models of memory-based knowledge accumulation ... will not sufficiently prepare young people for solid careers,” said Sue Bhatia, founder of Rose International, a Missouri-based staffing agency. “We’re living in an era of a lag between the old model of college education and the coming future of work. Unfortunately, our young professionals are educated for a world that will not exist as it currently does.”⁸

Without a deliberate effort to shift to a system of lifelong learning, the gap between training and skills is likely to widen over the next few years. In 2020, the World Economic Forum famously predicted that the “robot revolution” would create 97 million new jobs, and as a result, 50 percent of all workers will require retraining this decade—with most needing six months or less of education.⁹

While some white-collar jobs will become totally automated, artificial intelligence and machine learning will take over parts of every other job. That makes the human element of jobs—such as communication, problem solving, working in teams—even more critical to success in the new economy. Those “social skills” or “soft skills” are often attributed to traditional liberal-arts majors. But such disciplines have fallen out of favor with students in recent years. Humanities majors—which made up one-third of all degrees awarded at top liberal-arts colleges as recently as a decade ago—have fallen to well under a quarter. At elite research universities the share of humanities degrees has dropped from 17 percent in 2011 to just 11 percent today.¹⁰

What’s clear is that students in the future will require a mix of the liberal arts *and* the practical arts. One design principle of the New Learning Economy is that instead of colleges and universities awarding a single degree to students at graduation, every diploma should also come with industry-recognized certificates certifying that students have specific, in-demand skills—such as data visualization for history majors or project management for psychology majors. A certificate in SQL, for instance, can increase the average salary for a marketing manager by \$24,000, said Matt Sigelman, president of the Burning Glass Institute. At Paul Quinn College in Dallas, students at each level of their undergraduate career have a chance to earn different certificates, such as in Microsoft or in fields like data science. One goal of the program is to give students opportunities in the job market even if they drop out.

“College graduates can no longer rely on their degree to accurately signal their fitness for a job,” concluded a report from *The Chronicle of Higher Education* in 2022. “Instead, they will need to clearly spell out the competencies they have acquired.”¹¹

THE SKILLS TRANSLATION PROBLEM. Historically, four-year colleges and universities haven’t seen workforce development as a mission. In fact, *The Chronicle* found in its 2022 report, some have been oddly proud of the disconnect between college and the “real world.” Faculty members, in particular, see discussions about career outcomes and job-placement rates as turning the four-year college degree into vocational training. That notion feeds into the belief that career education or counseling is optional, something that students can engage in if they feel they need it, like joining a club or an intramural sports team.

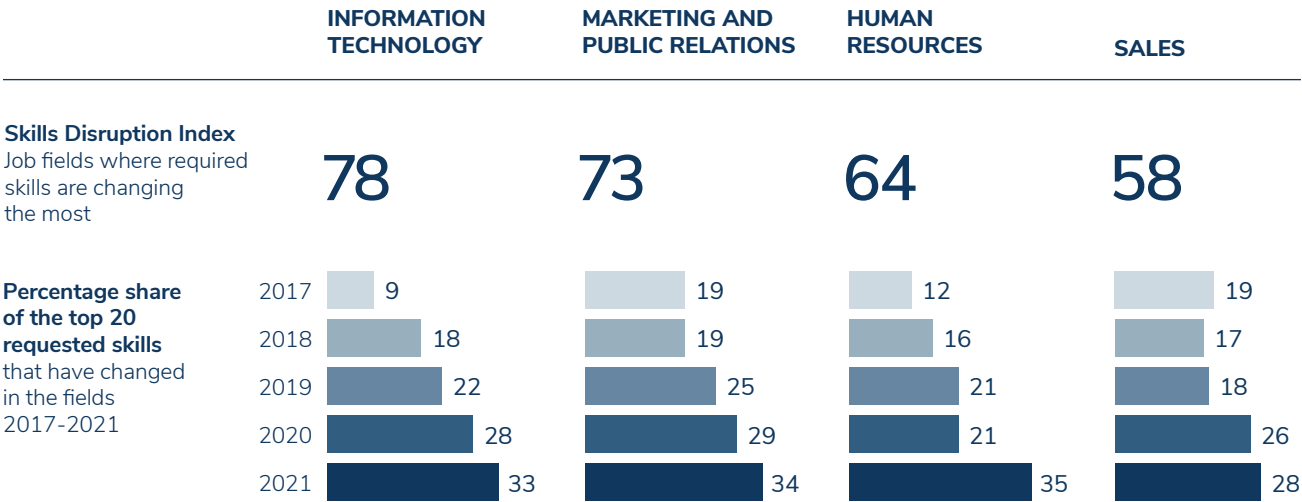
While community colleges have done a better job than four-year institutions of providing direct-to-workforce programs, legacy systems can keep even two-year colleges from matching their curriculum to the rapid technological transformations taking place on factory floors, in health care, and within skilled trades. The arbitrary dividing lines between high school and college (and then between community colleges and four-year universities) create unnecessary friction in the system. Students can’t easily transfer between institutions, and the curriculum, support services, expectations (i.e., Is a two-year college intended to be a transfer station or meant to deliver an associate’s degree?) are often misaligned and difficult to navigate.

The U.S. education systems haven’t been held accountable “for ensuring that students are properly equipped with the skills and capabilities to prepare for a career where they can obtain financial stability,” Michael Hansen, CEO of Cengage Group, wrote in the *Harvard Business Review*. “This archaic system simply no longer works in our modern world.”¹²

Whatever the reasons, learners and workers understand this disconnect all too well. A 2022 survey by the Cengage Group revealed that only 32 percent of recent college graduates think their four-year degree signals their skills.

Figure 2

Skills Disruption in Popular Fields for College Graduates



Source: The Burning Glass Institute

Graduates of skills training programs don't have much more confidence, with only 35 percent believing their credential demonstrates their skills. What's more, nearly one in two college graduates—including those who completed both four-year and skills-training programs—did not apply for entry-level jobs because they felt underqualified.¹³

Part of the problem is that critical skills are often embedded in degrees—but employers and students themselves don't know they might have learned these skills somewhere in college, including in co-curricular activities. Students are very good about listing what they did on their résumé or LinkedIn profile but ask them about the skills they learned in college and they're often stumped.

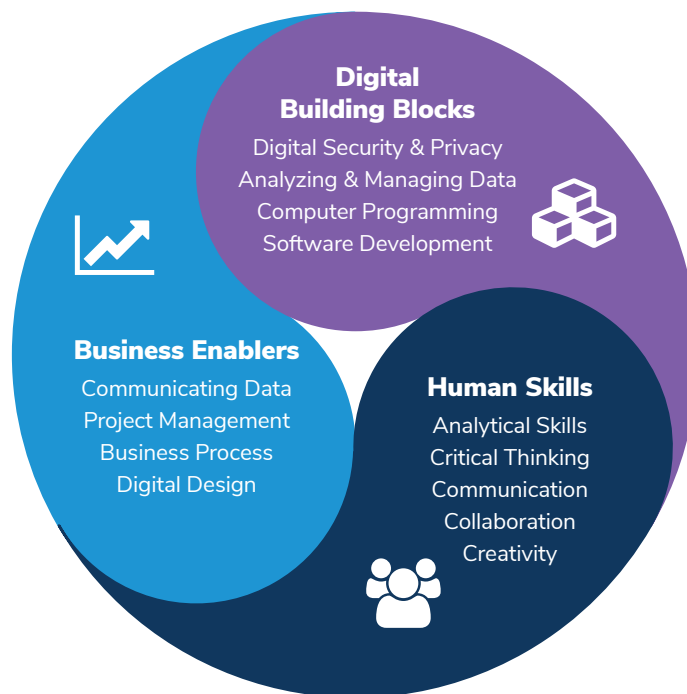
Higher education faces what I call a “skills translation problem.” As Sigelman, the president of the Burning Glass Institute, told me, “Higher education and industry speak fundamentally different languages.” Higher education, he said, “speaks a language of learning outcomes; industry speaks a language of skills. There's some correspondence between the two, but they are definitely not the same. And so there are all sorts of skills that we are teaching in higher education, but which we don't claim credit for.”

Case in point: Sigelman related a story about work he did for a public university where he was mapping the curriculum and courses to skills. One major was Gender Studies—one of those programs that frequently is the target of criticism by politicians for lacking currency in the job market. Burning Glass found that this particular program had robust field work, “and as a result, robust curriculum around project management, except no one ever called it that,” Sigelman said. As he pointed out, project management is increasingly a business skill that is “foundational to the 21st-century economy work.”

Figure 3

Future Jobs Require a Mix of Technical and Human Skills

These 13 skills are in high demand both for digitally intensive jobs and the wider economy.



Source: Burning Glass Technologies

CASE STUDY

An Opportunity to Earn and Learn with Pre-Apprenticeships

As higher education works to align curricula to workforce needs, community and technical colleges in particular are expanding apprenticeship options. And with good reason: for many students pursuing credentials in skilled trades — those that require some training but not a four-year degree — the chance to earn *and* learn simultaneously is the ultimate win-win. Employers across the U.S. reap the benefits, too, realizing an average [return on investment](#) of \$1.47 for every \$1 they spend on an apprentice.

For most postsecondary institutions, though, the trick is making students aware of apprenticeship opportunities early, maybe even when they're 9th- or 10th-graders mulling what to do after high school.

That's why in January 2022, **Hocking College** in Nelsonville, Ohio, began offering pre-apprenticeship programs in carpentry, electrical, HVAC, and water/wastewater management. Students complete a "ready-to-work" package of courses that prepares them for entry-level work or a registered apprenticeship in their field.

The programs are open to high school students, meaning they could start the pre-apprenticeship in high school and then enter straight into a registered apprenticeship program after graduation.

"Pre-apprenticeship programs offer students the opportunity to earn a paycheck while they are learning a trade. And unlike a traditional education model, students aren't putting their on-the-job experience on hold while taking classes," said Betty Young, president of Hocking, a two-year technical college about 60 miles southeast of Columbus.

"Pre-apprenticeships lead to opportunities for sponsorship in full registered apprenticeships, which provide very affordable paths to secure, high-paying jobs and careers, all without accruing unmanageable student loan debts."

Each of the four pre-apprenticeship options provides opportunities to "stack" on other credentials, including two-year diplomas and, for those in the HVAC program, Level 1 certification from the National Center for Construction Education and Research. Carpentry students can earn advanced apprenticeship credits through Hocking's partnership with the Ohio Carpenter's Joint Apprenticeship and Training Trust Fund.

The pre-apprenticeships are part of Hocking's larger earn-and-learn initiative to match their offerings to the needs of the regional labor market. While the obvious goal is to equip workers with skills and knowledge to do their jobs well, Hocking's leaders believe the programs build the confidence students need to take on their first apprenticeship.

"Most of all, we are talking about actively participating in society in a profoundly positive way, experiencing regular acknowledgement of skills and knowledge gained—and ultimately celebrating the true dignity of work," Young said.

Why the Focus on Alignment of Skills and the Workforce? Why Now?

In previous periods of American history when the workforce was undergoing a radical transformation, higher education rose to the challenge.

Perhaps the period most relevant to the present is the Industrial Revolution. That's when colleges were forced to rethink their curriculum from focusing on the liberal arts to incorporating the practical arts to serve the growing legions of factories, railroads, and mechanized farms. Hundreds of colleges were started in the early part of the 19th century, including the Rensselaer Polytechnic Institute in upstate New York, which Stephen Van Rensselaer, its founder, wrote in 1824 would impart "a very useful kind of knowledge, with its application to the business of living."¹⁴

In the decades that followed, the first Bachelor of Science degree, which was seen as an applied credential, was awarded by Harvard. In the midst of the Civil War, President Lincoln signed the Land Grant Act, and the number of vocational majors took off. In 1870, nearly 50 percent of higher-education enrollment in the U.S. was in the liberal arts; by 1880, only 30 percent was.¹⁵

A similar alignment between higher education and the economy is needed now. If not, the consequences will be significant for traditional colleges and universities, as well as the broader economy, employers, and workers—all with intertwined effects.



Perhaps the period most relevant to the present is the Industrial Revolution, when **Stephen Van Rensselaer**, the founder of the institution that today bears his name, wrote the school would impart "**a very useful kind of knowledge, with its application to the business of living.**"

First, let's look at the economy. One reason for a labor shortage right now, which is leading to higher wages and subsequently higher inflation, is that too many people who are able to work can't, for a variety of reasons—chief among them, a lack of skills. Over time, if those workers don't get upskilled or reskilled, they suffer from what Lisa Cook, a professor of economics and international relations at Michigan State University, calls "skills atrophy"—where a person loses the skills they do have during a period of long-term unemployment.¹⁶

Then there is the impact on employers. According to the World Economic Forum, without more of an effort to bring workers up to speed on the skills and knowledge necessary for the jobs of the future, "Skills shortages will remain endemic and a scarcity of adequate skilled individuals to fill the jobs of tomorrow will lead to a persistent productivity lag."

But if learners and workers then turn to a higher education system that isn't aligned with the workforce, they face what Temple's president pointed out earlier: an outdated curriculum that isn't helpful to them in a new job market. As Sigelman of the Burning Glass Institute noted, 37 percent of the top 20 skills requested for the average job have changed since 2016. "But has 37 percent of the curriculum changed?"

That leaves higher education, a crucial piece of the puzzle in syncing education, skills, and the world of work. In significant ways, aligning with the workforce is key to the survival of many higher education institutions. Colleges and universities are hemorrhaging students, with enrollment at postsecondary institutions dropping by almost 1.3 million students since spring 2020—a trend that is only partially attributable to Covid-19.¹⁷

"It suggests that there is a broader questioning of the value of college and particularly concerns about student debt and paying for college and the potential labor market returns," said Doug Shapiro, executive research director for the National Student Clearinghouse.¹⁸ This theory is backed up by polling: from 2015 to 2019, confidence in higher education dropped more significantly than for any other American institution measured by Gallup.

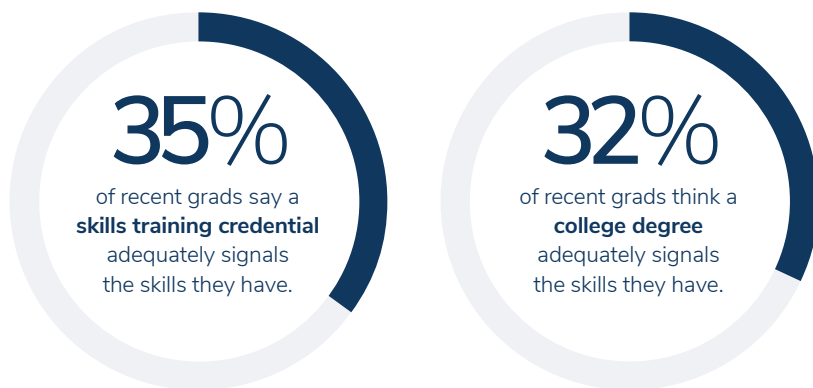
If colleges and universities fail to develop an approach quickly—and at scale—to compete in this New Learning Economy, there is growing evidence that outside entities, including companies themselves, will come to dominate the space. Walmart, for instance, is already investing \$4 billion to help staff in frontline and back-office jobs transition to new customer service-oriented roles. Professional services company ManpowerGroup is upskilling 130,000 workers over the next five years. And Amazon plans to spend more than \$700 million to train 100,000 employees for higher-skilled jobs over the next six years. In most cases, these companies are either building their own education and career development programs or partnering with a select group of colleges through third-party providers, such as Guild Education, which administer the education benefits and provider wrap-around services, such as coaching, to students.¹⁹

Figure 4

The Leveling of Degrees vs. Certificates

The value of a skills-based credential in the job market is increasingly seen on par with a degree among recent graduates.

Which do you think most clearly indicates to an employer the skills you have that qualify you for a desired job?



Source: Cengage Group survey, 2022

CASE STUDY

How Job-Embedded Learning Fills the Need for Teachers

Recently, some postsecondary institutions have heeded calls to make their credentialing programs faster and more affordable. A few award students with credits for prior learning—meaning they allow military or job-related experiences to substitute for one or two courses out of a 120-credit hour program. Others still are experimenting with competency-based education, which allows students to learn at their own pace, though many such programs don't qualify for federal financial aid.

Officials at **Reach University** in California have found a third way, one they believe can have a greater impact on their target demographic: students who can't afford to step away from the workforce or take on enormous debt to earn a teaching degree.

Since 2020, the university for prospective teachers has offered a unique apprenticeship program that cuts the time to earn a degree by as much as half. The typical student is already working in a school as a paraprofessional and continues to do so while enrolled.

The difference, according to Reach Chancellor Mallory Dwinal Palisch, is how Reach interprets the Carnegie unit. Developed around the turn of the 20th century, this rule of thumb assumes that for every hour students are in class, they spend two hours reading assignments, writing papers, or doing homework—33 percent in class vs. 67 percent on academic preparation.

Reach continues to use the Carnegie unit to signify that every three-credit-hour class represents nine hours of work by students each week. And apprentices still spend 33 percent of their time in class, along with 17 percent in preparation. But instead of homework or writing assignments, students spend the remaining 50 percent applying what they've learned at their paraprofessional jobs.

"We've always assumed academic preparation means writing essays, doing problem sets, doing projects. There's nothing that says that two-thirds of a class couldn't just be the job itself," Dwinal Palisch said. "If I'm taking a childhood development class, then instead of writing a paper about child development, I could work in a school, then take whatever we're learning, apply it to my job, and come back to class prepared to discuss it."

Even more importantly, the structure qualifies Reach students for federal apprenticeship dollars, which lowers the cost to as little as \$900 a year.

Though only 15 students signed up for an apprenticeship the first year, Dwinal Palisch said enrollment grew to 300 during the next. And Dallas College, the nation's largest two-year institution, is replicating Reach's model as a pilot program for teaching candidates. The beauty, according to Dwinal Palisch, is how quickly institutions can implement the changes.

"Any university tomorrow could replicate this by changing the homework assignments in their existing courses rather than having to create new degrees or anything else," she said.

Three Pillars for the New Learning Economy

As outlined earlier, the various attributes of the New Learning Economy illustrate that there isn't a single strategy or blueprint for institutions to follow. But my research and in-depth interviews with more than three dozen postsecondary leaders, business leaders, and policymakers have identified three pillars that are foundational to the New Learning Economy: a frictionless learner experience, integrated experiential learning, and a mixture of credentials.



1

A Frictionless Learner Experience

The “learner experience” is everything that makes up the day-to-day interactions that students have with an institution. When that experience is positive, students are more engaged, retention rates are higher, and graduates are more satisfied. This is particularly the case for adult learners who are often time-pressed and place-bound and in some cases might have attempted higher education in the past but left because they found the student experience lacking.



An improved learner experience starts at the top of the recruitment funnel by easing the transition into higher education for those who missed the conventional on-ramp—or exited prematurely. One barrier the state of Michigan has eliminated: the price tag. “Michigan Reconnect” offers free tuition for state residents, 25 and older, at a community college if they have a high school diploma but lack a college credential. Some 100,000 residents have enrolled since the program started in 2021.²⁰

Another approach in designing a learner experience that reduces friction for students who are considering enrollment is to recognize what they might already have in the bank when it comes to college credits. More than 39 million Americans have earned some college credits but lack a credential.²¹

The first step institutions can take is to ensure students can access those credits. Ithaca S+R, a nonprofit consultancy, estimates U.S. colleges are carrying \$15 billion of unpaid balances on their books, which accounts for some 6.6 million students with stranded credits. In northwest Ohio, eight colleges have formed a compact to forgive up to \$5,000 in debt that students owe to one of those institutions if they return to complete two semesters or earn a degree or certificate.²²

Once students have access to their previous credits, colleges need to help learners understand what credentials those credits ultimately can earn. Using a data tool they built, North Carolina’s community colleges are targeting learners who have finished at least 50 percent of a credential program and had been enrolled within the last five years. Of the 12,000 people eligible in 2021 at one of the five participating North Carolina community colleges, 6 percent ended up enrolling (better than the 1 to 2 percent re-enrollment rate that is typical for most colleges).

“It’s not just about ‘Hey, why don’t you come back?’ but rather ‘Why don’t you come back for the purpose of getting this degree,’” said Scott Ralls, the president of Wake Tech Community College. “It’s very deliberate. Once you map it out and show them how close they are, it becomes a more attractive proposition for students.”

2

Integrated Experiential Learning

Even if learners understand the roadmap to completing a credential and how they're going to pay for it, they still want an experience that is fundamentally different from the one provided to teenagers right out of high school. Paramount in that differentiated experience is work-based learning.

Working is still too often seen as a “side gig” for many learners, Sigelman of Burning Glass said, and it shouldn't be. “Maybe working is core, and the learning is a side gig,” he said. That means integrating work experiences deeply into the curriculum, with students toggling between stretches in the classroom and the work world related to their area of study. This back-and-forth movement between theory and practice trains students' brains differently from a traditional classroom-only curriculum and also gives employers a chance to evaluate students for potential fit before committing to hiring or promoting them.

To that end, Des Moines Area Community College has expanded its noncredit programs to get new classes up and running more quickly than in the past and teach students just enough to start a career and then they add classes as they progress through the job. The college now offers 15 noncredit certificate programs, where students can receive credit retroactively as they move through the courses and a job simultaneously. Some 85 percent of students complete the programs (compared to just 39 percent for an associate degree) because students see the results of their learning immediately on the job.

Apprenticeships—the ultimate in integrated learning—are also on the rise. There has been a 64 percent growth in apprenticeships since 2012, the equivalent of more than 2 million positions. In the last five years alone, more than 14,700 new apprenticeship programs have sprung up, a consequence of technological advances in the workplace and increased emphasis on workplace education by states and higher education systems. Because most apprenticeships now have an academic component, they are nearly indistinguishable from a traditional college education. “This notion that you either go to college or you get an apprenticeship is just false,” said Thomas Perez, the former U.S. secretary of labor. “Apprenticeship is the other college, except without the debt.”²³



3

Mixture of Credentials

New ways of learning require institutions to certify that learning with credentials that will have currency in the job market. Over the past few years, an array of companies, industry groups, and colleges themselves have begun to offer new types of credentials: badges, nanodegrees, microdegrees, and stackable credentials. By one estimate, there are now more than 960,000 credentials available to learners in the U.S.²⁴ Two of these new types of credentials, in particular, can apply to the New Learning Economy:

Stackable Microcredentials. Microcredentials signify a specific skill that takes a relatively short time to master. They represent modules of learning that, when placed together, signal a competency in a field and can eventually lead to a traditional degree. Workers are turning to microcredentials to differentiate themselves in the job market, keep their skills fresh in their industry, and continue working while they advance their education to reduce the financial burden of pursuing a degree. Among higher education institutions, community colleges are most likely to experiment with short-term programs that lead to stackable credentials (*see case study*). But increasingly, four-year institutions are finding ways to help learners earn shorter-term credentials as they're working toward a bachelor's degree. The University of Texas system has started to embed workplace skills in the four-year curriculum, including digital skills, data analysis and project management, as part of an effort to raise wages for graduates of historically low-earning programs.²⁵

Expedited Credentials. Many community colleges are experimenting with accelerating the time it takes students to complete some programs, mostly in skilled trades. At Valencia College, students can finish training in four to 22 weeks, instead of the typical two years, and they can start whenever they want instead of having to wait for the beginning of the semester. The goal is to attract students who can't afford to put their lives on hold for two years while they're learning a skill. Meanwhile, the University of Minnesota at Rochester has redesigned its bachelor's degree in health sciences into a year-round, two-and-half-year credential. Every student in the program is assigned a coach as well as mentor from the Mayo Clinic, and they are offered research experiences, a paid internship at Mayo, and a digital portfolio to track their learning, among other things.



Toward the New Learning Economy

In interviews, college leaders and talent experts provided the following advice for higher education institutions to navigate the pathway to the New Learning Economy:

Start with awareness.

Outline the trends in the economy and the future of work and talk openly about the outcomes your graduates are now getting in the job market—both the good and bad. Focus on what outcomes you want them to have and the institutional approaches that can get them there.

Work with employers.

Survey and talk with the employers in your region and where you graduates end up (or wish to end up). What are the skills students don't have that they need to get started in a job? Build programs and credentials that can get them those skills.

Find the supporters on campus.

On most campuses there are departments and schools that are more innovative than others, willing to experiment and try things. Try to start new programs and credentials in those areas to serve as proof points for others.



CASE STUDY

Earning a Job-Ready Microcredential Alongside a Traditional Degree

Increasingly, colleges and universities are finding ways to help learners earn shorter-term credentials as they're working toward bachelor's degrees. But given the glacial speed at which colleges and universities move, some innovative institutions have discovered that finding partners outside of higher education is the most expedient way to align their curricula with the needs of the workforce.

The City University of New York, which includes both four-year universities and community colleges, is working with the nonprofit New York Jobs CEO Council to offer a slate of microcredentials. Called the EverUp Micro-Credential Program, it gives students job-related skills—and credentials that signal their skills and knowledge in the field—while they're enrolled in traditional degree programs at CUNY schools, have at least 30 hours, and are in good academic standing.

EverUp offers microcredentials in cybersecurity, data analytics, finance, marketing, project management, software engineering, systems administration, and user experience design. These 100-hour online "intensives," which usually last anywhere from one to two months, were developed in conjunction with 30 of the largest employers in New York City. Students can only enroll in one microcredential at a time, though nothing is stopping them from taking all eight programs, one after another.

They earn a \$300 stipend and LinkedIn badges once they complete the microcredential. Better still, the microcredential programs are free.

The New York Jobs CEO Council, whose members include Bloomberg, IBM, and JPMorgan Chase & Co., is incorporating EverUp into its larger job creation plans for the city. Council members have committed to hire 100,000 local workers for high-potential jobs by 2030, with 25 percent going to CUNY students and graduates. And individual council members, such as Mastercard, are touting EverUp on their career webpages, signaling to students that the programs are worth the effort.

Microcredentialing programs in general have become more popular since the COVID-19 pandemic displaced millions of workers from their jobs. They give students and workers the opportunity to learn specific skills needed to work in high-demand fields. **Pima Community College** in Arizona, for example, is offering short-term certificate programs to help students become desirable job candidates in less than a year. To complete the "micro-pathway," they must also master "21st-century skills," such as empathy, creative problem solving, resilience, and critical thinking. Pima developed eight micro-pathways in high-demand, high-wage industries, including carpentry, plumbing, and automotive repair. Officials expected 600 participants in the pilot programs, but instead got 1,000.

The Way Forward

For generations, we have imagined “education” as happening in a physical place (a school or campus) at a specific point in life (usually between the ages of 5 and 25). Typically, we stopped doing whatever we were doing to learn.

The New Learning Economy is transforming how we think about learning, where we access learning, and who provides education and how. To achieve success, institutions need to consider how their academic programs provide specific job-related skills to students in addition to the broader soft skills that employers demand. Often that requires colleges to build new kinds of credentials that certify learning and give students the opportunity to translate their learning to the job.

Rather than get an education and then work, the New Learning Economy is flipping that traditional script on its head with learning experiences integrated into the job and more employers hiring workers first in a tight labor market, and then providing just-in-time education as they progress through their career. If traditional colleges and universities don't want to be left on the sideline in this market for education, it's critical they build such integrated work and learning experiences.

No matter what, it's clear that education rather than be an iterative approach early in life is becoming more akin to streaming entertainment: it's always on, and in the case of education, it will be lifelong. The path each institution takes toward this New Learning Economy will likely be slightly different, but the approaches outlined here can offer a practical guide to everyone.

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