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Ready to learn, ready to work

Higher education's role in driving economic recovery



Ready to Learn, Ready to Work

What will it take for higher education to bridge the gap between millions of jobs and millions of unemployed to become a key driver of economic recovery in a post-pandemic world?

The pandemic has played a major part in accelerating dramatic global change. The economic fallout, along with the associated job loss, has been drastic. The nature of work has dramatically shifted to be more remote, digital, and automated. And the demand for reskilling has now been turbo-charged. While the U.S. has made progress with new job creation over the past year, the country has not been immune to the skills gap. As of June 2021, **there are 9+ million job openings¹ yet 9+ million people remain unemployed²**. From a supply and demand perspective, there is a willing worker available for every open job. However, these two sides of the equation do not always align because of the skills mismatch between what employers are looking for relative to what these potential employees have to offer. What is being done to bridge this gap and get workers back into the labor market? How can we close the gap between millions of open jobs and millions of people ready and willing to work? What role can higher education play in this critical economic development?

The trifecta of a changing economy, the future of work, and the need for new skills pathways provides a unique opportunity for colleges and universities to revisit their core educational missions: teaching and learning, but with an emphasis on in-demand skills development and a renewed focus on the lifelong learner market. Now is the time to develop new solutions tailored to recent graduates and adult learners, across all skill levels and around the globe, and for higher education institutions to play a leading role in their national economic recovery and a driver of opportunity and growth. Failure for colleges and universities to adapt to this new reality might not only challenge their relevance, but also contribute to an increasingly unequal labor force as workers with less education are more vulnerable to unemployment³.

...universities must change, too, at a pace unfamiliar to higher education. While we retain our core mission of educating the next generation and cultivating new forms of knowledge, **universities must also embrace our ever-expanding role in driving innovation and catalysing economic development⁴**.

-Dr. Farnam Jahanian, *President of Carnegie Mellon University*

Setting the Stage: The Crucial Role of Higher Education in Post-Pandemic Economic Recovery

While global economies struggled to navigate the pandemic, colleges and universities were faced with their own share of turbulence. After a year of declining undergraduate enrollment⁵, ongoing financial losses⁶, and plenty of ambivalent feedback from students about their year of virtual learning⁷, higher education leaders have scrambled to tap everything in their arsenal to step up and meet this moment. Many higher education institutions are not sufficiently digitally mature and often lack the capabilities and agility to meet these growing demands. Even some elite institutions are slow to digitize and capitalize on upskilling and partnership opportunities to better align their curriculum with the job market.

We have a system designed for 100 years ago, and 100 years ago we had a very different population of students.

-Dr. Lande Ajose, *senior policy advisor for higher education for the Office of Governor Gavin Newsom⁸*

Despite these challenges, the world of higher education has made progress. The pandemic catalyzed the rapid growth of online learning, micro-credentials, and hybrid programs. The first quarter of 2021 saw a significant uptick in university partnerships with OPMs, bootcamps, and international pathways – a trend forecasted to accelerate this year⁹. Companies across industries, increasingly subject to digitization, are engaging in employer upskilling by developing their own programs and partnering with online learning platforms and universities to address gaps¹⁰.

While the demand and acceptance for higher education degrees remains virtually unchallenged, as evidenced by return premiums to university degrees, the popularity of nontraditional degrees¹¹ is a clear signal that institutions cannot ignore a labor market yearning for an upgraded skillset and more flexible formats. The overall pace of change is still too slow. Society needs – and expects – moonshots from leading higher education institutions around the world to align their curriculum with the job market, rapidly scale, bridge the skills gap, and keep pace with the evolution of skills in-demand.



As governments and world leaders roll out plans to stimulate and reopen economies, we believe **universities must play a similar leading role in their national economic recovery** that meet these shifts in the workforce and education, help get people back to work, and make meaningful contributions to their industries. Through *focused* digital transformation investments and partnerships, institutions can strive to marry strengths in faculty, the existing curricula, and an organization with the appropriate mix of digital, human capital, and academic innovation to help ensure that an institution remains

relevant in the workforce, meets the growing demand for new skills leveraging online and hybrid education, and generates value for today's and tomorrow's students.

There are three primary bold plays that higher education institutions can implement to embrace their role in this movement:

- 1 **Align skills development with market needs to drive economic recovery**
- 2 **Redesign the learning pathway to improve student access and affordability**
- 3 **Embrace public-private partnerships to amplify the impact of higher education**

1. Align Skills Development with Market Needs to Drive Economic Recovery

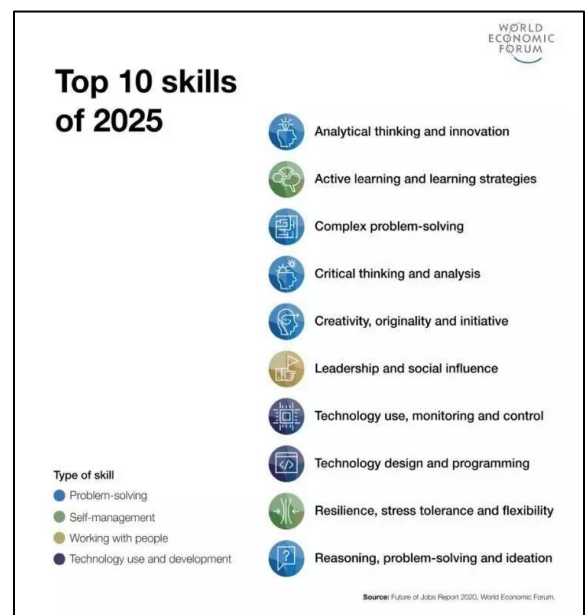
The economic volatility and unemployment brought on by the pandemic have increased the pressure on universities to equip their students with in-demand skills¹² as they prepare to enter the workforce. To play a leading role in stimulating their economies, **universities must begin their strategic transformation efforts by reimagining their core offerings**. This transformation can be achieved by better aligning university curricula with market needs and expanding capabilities to increase the number of entry points into programs, enabling life-long learning, and skills development **at any age**.

The market is increasingly demanding that colleges and universities move beyond bachelor's degrees as their primary product, **toward more nimble, lower-priced, digital “credentialized packages” of learning and mastery** valued by employers — which will be essential in a digital economy where **continuous upskilling is needed to keep pace with technological advances and the shrinking shelf-life of skills**.¹³

-Dr. Sean Gallagher, *Executive Director of Northeastern University's Center for the Future of Higher Education & Talent Strategy*; Jason Palmer, *general partner at New Markets Venture Partners*

So what are the skills that universities can provide new grads, non-college educated workers, and experienced high-skilled workers to help ensure a greater chance of returning to the workforce and prepare them for the future? While the answer to this question can vary widely across regions, industries, age groups and income brackets, recent data indicates:

(1) Strong demand for **digital skills** in order for graduates to remain aligned with the growing application of new technologies across industries and for adult learners to meet the “new collar” workforce profile ¹⁴. *Example: The use of emerging technologies such as artificial intelligence (AI), cloud computing, data science and security is rapidly growing. AI alone is expected to create more than 130 million new jobs by 2022* ¹⁵. A large portion of these are and will be in-demand “new collar” jobs that require in-demand skills, but not necessarily a bachelor’s degree in technology related fields or a previous career in technology. To keep pace with innovation, close to 120 million workers in the world’s 12 largest countries may need to be retrained or reskilled because of AI and intelligent automation in the next three years ¹⁶.



Skills will play a critical role in helping workers keep pace with the accelerated digital transformation that came with the pandemic. The top-performing countries across a number of economic outcomes show higher overall skill proficiency and over-index in many disruptive skills, such as Machine Learning, Financial Technology, and Critical Thinking.

Coursera Global Skills Report 2021

(2) Strong demand for **durable skills** ¹⁷, e.g., soft skills and common competencies like communication, critical thinking, teamwork, empathy, and mindfulness. Although the need for inclusive, soft skills-based education and hiring was apparent long before the pandemic, COVID-19 greatly accelerated existing trends. As we look toward economic recovery – and overcoming the inequities exacerbated by this past year – it has become even more critical to ensure every individual is prepared or upskilled with the durable skills necessary for long-term success in the workforce. Durable skills are not just nice to have, a recent analysis showed that 64% of job postings in the last 2 years required at least one of these skills ¹⁸, and they are valued in high-paying occupations ¹⁹. By focusing on these competencies to complement technical and digital skills, universities have an opportunity to deliver a more holistic and relevant curriculum and help a broader and more inclusive group of learners advance in career pathways for employees’ and employers’ mutual benefit ²⁰.

2. Redesign the learning pathway to improve student access and affordability

As universities return to on-campus and in-person teaching, senior leaders should leverage the lessons learned from the past year and take advantage of the opportunity to invest in redesigning the traditional learning experience by personalizing the learning pathway through innovative modalities to increase access. As the labor market yearns for workers with upgraded skills and learners struggle with the increasing cost of tuition, universities can no longer afford to be complacent and ignore the market gaps needed for a full economic recovery or the challenges associated with a cookie-cutter approach to higher education. These new modalities must be flexible, affordable, learner-centered, skills-focused, and online, with the ultimate goal of preparing any student of any age or background to enter the workforce.

Over the past fourteen months, the demand for these innovative modalities has increased rapidly, primarily brought on by the pandemic and shifting workforce dynamics. A recent Strada education consumer survey found that the most popular option for American adults interested in pursuing education or training was a “certificate, certification, or license” compared to the traditional demand for university degrees²¹. In addition, the digital credentialing platform Credly also reported that the number of organizations issuing industry and workforce credentials had increased 83% since the beginning of the pandemic, showcasing the shift in corporate sentiment and the growing need for new ways to upskill or reskill their workforce²². As these credentials become more popular, it becomes critical to create mechanisms for credit recognition, like Prior-Learning Assessments, and pathways for modular learning to accrue to degrees or mastery learning experiences.

“Colleges and universities in particular stand to benefit from **more research, dialogue, and action related to employer-issued credentials**. The stacking and weaving of employer-issued credentials to create new pathways into college degree and certificate programs is becoming an increasing trend. Faculty and academic leaders could benefit from **frameworks and best practices to integrate and align employer-issued credentials with their curricula**—especially in a world where employers see validation by industry as one of the hallmarks of credential quality.”²⁵

—EdSurge

But many universities are behind in providing access to these in-demand certifications, innovative pathways, and new modalities. In a recent global HolonIQ higher education survey, senior higher education leaders who were surveyed saw micro-credentials as “an important future strategy for their institution,” but at the same time, were also “non-existent at 1 in 5 institutions”²³. Given the lack of access to job-focused credentials and pathways, a new breed of institutions has emerged with a focus on bridging the skills gap, including “Grow with Google”²⁴ who has begun to offer job training programs. This includes a broad offering of professional certifications with pathways into careers and eliminating formal degree requirements for many of their jobs.

3. Embrace public-private partnerships to amplify the impact of higher education

Increasing the impact and value of tertiary curricula through industry and ecosystem partnerships can drive economic development and recovery in a cost-effective and timely way for universities. The alternative route would require universities to build brand new proprietary content to deliver on new skill requirements -- and all in a digital format. Muscling through such an approach can be quite expensive and time consuming, when fortunately, the pandemic has proven that coursework and training can be conducted digitally when produced and delivered thoughtfully. With industries being disrupted by technology and digitization, most professionals would benefit from basic literacy in data and analytics skills and would benefit from proficiency in growing fields such as software development skills. Thus, a vibrant, tech-enabled higher education ecosystem makes it possible to envision and realize new possibilities.

“As education thought leader **Jeffrey Selingo** and Burning Glass CEO **Matt Sigelman** observed: “If experience counts in this job market for those with newly minted degrees, **colleges need to step up by infusing their curriculum with more job experience through internships, co-ops, and job shadowing**. It used to be that such experiential learning was often place-based and capacity constrained. COVID-19 has demonstrated, however, that many of those job-training experiences can take place virtually.”²⁶

Corporate partnerships and industry-sponsored projects also provide universities the opportunity to remain “competitive in an environment marked by declining state funding and continued questions on the value proposition of public higher education.”²⁷ For example, Deloitte and Wichita State University have launched The Smart Factory @ Wichita, a groundbreaking and immersive experiential learning environment that can help accelerate the future of manufacturing as innovation and new technologies continue to reshape operations and the modern enterprise.



The Smart Factory will feature more than 40 robots, robotic programs and cyber applications, 26 AR/VR assets and high-end data visualizations, 10 types of 3D printers, nine reverse engineering machine types, 21 professional engineering software programs and more. It offers a compelling experience in which the digital, physical, and experimental come together — for educators, collaborators, and clients — providing the opportunity to see how Industry 4.0 can make an impact and spur innovation and smart factory capabilities.

Embracing Higher Education’s Role in the Global Recovery

A college or university’s value is not just innate to that institution – it is driven by its relative place in the world stage, in the economy, the local community, and importantly in the value to a student’s life and the possibilities it opens up. Universities can and should play a leading role in helping to stimulate national economic recovery by evolving their vision to be more responsive to the social and economic challenges our societies face today and will in the future. Only then can institutions fulfill their core mission: to equip students with the knowledge and skills to make meaningful contributions to their own societies and have fulfilling lives.

End Notes

¹ [Job Openings and Labor Turnover Summary \(bls.gov\)](https://www.bls.gov/news.release/jobopenings.toc.htm)

² [US Unemployment Rate and Total Unemployed | Department of Numbers \(deptofnumbers.com\)](https://www.deptofnumbers.com/unemployment-rate)

³ [More education: Lower unemployment, higher earnings \(bls.gov\)](https://www.bls.gov/news.release/educatio1.toc.htm)

⁴ [4 ways universities are driving innovation | World Economic Forum \(weforum.org\)](https://www.weforum.org/agenda/2020/09/4-ways-universities-are-driving-innovation/)

⁵ [A New Term, the Same Enrollment Losses \(chronicle.com\)](https://www.chronicle.com/article/A-New-Term-the-Same-Enrollment-Losses)

⁶ [How Much Has Covid Cost Colleges? \\$183 Billion \(chronicle.com\)](https://www.chronicle.com/article/How-Much-Has-Covid-Cost-Colleges-183-Billion)

⁷ [Student experiences during COVID and campus reopening concerns \(insidehighered.com\)](https://www.insidehighered.com/digital-learning/article/2020/09/16/student-experiences-during-covid-and-campus-reopening-concerns)

⁸ <https://hechingerreport.org/californias-covid-19-recovery-plan-seeks-to-improve-higher-education-equity/>

⁹ <https://www.holoniq.com/notes/100-new-opm-bootcamp-and-pathway-partnerships-in-q1-2021/>

¹⁰ [Upskill or Fade Away \(SHRM.org\)](https://www.shrm.org/learning/whitepapers/2021/03/upskill-or-fade-away)

¹¹ https://cci.stradaeducation.org/pv-release-may-19-2021-back-to-class/?utm_campaign=2021%20Public%20Viewpoint&utm_content=167238716&utm_medium=social&utm_source=linkedin&hss_channel=lcp-61414

¹² [C4C Unbounded-University-eBook.pdf \(coursera-for-business.org\)](https://www.coursera-for-business.org/c4c-unbounded-university-ebook.pdf)

¹³ <https://hbr.org/2020/09/the-pandemic-pushed-universities-online-the-change-was-long-overdue>

¹⁴ [New-collar workers - who are they and how are they contributing to our labor shortage?](https://www.forbes.com/sites/amitchowdhry/2018/09/18/artificial-intelligence-to-create-58-million-new-jobs-by-2022-says-report/?sh=360184f74d4b)

¹⁵ <https://www.forbes.com/sites/amitchowdhry/2018/09/18/artificial-intelligence-to-create-58-million-new-jobs-by-2022-says-report/?sh=360184f74d4b>

¹⁶ <https://newsroom.ibm.com/2019-09-06-IBM-Study-The-Skills-Gap-is-Not-a-Myth-But-Can-Be-Addressed-with-Real-Solutions>

¹⁷ [The high demand for durable skills](https://www.grow.google/learn/the-high-demand-for-durable-skills)

¹⁸ [The high demand for durable skills](https://www.grow.google/learn/the-high-demand-for-durable-skills)

¹⁹ [The Power of Transportable Skills \(Burning-glass.com\)](https://www.burning-glass.com/insights/the-power-of-transportable-skills)

²⁰ <https://www.weforum.org/agenda/2020/10/top-10-work-skills-of-tomorrow-how-long-it-takes-to-learn-them/>

²¹ [Strada \(stradaeducation.org\)](https://www.stradaeducation.org/)

²² [More Employers Are Awarding Credentials. Is A Parallel Higher Education System Emerging?](https://www.holoniq.com/notes/micro-credentials-global-panel-results/)

²³ <https://www.holoniq.com/notes/micro-credentials-global-panel-results/>

²⁴ <https://grow.google/>

²⁵ <https://www.edsurge.com/news/2021-03-25-more-employers-are-awarding-credentials-is-a-parallel-higher-education-system-emerging>

²⁶ [Good Jobs in Bad Times.pdf \(chronicle.com\)](https://www.chronicle.com/article/Good-Jobs-in-Bad-Times.pdf)

²⁷ [This College Degree Is Brought to You by Amazon - WSJ](https://www.wsj.com/articles/this-college-degree-is-brought-to-you-by-amazon-1161414)

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