

A Review of Workforce Education, 2020 to 2022: Two Years of Enormous Change



by George Lorenzo
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INTRODUCTION

There's been an extraordinary amount of disruption around workforce education over the past two years.

We start in October 2020 when COVID was surging. At that time, the *New York Times* [noted](#) that companies were barely surviving. The growing number of unemployed looked toward developing new skills and figuring out how to transition into new careers. According to the Bureau of Labor [Statistics](#), unemployment surged to 13% by the second quarter of 2020 and by the fourth quarter eased to 6.7%. Today it hovers around 3.6%.

In November 2020, Jamie Merisotis, president and CEO of Lumina Foundation, [wrote](#) that “many jobs aren’t coming back because the pandemic accelerated a shift toward jobs demanding higher levels of education and skills.” Merisotis added that prospects for more continuous learning opportunities needed to be developed “on a vast scale,” and he called for “strengthening our community college system, making training more affordable and accessible for adult learners, and breaking barriers of inequality that the pandemic exposed.” His calls did not go unheeded.

SKILLS SHIFT

In a May 2022 [report](#) by Emsi Burning Glass (now Lightcast) and Boston Consulting, America’s workforce is shown as experiencing an environment of “shifting skills” marred by “disruption,” particularly in industries such as finance, design, media, writing, business management and operations, HR, and IT.

“Many jobs aren’t coming back because the pandemic accelerated a shift toward jobs demanding higher levels of education and skills.”

*- Jamie Merisotis, president and CEO
Lumina Foundation*

By analyzing data across job families, Emsi listed four trends related to skills change:

- 1. Digital skills** – For example, think of the enormously popular Salesforce platform and customer relationship management (CRM) software skills for jobs in such fields as advertising sales, communications, healthcare IT, and numerous other industries. Or think digital photography skills as a merchandiser, or technical support skills as an insurance agent, or Adobe Suite skills as a marketing person.
- 2. Soft skills in digital occupations** – “These include skills involving organization, time management, verbal communication, leadership, positive thinking, listening, critical thinking, and building effective relationships.”
- 3. Visual communication** – Think skills in data visualization and business intelligence platforms, which have

increasingly become important in a wider variety of occupations.

- 4. Social media skills** – To keep abreast of everything going on in the marketplace requires a certain amount of social media experience and knowledge along with various design and writing skills for posting and communicating.

Further, “investments in recruitment, upskilling, and reskilling must accompany technology investments. Even when it’s clear that new approaches are required—and even when they are underway—it’s hard to gauge the true degree and pace of change across job roles, within a company and across an industry or job family.”

ENROLLMENT CONUNDRUM

Concerning the strengthening of community colleges to build more affordable and accessible training and upskilling for underrepresented adult learners who need it most, such as low-income individuals and minorities, we’re seeing an oppositional trend with a dramatic drop in community college enrollments.

According to [AACC](#), “the COVID-19 pandemic has led to steep enrollment drops at community colleges. The National Student Clearinghouse

Research Center estimates that 4.7 million students were enrolled in public two-year colleges in fall 2021, down 3.4% from fall 2020. That’s on top of a 10% drop from the year before.”

According to a May 2020 *New York Times* [article](#), “all told, community colleges around the country have lost 827,000 students since the pandemic began in spring 2020, according to the figures released by the research center.”

Lower-income Strata Impacted by Pandemic Express Growing Doubts About Higher Ed

In September 2020, the National Skills Coalition [reported](#) that “more than 40 percent of the 50 million job losses during the first four months of the pandemic have been concentrated among workers earning less than \$40,000 a year.” While these workers believed that pursuing a college degree could help them transition into a more lucrative career, they also grew more hesitant to enroll in higher education degree programs.

The Strada Education Network collects data and reports on enrollment hesitancy, noting in a recent [webinar](#) that confidence in higher ed’s ability to advance careers was down 13 percentage points. Plus, the notion of whether higher ed is worth the cost was down 18 percentage points. The two biggest barriers repeatedly brought out in the research on

“All told, community colleges around the country have lost 827,000 students since the pandemic began in spring 2020, according to the figures released by the research center.”

- New York Times, May 2020

declining enrollments were cost and balancing school with work and other responsibilities. There's also a lot of intangible factors that come into play such as stress and anxiety, fear of not succeeding, uncertainty about the job market, and figuring out what educational path to take. Five categories "rose to the top" as factors most likely to increase the probability of enrollment: flexible scheduling (56%), credit for prior learning (54%), financial aid (51%), work-based learning (41%), and confidence in career advancement (40%).

The Growth and Need for Additional Financial Aid and Education & Career Advisement

While the unemployed continued to struggle, even those maintaining employment in the relatively lower-earning tiers of the population still encounter significant roadblocks in their quests to further their education and career advancement. It's important to note that more than 40 percent of college students are over 25 years of age. Thirty percent are parents, and 60 percent work at least part-time. Many of these learners start attending college only to ultimately drop out before earning a degree. How can these drop-out learners be assisted in their pursuits for career and academic advancement opportunities?

In a September 2020 [report](#) by the Graduate! Network and New America, authors Hadass Sheffer, Iris Palmer, and Annette B. Mattei took a close look at these non-completers whom they refer to as "comebackers." The research for this particular report was conducted in February 2020. At the time, it was discovered that fewer comebackers were considering a return to college, and most of these non-returners were low-income learners. In addition,

"more comebackers than expected who were matriculating at the start of the pandemic had to stop out during the term, notably true for Black, Latinx, Asian, and other non-white categories of race and ethnicity." Sheffer et al. described how postsecondary institutions and employers need to design better systems to keep these comebackers enrolled.

On the employer side, Sheffer et al. noted that "35 percent of employed comebackers have employers that do not offer educational benefits." In addition, 7 percent were not aware of any tuition benefits being offered by their employers. Another 12 percent who work for employers with tuition assistance programs did not qualify for such benefits, and 19 percent who qualified did not take advantage of those benefits. In the group of employees who did report education benefits, individuals in higher income brackets were more likely to say they had access to such benefits and were more likely to use them. Comebackers earning \$24,000 or less were more likely to say their employer did not offer education benefits or that they did not qualify for benefits even though their employers offered them. The older the worker, the more likely he or she was to have used employer education benefits, peaking at age 50.

On the institutional side, Sheffer et al. explained how states and colleges can help ease the financial challenges lower-income comebackers face through supplemental grants and programs. They pointed to several promising strategies along these lines, such as [Tennessee Reconnect](#), the [Arkansas Academic Challenge Scholarship](#), Purdue University's [Span Plan](#),

Wayne State University's [Warrior Way Back](#), the University of Akron's [Adult Focus](#), and the University of Memphis [Finish Line](#) program. Sheffer et al. also encouraged faculty to form mentoring relationships with returning adult students, suggesting that department chairs could facilitate such relationships in partnership with campus student services departments.

UNPREPARED LEARNERS

Meanwhile, some educators are saying that even with learners who do actually enroll, many arrive unprepared, particularly recent high school graduates, making academic advisement services more important than ever. In a July 2022 [article](#) published by the *Hechinger Report*, Kathryn Boucher, associate professor of psychology at the University of Indianapolis, explained that “plummeting high school graduation rates in multiple states, has left fewer high school graduates applying to enroll in colleges and universities this fall.” On top of that bad news, “those who do enroll may be less prepared for college coursework than the students who enrolled before the pandemic.” Some of the indicators of this activity include lower standardized test scores and a jump in middle and high school failing grades across the country. “The state of New Mexico, for example, and the city of Houston, Texas, had more than 40 percent of students fail at least one class from spring 2020 to spring 2021.”

In addition, as explained in an April 2022 *Hechinger Report* [article](#), “many students whose last years of high school were disrupted by the pandemic are struggling academically in the foundational college courses they need to succeed later in their academic and professional careers.”



In a July 2022 *Governing* [article](#), it was noted that since 2019, K-12 schools have experienced chronic absences escalating into a “full-scale crisis.” According to a [new report](#) by Attendance Works, there has been “two- and threefold increases in many states. The levels are highest among low-income and minority students, it says, from the same communities most affected by the pandemic in other ways.”

NUMEROUS WORKFORCE EDUCATION RESOURCES

For well-researched and informative reports on the many academic and employment challenges being faced by learners, see Georgetown University's [Center](#) on Education and the Workforce (CEW). For three examples among many, in June 2020, CEW [tracked](#) COVID-19 unemployment and job losses. In June 2022, CEW [ranked](#) the economic value of college business programs, and in February 2022, the [ROI](#) of 4,500 colleges.

Other major publishers of information about workforce education, or as many say, the work and learn ecosystem, include, in no particular order, Jobs for the Future (JFF), New America, Brookings, Strada, Emsi, Lumina Foundation,

National Skills Coalition, National Fund for Workforce Solutions, ECMC, Working Nation, The Project on Workforce at Harvard, Workcred, Education and Employment Research Center, Non-degree Credential Research Network, Education Strategy Group, Education Design Lab, Corporation for a Skilled Workforce, UPCEA, National Science Foundation, McKinsey & Company, Pew Research Center, and others. Most of these entities also host informative webinars and podcasts on numerous workforce education issues. They exist outside of the mass education media who also regularly report on workforce education, such as *Inside Higher Ed*, *Open Campus*, *the Chronicle of Higher Education*, *the Hechinger Report*, *The evOLLution*, etc.

For our two-year historical emphasis, - and again, among many interesting report-oriented resources available - in May 2020, JFF [published](#) *Supporting Dropout Recovery Programs to Focus on Postsecondary Success*. In March 2022, JFF [published](#) *Navigating the Maze of Short-term Credentials to Boost Young Adult Talent*. In June 2020, New America [published](#) its fourth annual survey titled *Varying Degrees*. In June 2022, New America [published](#) *If a recession hits, community college enrollment may worsen - plan now*. In November 2020, the National Skills Coalition [published](#) *Skills for an Inclusive Economic Recovery – Policy Agenda*. In May 2022, the National Skills Coalition [published](#) *Data for an Inclusive Economic Recovery*.

ON DATA

Reporting on the collection and analysis of data concerning our labor force and credentialing is an entirely different animal that is often highly esoteric and difficult to keep up with. There is a general consensus that “higher education is data rich but information poor,” as noted by Janice Robertson, director of research and policy at the Institute for Higher Education Policy in a June 2022 [EdUp Experience podcast](#) on the [College Transparency Act](#). In addition, keeping up with all the data being collected by the numerous divisions of our federal government can be extraordinarily challenging.

We covered this issue in a September 2021 WFM [special report](#) titled *Data Deluge: Efforts to Create an Effective, Large Scale Federal Workforce & Labor Market Information System (WLMIS) – The “Mess” Explained*. Also see this June 2022 WFM [feature article](#) headlined *Part III: NCRN Conference Explainer on Data Issues Impacting Researchers and Users of Research: Infrastructure and Public-Private Partnerships*.

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- Andrew Reamer, research professor
George Washington University

It was noted in *Data Deluge* that “U.S. labor markets are not working well,” due, in part, to its “participants’ [e.g., students, job seekers, employers, educators, policymakers, etc.] lack of access to current, reliable, useful quantitative and descriptive information they can use to intelligently make difficult-to-reverse decisions that have a reasonable probability of success,” said George Washington University Research Professor Andrew Reamer. However, Reamer added that it’s not all gloom and doom, saying there’s more public-private collaboration that didn’t exist in the past. “There are promising efforts in motion,” he said, pointing to three relatively recent developments – Federal Statistical Agencies, Nonprofit/ Private Sector Organizations, and Federal Initiatives Outside of the ETA – that complement each other and comprise more than a dozen programs and initiatives established over the past several years that have great potential to enhance the creation of a comprehensive federal workforce & labor market information system (WLMIS).

In the aforementioned NCRN [session](#), held in April 2022, we explained there’s not enough data about non-degree credentials (NDCs). This lack of information should change in the not-too-distant future provided that all the stakeholders – which includes researchers; state, federal, and local workforce development agencies; employers; [workforce intermediaries](#); and, of course, the many varied providers of NDCs – effectively collaborate with each other and produce data analyses that will make us all smarter about the growing and increasingly popular world of NDCs.

For more on data, see WFM’s [labor market information](#) and [metadata](#) categories.

RESKILLING



The growing need for a reskilled workforce and an increase in affordable educational opportunities is not expected to fade away anytime soon. In a September 2020 Lumina Foundation [webinar](#), Chauncy Lennon, vice president for the future of learning and work, said that the employment hiring marketplace seek out skills from potential applicants that frequently go beyond college degrees. In other words, “it’s often about building a constellation of different kinds of credentials,” he explained. Therefore, “to help individuals, there needs to be more information and understanding about what the labor market looks like, where the demand is, and what credentials are essential to meet those market needs.”

What skills and credentials are employers seeking? For an in-depth resource on this topic, see *Workforce Basics: The Competencies Employers Want*, a [website](#) that summarizes a report of the same name, published by CEW. The report claims that the pandemic has intensified a [50-year, cross-industry economic trend](#) in increased demand from employers for employees with marketable cognitive competencies and decreased demand for physical labor. Cognitive competencies, as defined by [edupedia](#), are “skills

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associated with the acquisition of knowledge and the processing of information through thought, such as reasoning, intuition, perception, imagination, inventiveness, creativity, problem-solving, and oral and written expression.”

Soft skills like communication, problem solving, customer service, etc. will likewise continue to be in high demand. Yet, within specific industries, only certain combinations of soft and technical skills are worth pursuing through postsecondary education and training. For example, computer programming languages are a subset of technical skills that experience significant volatility in demand from employers. Emsi’s [2018](#) and [2020](#) *Top 10 Skills Demanded by the Top 10 US Companies* reports, by Meredith Metsker, indicated that corporations like Amazon and Apple dictated substantial shifts of programming/developer skills needed from their workforces through job postings from 2012 to 2020. During this time, for example, Amazon’s need for Java proficient employees dwindled while their AWS workforce experienced extreme growth. For Apple, job postings requesting C-language proficiency diminished while postings for Python increased rapidly. This is the kind of

information students need to be made aware of through strong institution-provided advising support that can help them better navigate the complex market of in-demand careers and skills.

WFM covered some of [Amazon’s](#) and [Google’s](#) enterprises in the skills-based courses they are offering, as well as [IBM’s](#) work in the field.

The New World of Changing Work Environments

As modifications in desired skills manifest in the hiring marketplace, the pandemic has also permanently altered our physical and virtual work environments. For example, in *COVID-19: Is this what the office of the future will look like?* [published](#) in April 2020 by the World Economic Forum, ten ways in which the world and workplaces could change are presented, ranging from augmented reality workstations and sanitation issues to co-working set ups and how we will greet each other. In October 2020, the World Economic Forum also published [The Future of Jobs Report 2020](#). Some of the report’s key findings include: Technology adoption rates will accelerate, with cloud computing, big data, and ecommerce remaining as high priorities. New technology integrations will both reduce and



expand the workforce, and company's utilizing contractor work is expected to increase.

The Future of Jobs Report estimated that 85 million jobs worldwide will be displaced by 2025, while 97 million new jobs may develop that adapt to a division of labor between humans, machines and algorithms. Employers will seek out the following skills: critical thinking and analysis, problem-solving, and skills in self-management. Moreover, "companies estimate that around 40% of workers will require reskilling of six months or less, and 94% of business leaders report that they expect employees to pick up new skills on the job, a sharp uptake from 65% in 2018." In addition, remote work will increase, and about one-third of employers will attempt to build a better sense of community among employees by deploying digital tools that are geared toward promoting well-being and good health." Comparing the impact of the Global Financial Crisis of 2008 on individuals with lower education levels to the impact of the COVID-19 crisis, the impact today is far more significant and more likely to deepen existing inequalities.

Online learning and training, along with new programs geared toward reskilling and upskilling, will continue to increase, including personal development courses and learning a variety of relatively new digital skills.

Finally, *The Future of Jobs Report* noted that the pandemic brought about an "increasing urgency to address the disruption underway both by supporting and retraining displaced workers and by monitoring the emergence of new opportunities in the labour market." It was suggested that to effectively confront this urgency, "governments must pursue a holistic approach, creating active linkages and

coordination between education providers, skills, workers and employers, and ensuring effective collaboration between employment agencies, regional governments and national governments."

THE MICROCREDENTIAL CRAZE



To a large degree, all the questions and research being addressed in the workforce education arena has led to what we are calling the "microcredential craze," or what some call "The Wild West." The adoption of non-degree short-term microcredential courses and programs, both noncredit and for-credit, looks to be growing fast, although there is not an exact count of how many college and university students are actually enrolled in these, as indicated in our recent [coverage](#) on this topic.

Also see the [credentials category](#) on the WFM website.

We'd be remiss if we did not mention digital badges in this section. Digital badges can be considered a sub-category of microcredentials, [defined](#) by the University of Buffalo as "a new type of credential that allows you to show specific skills that you have gained through



learning experiences. A digital badge is an icon but it is not a static image. It is web-based, clickable, and contains unique verifiable metadata. Metadata includes information regarding issuing institution, date of issuance, criteria for earning and evidence that the learner has met the criteria.”

See the [badges category](#) on the WFM website where there are several articles on how such institutions as University of Maine, Kennesaw State University, Alamo Colleges, and University of Dayton have implemented sophisticated digital badge initiatives.

DIVERSITY, EQUITY & INCLUSION

Many of education’s long-standing ills and bad habits were exacerbated once the pandemic hit in early 2020, with some of the most egregious issues related to diversity, equity and inclusion (DEI) taking a front seat in the literature on academic and career readiness and support. There are many nonprofit organizations working in the DEI arena. In June 2022, for instance, JFF Labs and the University of Phoenix partnered to [publish](#) *Building*

Professional Social Capital for Black Learners and Workers. This report highlighted the following ten DEI-oriented organizations (although there are many more listed in the report – as well as in our Workforce Intermediaries [section](#)) “that specifically position professional social capital as a core part of the learning and work experiences they provide.”

1. [BUILD](#) (Businesses United in Investing, Lending and Development) – Youth entrepreneurship program offered in partnership with local school districts.
2. [DivInc](#) – Assists underrepresented founders in overcoming ecosystem barriers to entrepreneurial success.
3. [HBCU Career Center](#) – Supports the career development of HBCU students and alumni by bridging the gap between educational and corporate life.
4. [HBCUvc](#) – Directs how capital is formed and distributed to increase opportunities for Black and historically excluded communities.
5. [Here to Here](#) – Champions youth in the Bronx by bringing together business, education, and community leaders to build equitable avenues to lifelong career success.
6. [INROADS](#) – Creates pathways to careers for diverse high school and college students across the country.
7. [NSBE](#) – The National Center for Black Engineers supports the engineering and technical aspirations of pre-collegiate, collegiate, and professional members through a comprehensive suite of programs.
8. [Social Capital Builders](#) – Works to increase social capital literacy (promoting awareness of what social capital is and why it’s important) in young adults and in the organizations that serve them.

9. [StreetWise Partners](#) – Working in New York, Washington, DC, and Michigan, pairs volunteer mentors with unemployed or underemployed adults in its 12-month Workforce Development Mentoring program.
10. [Strive for College](#) – Now UStrive.org, this organization is a free online mentoring program that connects high school and college students with mentors to work on education and career goals.

There are several publishers and researchers in the DEI category worth noting, such as Every Learner Everywhere, Opportunities@Work, and *Diverse Issues in Higher Education*. In December 2020, JFF [published](#) *How Intermediaries Can Help Black and Latinx Youth Develop a Strong Occupational Identity: Four Principles of Practice*. Here it was explained that COVID-19 compounded the socioeconomic marginalization of youth minorities and other groups. Consequently, it is more vital than ever for intermediaries to create new pathways that lead to humane wages and working conditions for adolescents entering the labor market. To reduce inequity, intermediaries must fully endorse the increased allocation of resources for counseling and income-support services and continue to support positive change.

In April 2022, Brookings [published](#) *Institutionalizing inclusive growth: Rewiring systems to rebuild local economies*. Here it was explained that the primary task of workforce intermediaries working within metro areas across the country is to spur economic growth. However, metros face numerous challenges to implement inclusive

growth strategies in their communities, with the end result too often being “tremendous downstream consequences for economic and health inequities.” Hence, it is imperative that workforce intermediaries continuously improve their organizational capacities.

GROWTH OF APPRENTICESHIPS

According to the [Department of Labor](#), the number of apprenticeships keeps growing, showing a 64% increase since 2012. The DOL provided the following key facts:

- There has been 2 million+ new apprenticeships since FY12.
- There has been 22% more active apprentices than the previous 10-year average (593,000 vs 484,000).
- 396,000+ participants completed an apprenticeship in the last five years.
- 14,700+ new apprenticeship programs were created in the last five years.

A June 2022 *Wall Street Journal* [opinion piece](#) by Paul Winfree and Rachel Greszler heralds apprenticeships as being a better option for certain learners than going to college, citing studies from Emsi and Harvard Business School that found occupations commonly filled via apprenticeships “could nearly triple (to 74 to 27).” In addition, “the number of job openings filled could expand eightfold (to 3.2 million), and the occupations ripe for apprenticeship expansion would offer 20% higher wages than traditional apprenticeship occupations.”

We have written a number of interesting pieces related to apprenticeships, including a

June 2021 [two-part story](#) on how *Federal Grants for Apprenticeships are Shifting the Postsecondary Landscape*. Also see the [apprenticeships category](#). In May 2022, we [covered](#) *How Achieve Partners is Building Paid Apprenticeship Programs for IT Entry-level Positions*.

BUILDING LERs, CLRs, & A COMPREHENSIVE NAVIGATOR

Lastly, Learning and Employment Records (LERs) and Comprehensive Learner Records (CLRs) are two topics of increased interest in the workforce education arena. In April 2022, we [published](#) *Understanding Comprehensive Learner Records*. CLRs in higher education are in an early stage of development. A growing list of colleges and universities and third-party intermediaries are working meticulously to make CLRs part and parcel of a new way to officially record learner records that more accurately and fully validate individuals' skills and competencies. LERs are more of an umbrella term, with CLRs holding a sub-category that basically promotes the practice of recording and conveying an individual's skills and competencies that are not reliant upon or explained adequately enough in college transcripts. Both LERs and CLRs typically feature digital wallet/blockchain-oriented technologies for sharing information and maintaining privacy and control over one's academic and career record keeping.

Also see this [report summary](#) headlined *Building a Skills-Based Talent Marketplace: Verifiable Credentials Wallets for Learning and Employment*. In this JFF Labs report, published in April 2022, author Sharon Leu profiled seven digital wallet providers identified as innovators among

hundreds of providers. Brief snapshots of each are provided below.

[Diwala](#): "The company piloted its wallet in six countries in Africa, where issuing an official academic certificate can cost \$5 to \$15 and take three to six months. Its system uses VCs that are delivered via secure multi-messaging notification platforms."

[Gataca](#): "Founded at MIT in 2017, Gataca has developed a blockchain-based SSI solution. The company aims to drive multi-regional adoption of credential wallets by developing an agnostic technology standard that enables interoperability of vendor certificates and wallet platforms."

[SmartResume](#): Developed by [iDatafy](#), "individuals who have SmartResumes own the data stored in these digital portfolios, and they are free to share it with third parties."

[MATR](#): Based in New Zealand, and released in June 2020, "the company's mobile wallet for smartphones features a simple user interface to allow people to interact with and receive credentials from issuers and present credentials to third parties."

[Tykn](#): "A Netherlands-based startup that develops blockchain based self-sovereign decentralized identity solutions. The company works with other startups, governments, and international nongovernmental organizations."

[GreenLight Credentials](#): "GreenLight's pilot demonstrated that it could format and exchange records according to institutional specifications for three types of institutions: community colleges, K-12 schools, and four-year universities in the Dallas, Texas area."

[BlockCerts](#): “Launched in 2015 as part of an MIT Media Lab project, Blockcerts provided one of the first standards for creating, issuing, viewing, and verifying credentials on the blockchain.”

We would add [Territorium](#) to this list, a new comer to the U.S. marketplace.

Some early implementations of wallets include:

[Arizona State University Pocket](#)

[Learner Credential Wallet by DCC](#)

[C.TI Wallet by Convergence.Tech](#)

[Super Skills](#)

[The Open Credential Publisher Wallet by Randa Solutions](#)

[The Teacher Wallet by Randa Solutions](#)

[Talao](#)

[The Velocity Career Wallet](#)

[Walt.id](#)

[WayTo by Workday](#)

[Yoma by Trinsic](#)

For more on blockchain technology, see our [ACE report summary](#) of a DOE-funded and ACE-managed Education Blockchain Initiative (EBI) launched February 2020 through September 2021.

The Need for an Efficient Navigator

In line with this work of recording and conveying skills and competencies through LERs and CLRs, there is an earnest quest among educators for a legitimate and effective navigation tool that would allow learners to effectively shop online for high-quality credentials offered by institutions across the country.

William B. Bonvillian and Sanjay E. Sarma from MIT covered this notion in their [book](#) titled *Workforce Education: A New Roadmap*. They explained that “efficient labor markets, like all other markets, require good information flow and widespread participation, which we lack.” And for good measure, they add that our federal labor market information system “is a mess.” The creation of an efficient, data-rich workforce navigation system (called a “navigator”) could help organize the mess, if the mess itself, which operates within numerous unconnected and highly complex labor market information generators working within federal and state governments, can be consolidated and shared effectively.

“The navigator could be an online guardian that collects and scans occupation shifts and alerts employees, finds relevant job openings, and identifies the skills needed on new jobs,” Bonvillian and Sarma wrote. Such a system could operate like recommendation sites similar in functionality to Netflix, Amazon, or Expedia. The important information that can drive the creation of an efficient navigator could be disaggregated and assembled via numerous labor market data sources.

Unfortunately, this well-intentioned navigator has not yet been created, and, in our opinion, it seems that it is anyone’s best guess as to when and if it actually might become a reality.

This concludes our wide-ranging report on workforce education, 2020-2022. Comments and opinions are welcome via email at glorenzo@wfmonitor.com.

ABOUT WORKFORCE MONITOR

The mission of [Workforce Monitor](#) is to keep up with the abundance of literature on the broad topic of workforce development (WFD) and its relationship to education. We write and publish feature articles that help explain all the issues, trends, and strategies related to WFD. In addition, we provide a growing library of report summaries that break down research written by the most influential organizations across the public, private, and non-profit sectors. We are committed to developing a robust community of knowledge for educators, workforce development management and staff, policymakers, employers, and students so that they can navigate the complex credential and labor force marketplace with confidence. In short, we are trying to make the education and workforce development arena more transparent for all.

At Workforce Monitor, we save you time by summarizing, categorizing, and publishing the most salient aspects of the vast array of literature on WFD and its relationship to education. We also provide direct links to the original literature we summarize, so you can go directly to the original source for a more expansive view.

Finally, we publish a [biweekly newsletter](#) that includes our Editors' Picks of the most interesting articles and reports we have recently discovered. Check out our biweekly newsletter for a view of past issues and consider subscribing. The newsletter is meant to keep you apprised and regularly reminded of what's going on in the field, with links to all of our most recent summaries and articles. Browse through our expanding compendium of summaries and feature articles. We are building a substantial resource, having launched in mid-January 2021.

Founder, Writer, Editor & Publisher

[George Lorenzo](#) is the writer, editor, and publisher of Workforce Monitor. In 2000, he launched Educational Pathways (EdPath), an education writing, editing, publishing, and curation service. George's independent research, writing, editing, and publishing services have been provided to institutions, publishers, and organizations, including the Rochester Institute of Technology, Michigan State University, the University of California, Fort Hayes State University, Northern American University, Ferris State University, Rio Salado College, the Sloan Consortium, WCET, EDUCAUSE, Blackboard, Prometheus, eCollege, University Business, EdSurge, Fast Company, PBS, Hezel Associates, Training Magazine, Training Industry, the Association of Public & Land-Grant Universities, and the Association of Chief Academic Officers.