Open Campus

One company's big push on cloud trainings

BY PAUL FAIN JANUARY 20, 2022



A look at how AWS plans to offer free cloud training to 29M people. Also, microcredentials from 10 big community colleges, new data on credential inflation and opportunity gaps, and a report on the science of working learners.

Within or Without the University

Few companies have invested more in training programs for their credentials in recent years than Amazon Web Services (AWS).

The Amazon subsidiary is the <u>world's leading</u> cloud computing platform and an increasingly important part of the internet's infrastructure, as millions learned during its <u>recent outages</u>. Just over a year ago, AWS <u>announced plans</u> to **spend hundreds of millions of dollars to offer free technical skills training in cloud computing to 29M people globally.**

More than 6M people had pursued that training by November 2021, when the <u>company</u> <u>expanded</u> its free cloud offerings, adding <u>AWS Skill Builder</u>, an online library of 500+ self-paced courses, as well as its first in-person <u>skills training center</u>, located in Seattle. AWS plans to add more <u>centers</u> this year.

The company's big spending on free training is driven by an enormous and growing <u>cloud IT skills gap</u>, says <u>Kevin Kelly</u>, director of AWS Education Programs.

"We can't afford not to," Kelly says. "This is investing in our customers and our future customers."

Demand is strong for AWS credentials—the <u>company says</u> 92 percent of IT professionals report <u>holding at least one</u> of its 11 industry certifications.

As university leaders await Amazon's choice about which institutions it will tap as partners for a <u>new free tuition benefit</u> aimed at its 750K front-line workers, **AWS** says <u>it's essential</u> to work both within and outside traditional higher ed.

Beyond 29M: <u>AWS Academy</u> offers a free curriculum and educator training to accredited colleges so their students can prepare for certifications. Many institutions around the world have signed up—incorporating cloud computing into new and existing courses and credentials—including hundreds of <u>community colleges</u> and <u>four-year</u> <u>universities</u> in the U.S. Students at those colleges get a 50 percent discount on AWS certification exams.

The company <u>says</u> AWS Academy graduates have been hired by a wide range of companies with cloud needs, including Accenture, Goldman Sachs, and Verizon Wireless. And while AWS courses from its member colleges tend to not be credit

bearing, some institutions are offering credit for an AWS certification, such as <u>LSU</u> <u>Online</u>, or for AWS Academy courses, including <u>UC San Diego Extension</u>.

Some institutions will allow students to stack the certifications toward degrees. Meanwhile, <u>Indiana</u> and <u>Georgia</u> have made broad commitments to use AWS Academy content across statewide two-year systems.

Kelly wrote this about the company's expanding partnerships with higher ed:

"We are building a global talent supply chain and fostering innovative and scalable collaboration between industry and academia. To be effective, **this model requires that both sides commit to understanding each other's unique pressures and strengths. It requires they prioritize career outcomes and job placements.**"

Two-Way Street: <u>Shalin Jyotishi</u>, senior policy analyst for the Center on Education & Labor at New America, sees an opportunity for AWS and Amazon to work with colleges to create stackable pathways for workers who aren't currently enrolled in college.

"One challenge I've observed in the market of employer-issue credentials and training is that other employers in the industry may not recognize it," he said. "If a worker can leverage in-house training from Amazon to progress in their careers at Amazon, that's great, but what if they have to or want to move to another opportunity?"

Colleges and universities, Jyotishi said, could build out their prior learning assessment infrastructure to help workers get credit for credentials from AWS and other employers.

Mentorship and Hiring of Graduates: Miami Dade College has a <u>close</u> <u>partnership</u> with AWS, says <u>Antonio Delgado</u>, vice president of innovation and technology partnerships at the primarily two-year institution. So far, 10 Miami Dade faculty members and 200 students have earned AWS certifications. And he says the faculty training and curriculum <u>provided by the AWS Academy</u> have been a "great differentiator," as has the 50 percent certification exam discount.

"More importantly, AWS is providing mentorship, résumé preparation training, AWS partners' engagement activities, real scenarios for capstone projects, and direct recruitment opportunities for MDC students," Delgado says, "which have led to job placement at AWS or AWS partners for many graduates of the cloud programs at MDC."

Noncollege Training: <u>Year Up</u> is an established and fast-growing nonprofit job training group, which has provided six months of tuition-free technical skills training to 36K lower-income young adults without college degrees, who move into paid internships for the second half of the program.

"Year Up really focuses on teaching skills that are relevant in a quick time frame," says <u>Emily Schaffer</u>, managing director of technology for the organization.

The group has partnered with AWS through its <u>re/Start program</u>, which is free and offered full-time and in person over 12 weeks. The training features scenario-based exercises in Linux, Python, networking, security, and databases. It's designed to prepare individuals with little or no technology experience for entry-level cloud computing careers.

AWS <u>recently tripled</u> the number of locations where re/Start is available—to 95 cities in 38 countries, ranging from India to five locations across Indiana. Kelly says AWS often works with nonprofit groups like Year Up to help launch its re/Start programs.

Year Up participants in San Francisco receive AWS training through re/Start in cohorts of 16 to 29 students. While the program is still relatively new, more than 70 percent of participants who graduated in July 2021 have gotten jobs, with average starting salaries of more than \$70K. Year Up plans to expand its re/Start locations, with D.C. as a possibility.

The group also collaborates with Amazon itself, having placed more than 200 of its participants with the AWS parent company since 2016. Amazon hired 150 of those interns for permanent roles.

Students who go through Year Up's program can earn college credits, including by being dually enrolled at the group's 15 or so <u>community college partners</u>. **But Schaffer** says Year Up is agnostic about whether students pursue college credits or just stick with tech certifications.

"It really depends on the goals of the student," she says. "They need the great-paying job first before they can continue with their higher education."

Job placement also is the goal of AWS with its training programs, says Kelly.

The Kicker: "We're keeping an eye on the prize, which is employment," he says. "We don't want to train just to train."

From Work Shift

In tech and other fields, big community colleges expand microcredential programs

Ten of the largest community colleges and systems in the U.S. are working to build and market and support—new short, work-aligned pathways with help from the Education Design Lab.

Science of Working Learners

A group of 180 academics, researchers, and other experts has been exploring how to build an "applied science of working learners" to better understand these students' experiences in education and work. The effort has been supported by the National Science Foundation and spearheaded by Stanford University's Graduate School of Education.

In a <u>new report on the effort</u>, the group calls for a <u>science of working learners</u> to be "defined and built as a civic project." It also makes eight other recommendations around engaging employers, investing in data infrastructure, and better connecting the learning sciences and the study of economic returns.

Work Shift went <u>in depth</u> with <u>Mitchell L. Stevens</u>, an organizational sociologist and Stanford professor, about the effort he's helping to organize. **Read the <u>Q&A here</u>**.

Credential Inflation

New research from Opportunity@Work sheds light on the growing share of well-paying jobs that are limited to workers who hold bachelor's degrees.

The nonprofit group has <u>made a splash</u> by pushing back on bachelor's degree requirements in hiring as it advocates for economic opportunities for 70M+ U.S. workers who have gained skills by attending community college, serving in the military, or learning on the job—people it calls Skilled Through Alternative Routes (STARs).

Since 2000, this group of workers have been displaced from 7.4M jobs that have historically offered them mobility, Opportunity@Work found in its <u>new analysis</u>, which

offers solutions by pointing to jobs it says can reopen pathways to the middle class for these workers.

"Companies have overlooked so much skilled talent and built pointless barriers, while opportunity gaps have widened to chasms," wrote <u>Byron Auguste</u>, the group's CEO and co-founder.

The report identified 292 "destination" jobs where STARs have translated skills they learned from a lower-wage job to one that pays well. A subset of 51 "gateway" jobs are good stepping-stones to higher-paying roles.

Yet, as the U.S. labor market added 17.2M of these jobs during the last two decades, STARs filled just 1.8M of them, with the rest going primarily to workers with more formal education. And STARs now hold 46 percent of these jobs, down from 54 percent in 2000.

About half of the estimated displacement occurred across 30 "key mobility jobs," including roles in nursing, IT and computer science, customer service, and business operations.

"STARs currently fill over 20 percent of the jobs in these occupations, suggesting their exclusion is not due to a lack of skills," the report concludes. "A change in hiring practices could reverse the downward trend."

For example, 26 percent of compliance officers are STARs. Common "origin jobs" for this role include claims adjusters and office support workers, who are even more likely to not hold a four-year degree. However, 87 percent of last year's job postings for compliance officers required a bachelor's.

Open Tabs

Graduate Earnings

The governing board of the State University System of Florida has rolled out a <u>college and career planning tool</u> with information on graduate employment, pay, and debt at the institution and system level. The state's legislature mandated the creation of the MyFloridaFuture tool, <u>reports the *Tampa Bay Times*</u>. It compares earning potential one, five, and 10 years after graduation, as well as for further education options. A newly updated dashboard of federal data shows how much community college graduates earn two years after college. The <u>tool</u> from the Community College Research Center at Columbia University's Teachers College <u>disaggregates earnings</u> by race and gender, showing results by award level. As many as three-quarters of associate degrees with the highest associated earnings were awarded to white students.

Free College

Fully 80 percent of Oregon's free community college scholarship funds are going to students who do not qualify for Pell Grants, with 40 percent of the <u>aid going</u> to students with household incomes that top \$100K, reported <u>Alex Baumhardt</u> for *News From The States*. The state previously <u>tweaked</u> the formula for the last-dollar Oregon Promise to focus it on lower-income students. But it <u>later dropped</u> a related income cap.

Enrollment Woes

The enrollment growth of Southern New Hampshire University, Western Governors University, and Liberty University is <u>creating a false impression</u> of the "overall health" of the private college sector, wrote <u>Phil Hill</u>, an ed-tech consultant and blogger. By removing enrollments at these three large, primarily online outliers, private nonprofit institutions would be down slightly from fall 2012 to 2020 rather than up by 5 percent.

Career Supports

High school teachers reported providing fewer students with college and career readiness supports during the first year of the pandemic, according to a new RAND Corporation <u>analysis</u> of survey data. Likewise, high-achieving students had the most access to help with their postsecondary transitions, the report found, while underachieving students and those who did not ask for supports had the least access.

Strada Education Network announced 15 institutional recipients of a \$10M grant to help improve career and life opportunities for underrepresented student groups. The <u>grants</u> will support <u>new projects</u> that focus on equitable outcomes through and beyond college completion. They are offered in partnership with the <u>Taskforce on</u> <u>Higher Education and Opportunity</u>. Strada later will provide \$6M more to expand the grants.

Microcredentials

Franklin University rolled out a <u>new online catalog</u> of industry-recognized certifications and microcredentials, which features offerings from noncollege providers like Coursera and PathStream, along with its own courses and certificates. Franklin plans to offer pathways and credits toward degrees for microcredentials in the new FranklinWorks Marketplace.

Sectoral Training

Job training programs that focuse on existing roles in high-demand sectors that pay well for workers without four-year degrees, including Year Up and Project Quest, have been shown to raise wages and employment, writes <u>Harry Holzer</u>, an economist and nonresident senior fellow at the Brookings Institution. Holzer <u>was responding</u> to a recent U.S. Department of Education <u>report</u> that cast doubt on the effectiveness of Year Up and Project Quest.

Thanks for reading. Catch you next week. —@paulfain

Learn more at https://www.opencampusmedia.org/2022/01/20/one-companys-big-push-on-cloud-training/