

Strengthening Community College Workforce Training

Investing in community college workforce training is a central part of the Biden administration's agenda for improving the lives of American families. Now more than ever, as the nation's economy enters a post-pandemic period of significant organizational and technological change, community colleges are well-situated to help millions of low-income Americans, particularly adults, get back into and advance in the labor market.

This brief highlights ways in which new federal funding can best support community college workforce training. We begin by describing the landscape of community college workforce education and by presenting evidence on the earnings and employment outcomes of students who earn workforce credentials. Next, we turn to current CCRC research on how innovative community colleges are responding to evolving skill demands from employers and to ongoing needs both for better integration of degree and non-degree programming and for more robust student support services. We conclude with suggestions on how a federal investment could encourage community colleges to expand and improve their workforce efforts by strengthening their capacity to deliver high-quality programs and by reducing inequities in access and outcomes by race and income.

Awarding more than a million credit-bearing occupational credentials each year, community colleges function as the nation's primary workforce education institution.

1. What does community college workforce education look like?

Community colleges serve as the primary workforce training institution in the United States. In addition to offering academic associate degree programs for those who want to transfer to a bachelor's program at a four-year institution, community colleges provide a broad range of education and training programs aimed at students—often adults—who seek direct entry into the labor market or an opportunity to improve their skills for a better job. These include programs for applied associate degrees; one-year-or-longer or shorter-duration occupational certificates; industry-recognized certifications that may or may not confer academic credit but are aimed at employment or job advancement, such as Cisco or Google IT certifications; customized training delivered for specific employers through not-for-credit workforce divisions; and additional noncredit professional development and occupational instruction offered through not-for-credit workforce divisions. In addition, some community colleges have begun to offer workforce-oriented bachelor's degrees in select fields such as business and nursing, particularly in areas that are not served by four-year institutions.¹

Nearly 7 million students, with a median age of 24, enroll each fall in credit courses at community colleges.² A majority of credit students are in occupational programs (leading to applied associate degrees and certificates in fields as diverse as allied health, business, computer science and information technology, construction trades, law enforcement and firefighting, and multi-media communication and graphic technologies). An additional 5 million students enroll in noncredit courses, according to the American Association of Community Colleges. Although data is limited on this group, it is fair to presume that the majority are older students, enrolled part-time, who seek workforce skills and advancement.³ In 2018-19, the nation's community colleges awarded 878,900 associate degrees, 619,711 certificates, and 20,700 bachelor's degrees.⁴ Almost three out of five associate degrees (57%), nearly all certificates (94%), and all bachelor's degrees earned at two-year colleges are in career-oriented fields in which direct employment is the student goal.⁵

As we discuss below, applied associate degrees generally provide greater labor market benefits than certificates. Yet there continues to be strong interest in certificates and noncredit workforce programs, especially among adult job seekers, who view them as an efficient, quick, low-cost option to learn new skills. A 2020 national survey taken in the midst of the pandemic found that workers who said they would change fields if they lost their jobs would prefer non-degree skills training to a college degree by 62% to 38%.⁶

2. Does workforce education pay off in the labor market?

Data from the U.S. Bureau of Labor Statistics consistently show that unemployment rates are lower and median weekly earnings are higher for adults with higher levels of educational attainment. In 2019—when the national economy was strong—workers age 25 and older with a bachelor's degree or higher had the lowest levels of unemployment and the highest median weekly earnings, followed by workers with an associate degree and then by workers with some college but no degree. Workers with no more than a high school diploma fared the worst.⁷ This pattern was amplified throughout the COVID-19 recession. For example, in December 2020, workers with a bachelor's degree or higher had an unemployment rate of 3.8%, compared to 6.3% for workers with some college or higher, and 7.8% for high school graduates with no college.⁸

A growing body of research finds that earnings gains of community college students vary by degree, credential type, and field of study. According to the federally funded Center for Analysis of Postsecondary Education and Employment (CAPSEE), in which CCRC was a lead partner, associate degrees provide a significant boost to earnings on average (compared to entering college but not completing an award)—a 26% increase (\$7,160) per year for women and an 18% increase (\$4,640) per year for men. Importantly, certificates boost earnings as well, though by less on average than associate degrees (\$2,960 for women and \$2,120 per year for men) and primarily because of longer-term certificates of one year or more.⁹

In general, community college students who complete occupational programs have higher earnings than students who complete traditional academic programs. For example, research by the Georgetown University Center on Education and the Workforce shows that workers with associate degrees in the health and business fields have earnings about twice as high as workers with associate degrees in liberal arts and general studies. The potential value of an academically oriented associate degree comes with successful transfer to a four-year college and completion of a bachelor's degree. There is wide variation in earnings across certificate

programs. For example, workers with certificates in engineering have median earnings equivalent to those of many bachelor's degree holders. Conversely, certificates in education and cosmetology—though widely offered and popular with some students—do not generally provide family-sustaining wages.¹⁰

3. How are colleges responding to changes in the workplace?

In late 2019 and early 2020—just before the pandemic struck—CCRC examined how a group of innovative community colleges were adapting their workforce education programs to the changing demands of the workplace in three high-wage, high-demand fields—health care, information technology, and advanced manufacturing—with a particular focus on responsiveness to increasing automation. In another recent study, CCRC investigated college and state policies designed to align short-term credentials with community college degree programs. The findings highlight what select colleges and states are doing to make their training programs and career pathways more responsive to the needs of employers and participants, especially those job seekers who are more at risk of not gaining access to or completing programs that lead to employment with family-supporting wages.

Adapting to evolving skill demand. Artificial intelligence, digitalization, and other technological changes are making their way through the economy and are affecting employer skill demands and their expectations for workforce training providers. The disruption caused by the pandemic is likely to accelerate these changes, eliminating some types of lower-skill jobs but more often augmenting the skills workers need to be productive in technology-rich environments.

In entry- and technician-level labor markets, employer demand for skills is being altered by the introduction of new technologies, expectations of regular interaction with customers and data, and changing boundaries of disciplines and occupational roles. Mastering specific new technologies or equipment is not the sole training need among this segment of workers. Rather, our research suggests that employers seek employees with strong foundational skills (basic math, reading, and writing), non-technical human-centered skills (focused around communication, collaboration, critical thinking, and customer service), and generalized data literacy skills (so they are comfortable using a variety of software or platforms to input, find, evaluate, communicate, and interpret data).

The community colleges we visited strive to provide every student with a combination of general and technical skill instruction, inviting local employer input on in-demand skills and how they can be integrated into curricula. At Monroe Community College in Rochester, New York, for example, a heating, cooling, and ventilation (HVAC) degree program added a “soft skills” course because graduates were being asked to engage in more customer service and to explain increasingly complex home and business HVAC systems while doing repairs or installation work. Similarly, the building maintenance associate degree program at Oakland, California’s Laney College added significant computer and data content to its curriculum so that graduates will be ready to work in increasingly complex downtown office building environments.

Meeting adult needs for flexibility and support. Adult learners are typically also workers and parents. They want to get quickly into the labor market—either in the same or a different field—and focus on providing for their families. Student-centered colleges are finding ways to be more accessible to students who have limited time and resources. They may offer night and weekend class times; 8-week (instead of 15-week) semesters; credit for prior learning, particularly for

veterans; and hybrid programs that combine online and in-person learning. The demand for shorter programs is clear, particularly in the aftermath of COVID-19. And many states have used federal CARES Act funding to encourage local colleges to create and expand short-term occupational programs, helping tens of thousands of adults learn new skills for rapid re-entry into employment. Some states have invested their own funds to promote quick re-training and re-employment on a large scale. Virginia's FastForward initiative, for example, has subsidized the enrollment of more than 24,000 adults in 6–12 week community college training programs for high-demand occupations identified by the state workforce board.¹¹

Flexibility is important but not sufficient. Adults trying to get back into the labor market frequently need a range of supports and services to help them find their way and persist in school. These include college and career advising, tutoring and academic support, and nonacademic support such as childcare, transportation, and food and housing assistance (nonacademic supports are especially relevant to those hardest hit by the pandemic). Some colleges bundle and sequence these services to create a cohesive experience for students as they progress through college.¹² These “wraparound” service models tend to be less readily available to workforce training participants than degree program students, but colleges are finding that providing such supports and making adult workforce training students feel a part of the college community can help promote persistence and completion. The importance of both flexibility and comprehensive supports is highlighted in a What Works Clearinghouse practice guide on career pathways interventions that have shown promising evidence of improved educational and labor market outcomes.¹³

Aligning shorter workforce programs with longer degree programs. Many community colleges offer noncredit programs and workforce training certificates through a stand-alone division that does not coordinate with associate degree programs. This is beginning to change, as college leaders realize that students need an increasingly rich combination of general and technical skills for work in the 21st century economy. Moreover, employers tend to use an earned degree as a signal for possessing general skills and being job ready. Institutions such as Wake Technical Community College in North Carolina are moving toward a “one college” model that breaks down walls between credit and noncredit divisions by organizing programs and offerings by content and career area rather than by whether or not they are offered for credit. The goal is to help all students advance toward credentials with labor market value in their chosen field, no matter where they start. At Indian River State College in Florida, alignment and integration have become institutional policy: No new course can be approved unless it counts as a course in a related degree program.

To enable students to keep their options open for further learning and employment, some institutions and states are beginning to build out “stackable credentials” or to embed certifications or certificates in degree programs. This idea has been around for some time: Learners can move from an initial short-term credential through a sequence of one or more additional credentials that can be accumulated over time, perhaps starting in a noncredit program and then moving on to more advanced certificate and degree programs in their field. For example, a student might earn industry certifications in technical support, cloud technology, and data analysis on their way to an associate or bachelor's degree in data management.

Studies suggest that few students nationally have earned stacked credentials¹⁴ and that short-term credentials alone generally fail to increase earnings sufficiently or equitably.¹⁵ The structure and implementation of such programs are key. Research from Ohio indicates that students will take advantage of stackable credentials to return for a second credential,

particularly in IT and health care. Ohio encouraged the development of stackable credential programs across all state postsecondary institutions—training centers, community colleges, and universities—and all played a role. Universities were key to helping students earn degrees.¹⁶

Partnering with high-wage, high-skill employers. Improved outcomes for workforce training depend in part on strong partnerships with high-quality employers and industry leaders. The best partnerships go beyond periodic meetings of industry advisory committees; they emphasize deep interaction around program design, curriculum content, access to work experiences, and feedback on student performance. Leaders of Malcolm X College in Chicago, for example, developed a close strategic partnership with a large nearby hospital system, which led to the identification of an emerging need for a new job, that of medical assistant. The college and the hospital system designed a new training program and collaboratively built out the curriculum so that qualified graduates would be job ready. In Rochester, New York, Monroe Community College has worked closely with the highly specialized local optics industry to rebuild a pipeline into the industry for technicians after the decline of former giants Kodak and Xerox. Innovative colleges are also looking for opportunities to expand apprenticeship programs in high-wage occupations, offering related instruction at the college and focusing on diversifying the demographic composition of new apprentices.

4. What challenges are community colleges facing?

The examples above highlight the readiness and capacity of many community colleges to deliver high-quality training that meets the needs of students and employers. Nonetheless, our research also revealed institutional and systemic challenges.

Using data systems to track the progress of noncredit students. There is no national standard on data collection for noncredit students. State and institutional data systems use different definitions for counting credit and noncredit programs, and they differ in their noncredit education metrics (e.g., hours of training, unduplicated enrollments, types of programs, outcomes). Until better data systems are available and used, noncredit students remain a “hidden” population. Colleges collect fees for serving them, but they generally do not have reliable data that they can use to capture academic and employment outcomes over time. This limits colleges’ ability to determine whether students are well served by these programs and to make improvements. Students who complete noncredit programs often have to start over if they want to enroll in a for-credit certificate or degree program or begin taking classes at another institution, in part because data systems are not integrated or aligned.

Securing high-value experiential learning opportunities. Some workplace-related skills that employers want to see in new hires are best learned on the job, in real customer-service or team-based situations. But the infrastructure to generate sufficient hands-on work-based learning placements for workforce program participants is generally understaffed and underfunded. In health care programs, required clinical placements often constrain program scale, since they are difficult to establish. Some colleges are beginning to hire work-based learning liaisons to work with employers, but progress is slow and was derailed by the pandemic. Development and implementation of computer-based simulations of real work situations may be a technological innovation to help address this challenge.

Assuring equity in access and success. Available data indicate that community college workforce training programs struggle with achieving equity in both access and outcomes.

In most community colleges, for example, access to selective nursing and allied health programs tends to favor White applicants who have often benefitted from stronger educational preparation, while Black and Latinx students are overrepresented in programs that train for lower-paying jobs. Better data collection and tracking would help clarify the dynamics surrounding program participation and help colleges focus on strategies to narrow gaps, as many are doing more routinely in programs that grant associate degrees. More targeted outreach can also help: Florida's Broward College created an initiative that delivers non-degree credential programs in neighborhood venues within the six local zip codes with the highest average unemployment and lowest education attainment levels. Nearly 2,500 primarily Black and Latinx adult residents have enrolled.

Collaborating within regions and states. If improvement in workforce training is to occur at large scale and across the nation's community college sector, institutions cannot go it alone. Too many students, particularly adults, enroll in courses at several different colleges (two- and four-year) only to find that many credits are forfeited when they transfer to a new institution and try to enroll in a new program. States and clusters of colleges in a region can help more students maximize credit for courses taken and earn credentials more quickly and cheaply by strengthening pathways, standardizing requirements and expectations across institutions in the state, and simplifying course and credit transfer. State-level policy changes can encourage collaboration to articulate different credential programs with each other and reduce cost and complexity obstacles in transferring from one program to another. In CCRC's recent research on short-term workforce credentials, we found that state-level leadership—essential, for example, in the Wisconsin Technical College System's decade-long strategy to embed short-term technical diplomas into degree programs—has made a difference in program alignment, scale-up and take-up, and nimbleness in the delivery of in-demand training.¹⁷

5. How can the federal government support improvements in community college workforce training?

While most funding for community college workforce training programs comes from state and local agencies and student fees, there are several ways the federal government can leverage its authority and resources to strengthen programs and benefit students:

- 1) **Competitive grants to community colleges** to help institutions conduct outreach and make program improvements to better serve unemployed, underemployed, and low-income adults most affected by the pandemic. A recent example is the Trade Adjustment Assistance Community College and Career Training (TAACCCT) program, created in 2011 to help community colleges serve dislocated workers. TAACCCT grantees enrolled close to 300,000 adults (average age: 31) within the first four years of the program.¹⁸ Priority for new grant funding should go to training in sectors that are needed for economic recovery and to help colleges expand high-return occupational programs that tend to cost more to offer, such as nursing and advanced manufacturing. Priority should also go to programs that “stack” toward degrees, recognizing the long-term economic benefits that accrue to individuals who earn an associate or bachelor's degree. Support for career advising and wraparound services—always important to low-income students—will be especially critical for adults whose lives were disrupted by the pandemic.
- 2) **Grants to state agencies or intermediaries such as Student Success Centers** to incentivize community colleges, employers, public workforce training systems, nonprofit

groups, and other entities to collaborate in the design and delivery of workforce training. Students often attend more than one institution, and yet structural or communication barriers prevent students from receiving full credit for courses and programs completed elsewhere. Improved articulation agreements and centralized record-keeping for student transcripts are some of the strategies states have implemented to facilitate transfer and help students advance more quickly. States and intermediaries may also provide leadership on addressing systemwide challenges: for example, how to expand the number and improve the quality of apprenticeships and other forms of experiential learning, and how to identify and close gaps in program access and student outcomes by race or income group. An advantage to supporting states and intermediaries is that they can offer targeted assistance to institutions that need to improve but do not win competitive grants.

- 3) Supporting improved data systems** to collect data on and assess the progress of workforce training participants as they advance through college and into the labor market. Currently, states and colleges are not required to report on students in noncredit programs to the federal Integrated Postsecondary Education Data System (IPEDS), and not surprisingly, this is the group for whom there is the least information. Federal guidance, combined with grants or other incentives to states and institutions to strengthen data systems, can shed light on this sector. Many states and institutions also lack capacity to link postsecondary education and employment data. Consequently, policymakers and program operators do not have complete or timely information on the types of jobs students get or what students are earning after they enroll in workforce training (credit or noncredit). Policymakers and program operators need this information to decide what courses to offer and where to make improvements; likewise, students need this information to choose a program of study and plan their career path. The State Longitudinal Data Systems program run by the Institute of Education Sciences has provided grants to help states link education and employment data,¹⁹ but there is need for further investment to capitalize on technological advancements in systems design and to use data for program evaluation and decision-making.

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