

EDUCATION AND EMPLOYMENT RESEARCH CENTER

Its Own Standard: Approaches to Quality in Community College Noncredit Workforce Education

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Introduction

Community colleges are a major source of non-degree credentials (NDCs) through their noncredit workforce education offerings. NDCs include certificates, certifications, licenses, badges, and micro-credentials (Credential Engine, 2019). Colleges award certificates and also prepare students to obtain certifications and licensure. Noncredit education has long been a part of community colleges across the nation, with enrollment levels almost matching credit enrollments (AACC, 2021; Jacoby, 2021). Credentials earned in noncredit programs are gaining increasing attention for their potential to provide swift access to career opportunities. Some have argued that noncredit programs may also expand the accessibility of higher education for students who have not attended college before and need shorter and more flexible postsecondary opportunities (Grubb, Badway, & Bell, 2003; Van Noy et al., 2008; D'Amico et al., 2019). Since the pandemic, increasing numbers of adults nationally report they prefer non-degree pathways that can be completed quickly to degree programs (Strada, 2020; Cengage, 2022). At the same time, a rising number of states have become interested in supporting NDCs. In this context it is imperative to better understand if these programs and credentials are a worthwhile investment of time and resources.

Identifying how to conceptualize and measure "quality" in noncredit education is essential to addressing these questions in policy and practice. With regard to credit education, accreditation is an established process recognized for ensuring quality that is institutionalized via its link to Title IV (federal financial aid) funding resources. However, community college noncredit education does not have a consistent set of definitions or processes to ensure quality across the country. Because noncredit education is not tied to the same traditional academic assessment processes as credit education, some have raised concerns about whether noncredit programs are adhering to equivalent quality standards. However, the fact that this traditional academic structure does not constrain noncredit programs is viewed by others as a strength that allows these programs to respond to labor market needs quickly and to adapt to students" needs for flexible scheduling and accessible programs (Voorhees & Milam, 2005; D'Amico et al., 2019; Erwin, 2020). Given its long-standing—albeit somewhat "hidden"—role, noncredit education may have definitions and processes related to quality that are particular to the goals and contexts in which it operates, such as state licensure requirements. Identifying and understanding them can help inform the current discussions on quality.

To inform discussions about quality, we draw from the Education and Employment Research Center's (EERC) conceptual model of NDC quality to guide an examination of how colleges approach quality in the development and design of their noncredit programs, and we build on that model based on college practice in noncredit education (Van Noy, McKay, & Michael, 2019). We analyze the perspectives of community college noncredit administrators and educators to examine the emergent practices related to quality in their noncredit programs. In this paper, we provide background on conceptualizations of quality as applied to noncredit programs; discuss our research methods; and present our findings across several potential elements of quality in noncredit education. We end with a set of recommendations for measuring quality in noncredit education and implications for policy and practice.

¹ For example, Get There FL, IN Next Level Jobs, NJ Pay It Forward, LA MJ Foster, VA FastForward

Conceptualizations of Quality

The EERC conceptual framework on NDC quality provides a broad lens for making sense of distinctions around quality and is a guiding framework for this research. The framework organizes quality elements into four categories: design, competencies, market processes, and outcomes. Design focuses on the content of the credentials, including the content's relevance, related instructional and assessment processes, stackability and portability, transparency, accessibility, and affordability. Competencies include the knowledge and skills the credential represents. Market processes reflect how credentials come to be known in the market. Outcomes reflect individual employment and educational outcomes and potential employer and societal outcomes. Several of these elements are highly fluid, such as relevance and market processes, and should therefore be revisited by colleges regularly. Figure 1 summarizes the conceptual model. Overall, NDCs are intended to represent the skills and competencies that noncredit program offerings convey and would lead to outcomes from programs as conveyed by the credential in the market.

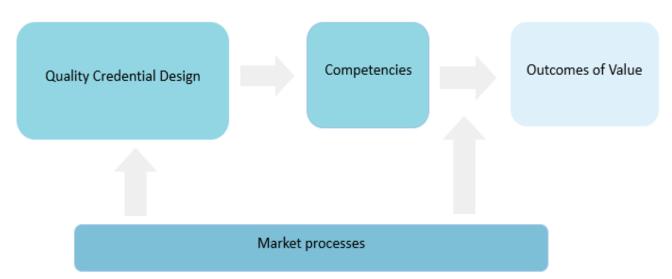


FIGURE 1: CONCEPTUAL MODEL OF NDC QUALITY

Source: Van Noy, McKay, & Michael (2019)

Ensuring the quality of noncredit offerings is essential to promoting equity because of their disproportionate appeal to economically disadvantaged students. Thus, intertwined in these definitions of quality are principles of equity. Quality credential design includes equitable instructional and assessment processes for all students while also safeguarding affordability and accessibility. Ensuring that content is relevant is essential to promoting valuable employment outcomes and opportunities for ongoing education pathways. Evaluating the outcomes associated with a given credential to determine both its quality and whether it promotes equity can be challenging because poor outcomes can reflect poor labor market conditions more than the quality of the credential itself. Understanding how institutions approach the issues of quality and equity in tandem with labor market–related issues is essential to understanding how noncredit education can serve as a bridge or barrier to equity. The quality framework was designed to pertain to NDCs, but it can also be applied to the programs that yield them. For example, certificates are typically awarded to document that an individual has completed a particular course, set of courses, or program of study. In this case, all elements of the NDC quality framework apply to the program because the certificate is intended to fully represent the skills and competencies the individual gained from the noncredit program. Though they are newer credentials, badges are similar to certificates in how they generally align with college programs. In the case of certification and licensure, colleges deliver noncredit programs to prepare students to take examinations to attain these NDCs, but they do not award them. In that sense, the programs may vary in how closely they are aligned with the NDC (e.g., their content may be broader). Colleges also have instructional and assessment processes that are unique to their program and not to the NDC.

In addition to the EERC framework, other concurrent efforts to understand and promote quality in NDCs inform this work. Definitions of NDC quality developed by the National Skills Coalition (NSC) and the Education Strategy Group (ESG) have been operationalized within states and provide insights for this work (Duke-Benfield, Wilson, Kaleba, & Levantoff, 2019; Education Strategy Group, 2019). NSC's definition includes documented job opportunities, competencies, employment outcomes, and stackability. ESG's definition includes demand for the occupation, use in hiring, and educational articulation. These two definitions include measures of both the design and outcomes of NDCs that are meant to inform state policy.

A few years later, New America issued a definition of quality for noncredit programs based on work with community colleges around the country (Jyotishi & Palmer, 2022). New America identified several quality elements in these programs, including labor market outcomes (e.g., the attainment of good jobs with benefits), pathways to advanced credentials and degrees, affordability, and completion. New America also called upon colleges to have equity goals for their programs to advance diversity in segregated occupations. Finally, in 2021, the Postsecondary Value Commission, convened by the Bill and Melinda Gates Foundation and the Institute for Higher Education Policy, emphasized that economic measures are key to determining the value and quality of higher education programs (Postsecondary Value Commission, 2021). These efforts converge on the importance of employment and economic outcomes to define quality, particularly to inform public policy.

However, to date neither institutions nor states collect the full range of data needed to assess quality along these different measures; we need to know much more about noncredit workforce education in general and employment outcomes specifically (Erwin, 2020). More data are needed about the characteristics of colleges' noncredit workforce program offerings to provide insight into what quality design looks like for noncredit education. This project examined how colleges and their programs define and promote quality in their noncredit offerings across various potential elements of quality design.

Methods

Data for this report come from interviews with college administrators and faculty at four colleges. Data from exploratory interviews conducted with administrators from community colleges around the country in an earlier phase of this project were used in selection of the colleges (Van Noy & Hughes, 2022). We considered colleges situated within varied contexts to illustrate different approaches to noncredit education and sought colleges with established noncredit programs interested in engaging in research on their programs to inform questions about quality in noncredit programs. We included colleges located in different regions of the country with variation in their state policy context. All were located in or close to large metropolitan areas.²

We worked with noncredit education leaders at each college to select two programs for in-depth focus. We asked them to recommend programs they viewed as exemplars of quality in noncredit programming that were established (having operated for several years), had substantial enrollments (approximately 50 or more per year), and served low-income adults and/or prepared students for entry-level occupations. We sought variety among the programs in terms of occupations and industries, and a range of NDC types, including college-issued certificates, industry or government-issued certifications, and licenses. See Table 1 for a summary of noncredit program offerings included in the research.

College/ Program	NDC Type	NDC Name
Harper College, IL (Harper)		
Real Estate	License	Illinois Real Estate Broker
Solar Photovoltaic Associate	Certification;	North American Board of Certified Energy Practitioners
Certification Prep; Solar		(NABCEP) Associate; NABCEP Solar Business and Technical
Business and Technical Sales	Digital badges	Sales (the course provides approved training hours toward this
		certification)
LaGuardia Community College, I	NY (LaGuardia)	
Community Health Worker	Certificate	Community Health Worker
Medical Billing	Certificate	Medical Billing Specialist
Mt. San Antonio College, CA (Mt	. SAC)	
Electronics	Certificate	Electronic Systems Technology Skills
Emergency Medical Technician	Certification;	National Registry EMT; State EMT
	License	
Northern Virginia Community Co	ollege, VA (NOVA	4)
Medical Assistant	Certification	Certified Clinical Medical Assistant (CCMA)
CompTIA® Network+	Certification	CompTIA® Network+

TABLE 1: SELECTED PROGRAMS AND CREDENTIALS BY COLLEGE

² Further research should examine the noncredit programs offered in rural areas.

This research focused on understanding the potential design elements of noncredit programs that may be associated with quality. We gathered information on quality elements based in community college practices to refine our conceptual framework and inform the field. While employment outcomes are an essential quality measure, colleges have typically lacked systematic data on noncredit students and their employment outcomes. Recently, however, some colleges are beginning to build systems to better track noncredit students and their employment outcomes, so future research should look for and examine any relationships between those data and noncredit program design elements.

Within each college, we conducted interviews with people in a range of positions. We spoke with college leaders in noncredit who could speak to the colleges' overall approach to noncredit education, including funding, college leadership, administrative structure, and student support. We interviewed program managers, advisors, and instructors for each program. In a final round of interviews with each college, we conducted second interviews with noncredit leaders to confirm findings and answer any remaining questions. Overall, we conducted 30 interviews across all four colleges from February 2022 to January 2023.

Interviews covered various topics focused on the context for noncredit at each college and the specifics of each noncredit program. Topics related to context included funding mechanisms for noncredit at the college, state oversight (where relevant), and the organizational structure for noncredit programs within the college. Topics related to the noncredit programs were based on the EERC conceptual model for NDC quality and supplemented by additional topics from the exploratory interviews conducted for the first phase of this research. The topics included labor market alignment, pathways to education, instructional approaches, assessment processes, cost and schedules, outreach and advising, and data availability and outcomes.

Interviews ranged from 30 to 60 minutes and were conducted via Zoom. Interviews were recorded and transcribed using Otter AI and were checked for accuracy. In addition, detailed notes were taken during the interviews. Summaries that examined key elements of quality for each program were compiled based on the transcripts and interview notes and then organized around the broad categories of credential design described in the EERC conceptual model of quality. In addition, we compiled summaries of each college's context with regard to funding, state oversight, and program organization. These summaries provided the basis for our analysis of each element of quality across programs to understand commonalities and differences in their approaches to quality. Our analysis was aimed at understanding what colleges were doing to address each quality element and to determine whether these elements needed revision or if others were emergent. The findings—first on college context, then on program and credential design—are reported in the sections below.

Contextual Influences

Noncredit workforce education includes an extremely varied set of program offerings driven by their funding, organizational context, and credential type. Each of these contextual factors potentially shapes the quality of noncredit program offerings. The state and college funding climate can significantly impact the types of noncredit programs offered and how they are provided. How colleges position their noncredit education within their organizations also influences how their programs operate and serve students. Additionally, the kinds of program offerings and the types of credentials associated with the programs will affect how quality is measured; programs that award certificates versus those that prepare students for certification or licenses may have different considerations. In this section, we provide background on the funding and organizational context for each of the four colleges in this study.

Funding

While credit programs at community colleges can rely on state funding and tuition for support, noncredit workforce programs can charge tuition but may or may not receive state funding. Even when it is available, state funding is often targeted in ways that limit what it supports. Concerning federal funding, there was little mention among our interviewees of funding through the Workforce Innovation and Opportunity Act (WIOA) or of any significant Perkins funding, which aligns with what other researchers have found regarding both the low use of WIOA funds to access community college training programs and the relative lack of investment of Perkins funds at the postsecondary level in most states (Jyotishi & Palmer, 2022).

College administrators described a wide variety of funding sources for their noncredit programs that

shaped their goals. These included state and city grants, allotments from higher education system offices, grants from foundations, and philanthropic donations to support student scholarships. These sources may reflect different goals for noncredit and may be inconsistent, require renewal, or require fast and agile responses to the opportunities they present.

Of the four colleges we studied, three are in states that provide some state funding, but the three differ in their funding conditions. In Illinois, courses that provide instruction in vocational skills and lead toward a vocational skills or industry-recognized credential are categorized as "nontransferable credit" courses. Headcount reimbursement is provided but varies by subject. Support for new program development tends to come from grants, as was the case with the programs in solar technologies we studied; for those, Harper benefited from state grants for education and training in renewable energy and energy-efficient technology. The grants supported the Illinois Green Economy Network, a collaborative of multiple community colleges in the state. Harper's grant funds were used for program start up, purchasing of curricula, and a networking and promotional event.

California's Career Development and College Preparation program provides state apportionment for four categories of noncredit instruction: English as a second language (ESL), basic skills, short-term vocational training, and workforce preparation. Programs must consist of two or more courses that lead to a noncredit certificate of completion or competency that are issued by the college and approved by the California Community Colleges Chancellor's Office. Mt. SAC has programs that blend the categories, such as vocational

ESL designed for general career preparation and ESL courses for specific occupations (e.g., health careers). The two programs we studied, electronics and emergency medical technician, are classified as short-term vocational. California community colleges are prohibited from charging noncredit students fees, so such students have very limited access to any fee-based college services, such as health centers.

State funding for noncredit workforce programming in Virginia is meant to strongly incentivize programs that yield industry-recognized credentials leading to immediate employment. FastForward, a performance-based funding initiative, was implemented in 2016 throughout the Virginia Community College system. Eligible training programs align with the high-demand fields set by the Virginia Board for Workforce Development, and which ones are funded differ by college and region. The state reimburses the college for one-third of the tuition when the student completes the course and another third when the student passes the certification examination. Students pay one-third upon registration and owe the total amount if they do not complete it. The programs we studied at NOVA—Net+, which led to a CompTIA Network+ certification, and medical assistant, which led to the Clinical Medical Assistant certification—were both FastForward-funded programs.

New York State does not provide formula funding for noncredit workforce courses or programs as a whole. The state provides funding to community colleges for non-degree programs that include remedial academics, so noncredit workforce programs with basic skills components, such as essential math content in a carpentry program, can receive some state reimbursement. Further, in the City University of New York system, of which LaGuardia is a part, Adult and Continuing Education divisions are expected to be self-sufficient and not a financial liability for the college. Thus, of the four colleges we studied, LaGuardia administrators listed the most extensive and diverse list of funding sources, including the ones described previously as well as state and city allocations that may require the college to quickly implement a program that may or may not be sustained over time. Both of the programs we studied at LaGuardia—medical billing and community health worker—were funded by grants, the former from the New York City Department of Small Business Services and the latter from the Mother Cabrini Foundation.

Funding sources and stipulations contribute to and sometimes determine the programs being

offered. A clear example of funding-driven programming was observed at NOVA, where the introduction of FastForward led to significant changes in the mix of noncredit program offerings. FastForward led to a stronger focus in the noncredit division on workforce training, a pruning of community-oriented offerings, and attention and dedication to offering programs that lead to industry-recognized credentials. In California, state policy delineates the programs that may receive funding. Grants also drive programmatic decisions, such as the Illinois state grants for programs in green energies and the New York City grants for programs in medical fields.

College Organization

Each of the colleges in this study had somewhat different organizational structures. This variation is typical, as we noted in a previous report (Van Noy & Hughes, 2022). Colleges differ dramatically in terms of where noncredit is situated organizationally. In some cases, its location and prominence have changed recently.

Harper divided and reorganized its noncredit offerings in 2019. Workforce programs and courses more than 14 contact hours in length were renamed Continuing Professional Education (CPE) courses and moved to the Career Technical Programs (CTP) division, which previously housed only for-credit programs. Very short-term workforce and skills courses, as well as enrichment courses, remained in the Community Education division. CPE courses are now categorized under healthcare, business, and technology. "We want to build pathways from noncredit to credit," an administrator said, so they are working to align programs developed under CPE with credited CTP programs as well as academic departments. In addition, noncredit is situated to serve "like an incubator" for credited programs; for example, in recent years, cybersecurity and cannabis programs were first offered as noncredit but were designed to transition to for-credit programs. In some CPE courses and programs, students who earn industry certification may receive credits if they move to for-credit programs.

At LaGuardia, the Division of Adult and Continuing Education includes ESL, workforce training, small business services, and pre-college and high school equivalency preparation courses. It also includes the Office of Career Services, which serves credit and noncredit students, and the Office of Credit for Prior Learning. Workforce training programs include those in healthcare, technology, skilled trades, and manufacturing. Such programs tend to last three to six months, and many, but not all, lead to industry certifications. Similar to Harper, LaGuardia administrators said that many noncredit workforce programs articulate with credit programs. Within the division, there are also bridge programs that combine English language classes with vocational training.

Noncredit workforce programs at Mt. SAC are found in the School of Continuing Education. Previously, noncredit operated within the Instruction Division; at that time, it prioritized adult basic education and ESL rather than expanding noncredit vocational programs. But in recent years, prodded by the college's president and a stronger state emphasis on noncredit education for short-term training, a shift was made to develop more vocational courses and vocational ESL courses. Employer needs and state grants guide program development; for example, the governor's budget proposal includes \$130 million to support healthcare-focused pathways for English language learners. As interest and funding levels have risen, the status of noncredit has become more elevated within the college; the number of full-time faculty has increased, and the division's leader is now a vice president.

At NOVA, noncredit workforce education falls under Continuing Education, a self-funded college division. Significant changes have been under way for several years. Community-oriented leisure courses were diverting critical resources from career-focused programs, so rather than separating those courses organizationally from workforce preparation, as Harper did, NOVA simply eliminated most of them. Workforce programs are now categorized as information technology (IT), business, healthcare, trades and transportation, and English as a Second language, and management of the college's workforce programming is centralized. Previously, workforce programming had been campus-specific, with each campus having its own leadership and oversight; under the new centralized management, there is, for example, one program manager overseeing the healthcare programs across all the campuses. In addition, previously decentralized career services offices are now consolidated into a centralized Business Engagement and Career Services Office housed in the Strategy, Research, and Workforce Innovation Division that serves both credit and noncredit students.

Design Elements

The design of noncredit offerings – that is, how they are structured and delivered – is foundational to quality. If noncredit programs are not designed in a quality manner, they have little chance of leading to valuable outcomes for students. In this section, we examine several elements of quality design. We begin by describing in more depth the types of programs included in this research. We then discuss several key elements of quality design and how the programs approached each one.

Labor Market Relevance

Since noncredit workforce programs are intended to provide skills and credentials that propel adults to employment, an initial and essential marker of quality is that programs are selected and designed with relevance to the labor market. This includes making sure that the programs have enough demand in the labor market and successfully convey the appropriate skills for that market (Cleary, Kerrigan, & Van Noy, 2017). In accordance with best practices nationally, all four colleges in our study access labor market data from Lightcast (formerly Emsi Burning Glass) or from state sources and also rely on employer guidance to determine which programs to offer.

Administrators at Harper regularly consult with industry subject matter experts and conduct focus groups with industry representatives; they also analyze occupational data looking for factors such as family-sustaining wages. NOVA must submit labor market data to the state to justify any new FastForward programs the college wishes to be approved and looks for documented demand in the data for particular skills when deciding on a program to offer. Partnerships with employers in the community were also strong drivers of programming decisions, such as for the two LaGuardia programs that were shaped and provided to meet immediate labor market needs in the local healthcare industry. In fact, the grants that funded those programs prioritized close relationships with local employers. In the cases of the established real estate program at Harper and the EMT program at Mt. SAC, high job placement rates of completers consistently warranted their continuation.

Several additional approaches to promoting labor market relevance are being followed by the eight noncredit programs in this study. Some of these approaches are based on the requirements of the occupations associated with the programs, whereas others are grounded in the college's institutional approach. The approaches can range from national to state to highly local—with each approach having a distinct set of potential tradeoffs. Finding a balance between these approaches raises the question of portability in the labor market.

The sources of program curricula vary widely, but none lack industry support. Program curricula can be viewed as a continuum, from programs designed by college instructors with some industry input (e.g., electronics at Mt. SAC), to programs co-designed by instructors in partnership with industry (e.g., medical billing at LaGuardia), to programs designed entirely outside the institution, such as those that rely on off-the-shelf, industry-developed curricula (e.g., solar at Harper) and state-dictated content (e.g., real estate at Harper). College administrators noted the industry orientation of curriculum as a marker of quality; a Harper administrator said that using a curriculum from industry adds credibility to the program.

Programs with certifications seek to balance national standards with local industry engagement.

Where colleges prepare students for certification, they do so while also engaging with local employers – most commonly via instructors' informal relationships with them. At NOVA, while the instructors for the medical assistant program base their class on materials from the National Healthcare Association that will prepare students for the national certification test, they also maintain relationships with physician colleagues who provide input on important focal points in the curriculum. Instructors also invite industry representatives to their classes to discuss career paths, including those in hospitals and smaller medical practices. Even in the case of Mt. SAC's EMT program, which has stringent certification and licensure requirements, connections with industry are important. Students complete externships with ambulance companies to gain the skills and experience needed to practice in the field while also gaining clinical hours. The college's partnerships with ambulance companies also help students become employed.

Certificate programs are often developed in close collaboration with employers to serve local and

regional needs. The LaGuardia noncredit programs we studied embody the approach of locally embedded and developed programs. The college worked closely with local employers to develop programs that would meet their specific needs rather than programs focused solely on national standards or curricula. Weill Cornell Medical Center was deeply involved with the initial curriculum development for LaGuardia's medical billing program, for example, and continues to provide support by assisting with screening applicants and staging mock interviews when students are close to completion. Many of the program graduates are hired by Weill Cornell as well as by Mt. Sinai Hospital and other large healthcare providers in New York City; these employers provide valuable feedback on those hires and guidance for future program improvement.

Similarly, LaGuardia developed its community health worker program with employers via an iterative process with a goal of preparing students to work in their own communities. This field, in particular, includes various roles that the program prepares people to enter, such as outreach and engagement around preventative healthcare and health coaching. The college sought to develop a program that would be relevant across different but related job titles in the field. The college also saw that the need for contact tracing and vaccine outreach during the COVID pandemic increased demand for a community health worker (CHW) program.

The electronics program at Mt. SAC is also based very closely on local employers' needs. The threecourse program covers basic technician knowledge, including technical skills important for the field (e.g., troubleshooting, using meters, and security wiring), as well as employability skills (e.g., dependability, communication, and responsibility). The program is tailored to prepare students for the needs of a range of employers, from security companies like ADT to cable companies like DISH, Direct TV, and Spectrum. To infuse industry content into the classes, the instructor invites speakers from local companies to talk about career opportunities. In this way they seek to situate the program as a pipeline to industry.

Programs that lead to licensures are typically highly regulated, a factor that determines many of their program design elements. Where programs are intended to result in licensure, colleges may not have much leeway in design. This is because the content of those programs may be determined by the state. For example, Harper's real estate program is strictly regulated by the state of Illinois; the state has criteria for who may teach the program, the topics that must be taught, and the textbook to be used. Students in the program take two courses and an examination, each of which they must pass before they may take the state licensing examination. Instructors must certify that program graduates attended at least 90 percent of the required classes.

With regard to national credentials, programs seek to balance curricular and assessment content with strategies that prepare students for practice. "Teaching to the test" was a common feature of programs leading to certification exams; such programs included test-taking skills, practice tests, and exam preparation in the course. We heard from all instructors of courses leading to certification exams that there is a need to prepare learners with content and test-taking skills. An IT instructor with NOVA explained:

I will sit and take the [certification] exam myself and look at how the exam is structured, so I know exactly how to teach my students. I know how to answer the questions. Then I'll take the book that is recommended by CompTIA, and I'll go through the book with the students. And I'll go over the tools. So, there are critical tools that you need to understand about all the certification exams.

Thus, teaching to the test is an essential strategy for preparing learners to pass the certification exam used by the instructors for CMA, EMT, Network+, real estate, and solar programs in conjunction with content-related skill development. This strategy is especially valuable because passing certification exams is a visible success metric for programs and colleges. For example, the NOVA programs we studied aim for a pass rate of 90 percent or more and will pay for a student's second attempt.

Still, importantly, these programs include applied skill-building and knowledge demonstrations (e.g., case studies, presentations, projects, and simulations) alongside their content related to test preparation. For instance, at NOVA, the CMA program's content is based on the national certification requirements, providing clinical knowledge and skills to prepare students for employment anywhere in the country. In NOVA's Network+ program, the instructors create assignments beyond the certification exam to develop critical thinking, such as small group projects that simulate work-world challenges. These assignments reflect creativity on the instructor's part; one instructor described developing a hack-a-thon as a summative assessment to provide the students with significant work experience to augment their certification. Similarly, in Harper's real estate program, the instructor seeks to prepare students for the test and incorporates multiple-choice practice questions in the class. However, students go beyond test-taking prep in an interactive portion of the class where they are presented with case studies in real estate and discuss how they would handle each situation. They also participate in role-playing exercises. This part of the program exposes learners to more applied field knowledge. Finally, a Mt. SAC dean emphasized the importance of imparting soft skills in their programs, which students put into practice in interactions with emergency personnel.

Stackability/Articulation to Credit

Ensuring that noncredit programs lead to further education pathways is essential for promoting equity and social mobility via these programs (D'Amico, 2020). Noncredit programs can be stackable in that multiple noncredit programs can fit together to add to greater occupational opportunity. Further, noncredit programs can articulate into credit programs to create pathways to further education via credit-bearing degree programs. However, these pathways are highly bound to institutional context and have been found to be difficult to implement and promote to scale (Education Strategy Group, 2019).

Articulating noncredit programs into credit is uncommon both in policy and practice, and its

likelihood varies by field of study. Few of the programs we studied articulate to credit programs, and the articulation strategies that we were able to observe were typically not fully developed. Neither of Harper's noncredit programs articulates with credit. Students in credit programs, like accounting and paralegal, sometimes take the real estate program, but it is not a requirement and they do not get credit toward their degrees. Likewise, noncredit programs at Mt. SAC do not articulate to credit programs. There is no formal articulation between the noncredit electronics program and the for-credit electronics program, for example, although there are faculty in common that provide some connection across the programs. In the same way, Mt. SAC's EMT program does not formally articulate into any credit programs despite it being a prerequisite for the paramedic and fire programs. It is not uncommon, however, for students from credit-bearing programs to enroll in these noncredit programs to help with their career pathway.

Collegewide policies and practices may influence program articulation. At LaGuardia, prior efforts to build capacity around prior learning credit (CPL) created an institutional culture amenable to CPL (Price, Childress, Sedlak & Roach, 2017). Students in the college's noncredit medical billing program can articulate up to nine credits toward an associate degree in business technologies. In addition, some students who complete medical billing also complete a noncredit program in medical coding that can lead them to promotions and more career opportunities. Similarly, LaGuardia's community health worker program allows for the articulation of up to six credits toward a degree in human services. In both of these articulation scenarios, the students must apply for the credit transfer—it is not automatic, and, as a result, the option is underutilized. So even where fully developed articulation policies exist, few students may be aware of or take advantage of these possible pathways for further education.

Some NOVA programs also have options for CPL. This is more likely in IT than in other fields because NOVA's noncredit IT programs have had a strong, long-standing relationship with its for-credit IT programs, and industry certifications can help facilitate articulation. On the other hand, the medical assisting program does not have an articulation pathway and does not offer CPL. Developing these opportunities in the healthcare field is particularly challenging because such programs are regulated by the state Board of Nursing and accrediting bodies. It is understandably difficult to find a place to integrate credit into these pre-existing, relatively inflexible program pathways.

"Mirrored" or "co-listed" courses may offer a connection from noncredit to credit. Two colleges, Harper and Mt. SAC, offer "mirrored" or "co-listed" courses in which credit and noncredit students learn side by side. At Harper, a variety of credit-bearing, career-oriented courses have seats available to noncredit students. From the perspective of a Harper administrator, many adults returning to college do not care about any credit or grade they might receive from a course; instead, they are looking for specific training, such as how to program in Python or how to use QuickBooks. Enrolling to take the course without credit can also be less expensive, or even free, such as at Mt. SAC. Still, being in a classroom with students enrolled in credit-bearing certificate or degree programs may encourage noncredit students to explore longer-term college pathways. Some Mt. SAC noncreditmirrored courses have articulation agreements that allow students to earn college units that may encourage them to make a permanent transition from noncredit to credit. At Harper, noncredit students who complete these kinds of courses can convert them to credit. At the time of our study, the college was working to extend this opportunity to more courses.

Instructional Processes

How noncredit programs at community colleges are delivered in terms of instruction is an essential element to understanding their quality. The instructional approach includes how content is delivered and the qualifications and training of the instructors who deliver the content.

Program staff and instructors reported active, collaborative, and skills-focused instruction. The

noncredit instructors we interviewed described their teaching approach as a combination of theory and practice emphasizing "hands-on learning," by which they mean practice-based learning of professional and technical skills. While the balance of theory and practice varied, most course instructors expressed that both study and lab practice are necessary for developing essential skills. For instance, the healthcare (e.g., EMT and CMA) and electronics programs provide intensive and practice-based learning of essential skills, such as observing a patient's alertness, taking blood pressure, and routing cables through ducts. Other courses, such as medical billing and Net+, provide extensive software-based skills practice in computer labs where students learn hospital billing and IT network skills and practice real work-world scenarios. At Harper, the solar courses consisted of lecture and scenario practice, but the college was newly investing in small educational solar panel units to add more practice-based learning.

Instructor qualifications emphasize work experience and the NDC associated with the program.

When it comes to hiring instructors, past or present work experience is more important to administrators than formal postsecondary education. All the noncredit instructors we interviewed who taught in programs associated with industry certifications and licensure hold the credentials they teach and have at least four or more years of industry experience. Many have more than ten years of industry experience. Some highly regulated health programs (e.g., EMT and CMA), however, require instructors to hold bachelor's degrees or even, as we found at NOVA, prefer instructors with master's degrees and at least 18 credit hours in the field. At NOVA, this is a flexible guideline with an allowance for instructors with extensive work experience to circumvent the degree requirement. Overall, noncredit hiring guidelines are more flexible because they are not subject to requirements set by accreditation.

It is common for noncredit instructors to teach part-time while working in the industry. Several of the noncredit instructors we interviewed work in their field while teaching part-time. For instance, all of the instructors in the CHW and MB programs at LaGuardia and the solar instructor at Harper work elsewhere while teaching. At NOVA, instructors in the Net+ and CMA programs have varied work patterns. Some work full-time at the college in various roles (e.g., staff, leadership, and IT), while others teach part-time while working in the industry. For some, however, teaching was their full-time focus; in our study, this group included the real estate instructor at Harper and both the electronics and EMT instructors at Mt. SAC. Because Illinois law allows for certified real estate instructors to either teach or work as brokers, but not both, the instructor at Harper only teaches. Likewise, at Mt. SAC, instructors in the electronics and EMT programs also teach full-time, but not because of legal requirements. Instead, both hold tenured teaching positions at the college.

Noncredit instructors reported receiving little to no teaching training or feedback, and professional

development occurs outside the noncredit division. With a few exceptions, nearly all instructors we interviewed reported little or no formal training in instruction and said they learned independently by teaching on the job. Only a few, such as the real estate and EMT instructors, completed a teaching training course. One college, Mt. SAC, provides professional development to all its noncredit instructors. Instructors at other colleges described instructional supports such as receiving teaching materials and tips from colleagues. For example, in the CMA program, two staff members provide administrative and instructional support, and they and the lead instructor wrote a teaching reference manual. A few instructors reported receiving formal education and professional development provided by their industry employers that focused on developing additional content knowledge but not on teaching skills. For example, a CompTIA instructor earned a master's degree in IT paid for by a former employer. Any feedback instructors receive comes primarily from student surveys at the end of each class and peer classroom visitations.

Assessment Processes

How programs assess learning is another important element of program quality. Among the programs we investigated, assessment varies depending on the type of program and the associated NDC (if any). All programs use a combination of frequent informal (e.g., quizzes and labs) and formal assessments (e.g., exams, presentations, and projects). Programs informally assess skills development through case studies, work-world scenarios, simulations, and labs. Programs leading to a certification exam also frequently give practice exams to assess student readiness.

Assessments focus on essential knowledge and skills, with preparation for credential exams embedded into the programs. Learner assessment varies by the type of curriculum and whether or not the course is associated with a certification exam. Courses preparing learners to take a certification exam embedded frequent practice exams into their curricula, as in the cases of the real estate (Harper) and Net+ (NOVA) programs; the practice exams are provided in the state- and employer-developed curricula.

By comparison, healthcare programs use assessments keyed to curricula that either were created by accredited certification bodies such as the National Healthcareer Association (CMA at NOVA) or were developed by the college and then accredited by another authority (EMT at Mt. SAC is accredited by the Los Angeles County Department of Health Services). In both scenarios, the curricula and their included assessments were

standardized and accredited, with assessments drawn from a regulated list of specific topics and skills. Healthcare programs also have intensive lab components and include formal lab skill assessments in addition to exams.

Finally, three programs leading to college-issued certificates – electronics (Mt. SAC), community health workers (LaGuardia), and medical billing (LaGuardia) – use curricula and related assessments developed by instructors in concert with employer partners. Notably, none of these programs are designed to prepare learners to take a certification exam. Instead, they prepare learners for a specific job in the region. Instructors for these courses have more liberty over the materials they deliver, and assessments likewise have more variation.

Transparency

Transparency refers to the clarity of information about programs being offered and is critical in generally communicating the many ways that students can continue their education (D'Amico, 2020). This can be examined in multiple ways including the degree to which program information is available and how that information is conveyed to students, including outreach and advising strategies. Transparency can translate into the extent to which prospective students understand the programs they are about to enter – the expectations, necessary commitment, and projected value of the program to their lives.

Outreach about noncredit programs is focused on careers. The outreach that the colleges provide to students about noncredit programs can help them make informed decisions. When the FastForward program began in Virginia, the state implemented a communications initiative that includes general information about the program. On the state's FastForward website, prospective students enter their zip code and are referred to their local college for more specific information. NOVA staff said that promoting their guaranteed interview program for FastForward students on the college's website and showing the companies that participate in it has been an effective recruitment strategy. The Mt. SAC website lists the types of jobs that their noncredit programs prepare students for. Harper uses social media and mailing lists to promote new programs and emphasize what students can earn upon completing its noncredit programs.

Data availability on students' completion and employment outcomes is generally limited. Harper reports noncredit enrollments to the Illinois Community College Board (ICCB), but completions are not reported because, for the most part, noncredit programs lead to industry certifications rather than college certificates. Mt. SAC tracks whether its students achieve industry-recognized credentials and keeps data on attempts and pass rates. LaGuardia tracks completions for grant-funded programs but not necessarily for tuition-funded ones, and its administrators cannot verify the employment outcomes of students because they have no connection to state employment data. At NOVA, administrators track the completion of their FastForward courses and confirm exam results; there is a dedicated staff person to handle the latter task because reporting that information is critical to receiving the state funding needed to support the program. Employment outcomes for all the programs we studied are based on self-report. Thus, information on student outcomes is inconsistent across colleges – it varies depending on college data systems as well as by any data collection requirements made by states and funders. This fragmentation makes it challenging for learners and policymakers alike to understand whether these programs lead to outcomes of value.

Accessibility

Accessibility can include many elements. With the programs in our study, it refers to the ease with which students can enroll, progress in, and complete the program. Accessibility may be influenced by entrance requirements and program characteristics such as length and format. These factors combined can make programs either easier or more difficult for students to enroll and stay enrolled.

Nearly all programs have some entrance requirements, but some are minimal. Program entrance requirements vary by college and certification when applicable. Only one program, electronics at Mt. SAC, has no entrance requirements. Both of Harper's programs have minimal entrance requirements (e.g., being 18 years or older and having a high school diploma or GED). Other programs extend beyond these minimal requirements; for example, the EMT program at Mt. SAC requires drug tests and full immunization, per accreditation rules. NOVA's CMA program requires prospective students to complete a healthcare orientation course and background check. Students seeking to enroll in the CompTIA Network+ program must meet at least one of the following requirements: CompTIA A+ certification or successful completion of the NOVA Workforce A+ course; one year of on-the-job work experience in networking; degree (AS, BA, or BS) in IT, Computer Science, or Cyber Security; or completion of NOVA's course ITN 101 (Introduction to Network Concepts) with a C or better.

LaGuardia's CHW program requires a high school diploma or GED plus US work authorization, and applicants undergo a screening for reading and writing skills. LaGuardia's medical billing program has the most entrance requirements and rigorous screening process; a program administrator said that there are hundreds of prospective students for each cohort of 25 to 30 students, and it is important to identify those most likely to complete the program. The program funder requires students to have a low income and meet residency requirements. The multi-stage application process includes basic math and reading tests, an essay, an interview with the case manager, and then an interview with a panel that includes employer partners.

Short and hybrid programs are considered the most accessible to students. Programs span from five weeks to six months (as shown in Table 2). Hours of instruction range from 14 to 325. One healthcare instructor at NOVA explained duration considerations:

That eight- to ten-week class is good for the average student who may not have had a lot of school experience other than high school or something like that, maybe a class or two, and something else. That's a good pace When we go out to 14 [weeks], that's when we start losing them. I don't know what it is about that last few weeks that they just quit. I don't know if it's because they've been so long without having a regular paycheck, as you're talking three months of commitment to a training program. And many of them give up jobs or go part-time during that timeframe.

The instructor noted, however, that for some students, such as English language learners, stretching out the courses may be beneficial.

The longest [program] I've run is 14 weeks. The 14-week classes are slowed down, typically for non-native English-speaking students, to give them time to . . . take the information in smaller bite-sized pieces. And it's usually a lecture that's slowed down, not the clinical skills because the hands-on education for ESL students is usually fine.

Thus, program duration and pacing are designed to support completion by taking into consideration various students' realities, such as English language skills, prior experience with schooling, and financial challenges.

Hybrid and in-person instruction formats are the most common among the programs studied. Hybrid course formats reflect a general pattern: content instruction is conducted online while manual skills practice is conducted in person. Several factors, including government regulation and the nature of skills practice, influence the format. Synchronous formats are used for highly regulated courses such as real estate and for courses with a combination of regulation and intensive skills practice, such as EMT (e.g., first-responder skills). Further, most instructors prefer hybrid learning formats that privilege practice-based experiences for in-person sessions and conduct didactic learning and study in online sessions. One instructor in LaGuardia's CHW program, however, expressed a strong desire to return to full in-person learning because of the lack of student engagement on Zoom. Finally, one course, electronics (e.g., cabling and wiring skills), requires in-person participation because the skills are manually intensive and not easily simulated online.

TABLE 2: PROGRAM COMPARISON BY PROGRAM FORMAT, DURATION, AND PACING

College and Program	Format	Hours	Duration	Pacing
Harper College				
Real Estate	In person	63 (60 state mandated)	12 weeks	5 hours per week
Solar Photovoltaic Associate Certification	In person and hybrid	14	7 weeks	2 hours or more per week
Prep		30		
Solar Business and Technical Sales I and II		30		
.aGuardia Community C	ollege			
Community Health Worker	Hybrid	325	16 weeks	12 hours per week, including:
				• 200 hours in 2 courses
				Plus, 125 hours of internship
Medical Billing	Hybrid	325	24 weeks	12 hours per week and
				1 course per month,
				plus an extra 4 hours on some weeks for employer events
				Mandatory orientation
Mount San Antonio Com				
Electronics	In person	350	12–16 weeks	15 hours per week, including:
				• 200 hours in 4 courses
Emergency Medical Technician	In person	190	16 weeks	12–15 hours per week in
				2 COURSES
				Plus, 30 hours of clinical skills:
				• 6 hours hospital
				• 24 hours ambulance
				Mandatory orientation
Northern Virginia Comm	nunity College			
Certified Medical Assistant	Hybrid	140	12 weeks	12 hours per week:
				• 8 hours per week online
				• 4 hours weekly in the lab
				10 hours weekly independent study
CompTIA® Network+	Online and in person	130	5 weeks	26 hours per week

Student Supports

Accessibility may also be eased or diminished depending on the availability of student supports. In general, student supports were not widely available to students in noncredit programs. When they were available, they were tied closely to funding availability.

Programs offer student supports when they have more reliable sources of funding. In California, state funding for noncredit courses and other state sources such as the Student Equity and Achievement Program makes it possible for colleges to have counselors dedicated to students in noncredit programs. Thus, Mt. SAC has two full-time and two part-time counselors for students in short-term vocational programs. At Mt. SAC, administrators want every incoming noncredit student to meet with a counselor and encourage this by posing it as a requirement to "finalize their registration." One counselor told us, "It won't preclude them from starting the class, but we kind of lead them to believe that it will be a problem if they don't see us." In general, we heard that students are happy to speak with a counselor and can do it conveniently by phone or Zoom. Counselors provide education planning and, if applicable, assess any technology needs to determine whether the student is prepared to take an online course. One counselor noted that "a big part of the counseling session is assessment. I start with their concerns and questions, then go into my assessment: What are your goals? What are you trying to accomplish?" Thus, understanding a noncredit student's career goals is key to noncredit advising.

At NOVA, FastForward is the first dedicated funding source for noncredit workforce programming. Whereas previously NOVA could provide little advising to students in noncredit programs, FastForward enabled the college to expand and formalize their advising services. The college hired a student services manager and seven staff to help students register for courses and navigate the college. There is now also a retention coordinator and retention student support specialist. Because these positions serve all noncredit workforce students, the FastForward funding benefits even non-FastForward students.

LaGuardia administrators shared that, in general, tuition-based programs are much more thinly staffed than grant-funded programs because the latter provide dollars for staff to both support students and track their success for reporting requirements. Grants to scholarship funds only help students with tuition and do not cover the staffing needed to support the low-income students that LaGuardia typically serves. An administrator explained:

With these grants, we're able to hire a case manager to support the students. But you know, they're not going to go into the class and say, "I'm only here to support the scholarship students." They're there to support the scholarship students and the self-pay students, which is great because there's a spillover effect to provide a greater level of support for our regular students as well. However, to make that work, their caseload is much higher than what it would usually be in a grant-funded program We're going to see how it all plays out. But we're hopeful that it allows us to provide a higher quality service to our students overall.

Thus, using grant funding to hire a case manager supported all students, including self-pay students who would typically receive less support.

Grant and performance-based funding provide incentives and resources for supporting students

to completion. LaGuardia and NOVA administrators pointed out that certain funding types incentivize strong efforts to achieve positive student outcomes. In the case of renewable grant-funded programs (e.g., medical billing at LaGuardia), the multi-phase application and screening process is intended to select students with a high chance of success. Staff are dedicated to supporting students throughout their courses, ensuring completion, facilitating job placement at the end, and tracking and reporting those outcomes to the funder. The reimbursement structure of Virginia's FastForward funding also provides strong incentives for NOVA to support students in completing their courses, passing certification exams, and logging and reporting those outcomes. When our research began, NOVA's workforce division had recently added a staff member called a credential coordinator whose role is to shepherd students through their certifications, provide examination vouchers, keep in touch with students, and track completions. This role is needed because completion and individual certification attainment rates in noncredit workforce programs must be more closely tracked due to the FastForward funding reimbursement. The credential coordinator offers support to students who do not complete their programs and arranges for students to retake certification exams. A college administrator said, "We are spending more staff time on a certain group of students. The state is very interested in the success of these students. And FastForward points to a focus on completion for jobs, versus just completion."

LaGuardia's medical billing program has dedicated staff for student supports; the program has a case manager and a program associate who provide practice-based and individualized support to students. LaGuardia's CHW program, in contrast, lacks dedicated staff support; instead, the program manager and instructors reported doing most advising work. At Harper, administrative staff provide support for student outreach, advising, and onboarding for the noncredit real estate program as well as several other programs.

The colleges generally embed job search and career readiness skills into programs. For instance, at LaGuardia, each specific program offers its own job search and placement assistance. Programs also refer their completers to the college's career center for job placement assistance if internship sites do not hire them. In another example, Harper has a job posting board that all students can access. Similarly, at Mt. SAC the career services specialist holds workshops on resume-writing and job interviews, and assists students with job placement.

Some colleges offer holistic supports to all students, including those in noncredit programs.

LaGuardia offers noncredit students a unique program called "LaGuardia CARES." Under this program, students can access a food pantry, housing assistance, a wellness center, and daycare. The program also employs social workers who connect struggling students with services and academic support. Mt. SAC has a counselor dedicated to addressing students' basic needs, including identifying and connecting them to resources such as emergency aid, affordable food, housing, school supplies, technology, transportation, childcare, mental health care, and personal care items.

Affordability

The cost to the student is the essential metric for affordability. Given the wide variation in funding sources across states and colleges, it is important to understand how this context translates into programs and their ultimate affordability to students.

Program costs to students vary, but many are low. Program costs are shown in Table 3. The LaGuardia and Mt. SAC programs have no tuition costs to students, but the Mt. SAC EMT students pay for their exam fee and uniform. In contrast, the programs at NOVA have the highest costs to students – \$1,527 (CompTIA Network+) and \$3,267 (CMA) – but both programs provide eligible students with state financial assistance under the FastForward program. FastForward programs also include free exam vouchers. Students pay out-of-pocket for all other certification exam fees. Students pay comparatively less for programs at Harper – \$475 to \$875 each – but financial assistance available to students is inconsistent as it typically comes from college-sponsored scholarships and external grants. Certification exam fees are an additional cost to students, ranging from \$55 to \$358.

D	TABLE 3: PROGRAM COST TO STODENTS				
Program	Costs to Student				
Harper College					
Real Estate	Program fee: \$575				
	Exam fee: \$55 per attempt				
Solar	Program fees:				
	• \$475 Solar Photovoltaic Associate Certification Prep				
	 \$475 Solar Business and Technical Sales I 				
	• \$475 Solar Business and Technical Sales II				
	Exam fees:				
	• \$125 NABCEP PV Associate exam, \$25 application fee				
	 \$375 NABCEP PV Technical Sales exam, \$125 application fee 				
LaGuardia Community Colleg	ge				
Community Health Worker	Program fee: None				
	No related examination				
Medical Billing	Program fee: None				
	No related examination				
Mount San Antonio College					
Electronics	Program fee: None				
	No related examination				
Emergency Medical Technician	Program fee: None for eligible CA residents				
	Exam fee: \$104				
Northern Virginia Communit	y College				
Certified Medical Assistant	Program fee: \$3,267 (plus \$1,000 books; FastForward eligible)				
	Exam fee: \$325 (voucher included under FastForward)				
CompTIA Networking+	Program fee: \$1,527 (FastForward eligible)				
	Exam fee: \$358 (voucher included under FastForward)				

TABLE 3: PROGRAM COST TO STUDENTS

Colleges are making greater efforts to raise funds for student scholarships. Some of our interviewees noted a new emphasis on fundraising by their college aimed at providing student scholarships. For example, LaGuardia leaders newly created a student scholarship fund and scholarship committee, reaching out to philanthropic organizations, alumni, and local businesses for donations. Students apply for the scholarship, which covers 80 percent of the tuition of job preparation programs that lead to employment; awards are given based on financial need and immediate availability for training and employment. Harper also implemented a scholarship fund; it is designed to provide financial help to individuals impacted by the COVID-19 pandemic for enrollment in short-term career training programs.

Implications for Policy and Practice

Noncredit workforce credentials and certifications are growing with the nation's changing economy, and they now represent a significant trend in US postsecondary education. The colleges in this study were concerned with quality and were working to address and provide it in multiple ways. In our research on noncredit programs, several key indicators emerged as markers of noncredit program quality. These indicators include local and regional labor market alignment, curricula and instruction that prepare students with necessary job skills, instructors with significant work experience using the credentials that they teach, and sufficient funding and resources to make programs accessible. In addition, a few critical observations about quality in noncredit programs emerged that can inform ongoing efforts to develop effective policies and practices in this area.

Noncredit offerings should base programming and credential decisions on the labor market and occupational practice.

A sharp focus on the labor market and which credentials have value there is a unique strength of noncredit programs and frames what quality means in terms of developing content and delivering instruction. Quality measures must be grounded in understanding industry needs and how colleges align with those needs, such as how well colleges assess local, regional, and national labor market trends. In terms of curriculum, quality comes in different forms. Using an off-the-shelf curriculum from a reputable organization signifies quality to college administrators, but so does a curriculum that has been jointly developed by college faculty and local industry partners because the latter can be more deftly updated in response to shifting labor market demands.

Further, noncredit instruction is grounded in occupational practice and skills that are essential for jobseekers to be successful. This focus on job skill development is reflected in how programs are conducted and how instructors are hired. Practice-based instruction is fundamentally different from traditional credit education. At the same time, instructors may benefit from professional development on pedagogy to complement their hands-on knowledge of the field.

Colleges and programs must carefully consider how tightly linked they are to the labor market and how much to broaden what students learn to ensure quality pathways are available to meet students' goals as they change.

The importance of noncredit's alignment with the labor market is a different standard than in most credit programs and is what colleges say makes these programs valuable. At the same time, programs also have some discretion with regard to how much information they include that goes beyond the content required to pass certification tests and meet the needs of local employers. How well they provide students with more general academic skills is an important question, as is how much material they include that would help to align the program with educational articulation. This is something to consider to better bridge the gap to credit-bearing programs for students interested in pursuing further education. Few programs offer articulation, however, and it is not clear how many students would seek to continue their education if articulation were more widely available and transparent. Nonetheless, articulation to credit programs is an important linkage unique to community

college programs that can ensure students have ongoing pathways for advancement after completing a noncredit program, provided the pathways are clear and that students receive advising and adequate supports to help them pursue these pathways. More attention is needed to understand student engagement in pursuing articulation where it exists and to ensure data tracking on students' pursuit of credit programs after completing noncredit programs. A better understanding of the student perspective on this element of quality is essential.

Data are crucially needed to understand quality.

The collection of more consistent data on noncredit programs is essential for colleges and states to better understand whether these programs provide value in supporting upward mobility. Overall, the colleges we studied are still struggling to track outcomes – not just whether completers are hired and experience upward economic mobility, but in some cases whether they even take and pass the industry assessment connected to their program. Outcomes data on whether students are completing noncredit programs, attaining related NDCs, and getting well-paying jobs will go a long way toward helping to better understand noncredit programs and their quality. Indeed, this is the necessary cornerstone. Further, these outcomes need to be disaggregated by race/ethnicity and gender and placed into context relative to other options students may have pursued, such as how their outcomes would compare to students who enter general studies, accrue debt, and gain no jobs skills.

States that fund noncredit should include incentives for colleges to offer quality programs, review their programs, and collect data on outcomes.

Much of what happens in noncredit is driven by funding – or, to be more precise, by the lack of access noncredit students have to traditional funding sources available to credit students, such as Pell grants and federal student loans. Without federal funding, access for many students is limited because of insufficient resources. The paradox is that many students attracted to noncredit programs want a job that pays a living wage, such as single moms, adults who have not previously pursued postsecondary education, and people who did poorly in high school. Any quality assessment of noncredit programs must consider funding sources and their goals. As states consider adding funding for noncredit or begin to count shorter-term credentials in their attainment goals, it is important to consider quality and outcomes data.

In the early 2020s, extending Pell grants, a form of federal student aid, to shorter-term noncredit workforce programs became a focus of policy debate. Proponents have argued that the ways in which adults seek to acquire skills have changed and that supportive policy needs to catch up (Kreighbaum, 2019). Many prominent higher education and workforce groups support expanding Pell grants to short-term workforce education, stating that communities of color in particular need affordable access to such programs (Olugbemiga, 2021). Opponents, however, argue that significant variability in the economic returns of short-term training programs shows worse outcomes for students of color and women (Ositelu, McCann, & Laitinen, 2021). While, as we have stated, much more data are needed on economic and employment outcomes, the elements discussed in this report can be useful to states and colleges in determining how to define, measure, and improve quality in the meantime. Despite their lack of federal Pell funding, noncredit programs are prolific in colleges around the country. Ensuring quality is essential for these programs to fulfill their promises to learners and their communities.

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About

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