



Addressing the Employment Challenge

THE USE OF POSTSECONDARY
NONCREDIT TRAINING IN
SKILLS DEVELOPMENT

Mason M. Bishop

MARCH 2019

Executive Summary

The United States finds itself in the midst of a unique labor market problem: Job openings vastly outnumber unemployed workers. Many experts and industry leaders have attributed this problem to the mismatch between the skills that workers possess and the competencies employers need. With the skills gap presenting a modern economic problem, what should be the appropriate response to upskill workers and close the gap?

As one solution, this report proposes increasing community colleges' role in upskilling workers through noncredit skills training programs. Whereas credit-bearing programs measure progress based on time spent in class or on a subject, noncredit skills training is based on the time required to gain and demonstrate the occupational competencies needed in labor markets. This kind of training is comparatively quick and occupationally focused—an important benefit in the current labor market.

Noncredit skills training programs have not historically had a nationally recognized, uniform system for issuing credentials that demonstrate acquisition of occupational competencies needed to perform in jobs. However, in recent years, community colleges have expanded the use of credentials issued by third-party industry associations after

completion of noncredit training programs. Because industry-recognized credentials are developed with employers and industry experts, they provide a promising means of connecting human skills acquisition with gainful employment.

This report explores recent developments in noncredit skills training and evaluates the viability of noncredit training programs as a solution to the skills gap. No comprehensive federal or national data sets on noncredit student outcomes or program results exist, so this report relies on recently developed case studies, original surveys, and interviews with community college officials. Through these qualitative sources, this report highlights how noncredit training programs respond to employers' workforce needs, addresses quality concerns, and demonstrates noncredit training program financial affordability for students.

Noncredit skills training, in concert with the expanded use of industry-recognized credentials, is an important tool for developing human capital and addressing current and future labor market challenges. Federal policies, including recognition of noncredit skills training, must evolve and grow to support the expanded use of new learning methods and demonstration of occupational skills attainment.

Addressing the Employment Challenge

THE USE OF POSTSECONDARY NONCREDIT TRAINING IN SKILLS DEVELOPMENT

Mason M. Bishop

Ten years after the Great Recession, the United States economy is experiencing full employment and rising growth rates. In December 2018, a record 163.2 million people were in the labor force, and the labor force participation rate reached 63.1 percent.¹ The national unemployment rate is now hovering around 4.0 percent—a level not seen in nearly 20 years.² In this historically tight labor market, employers are finding it difficult to satisfy their labor demand. According to US Department of Labor data, there were nearly 7.3 million job openings in December 2018, significantly greater than the 6.3 million individuals who were unemployed during the same month.³

Several economic factors influence the availability of job openings and labor supply, including technological change and access to quality educational resources. One of the most important factors explaining the current disparity between available jobs and labor supply, however, has been the “skills gap,” or the difference between the skills needed for occupations and the skills workers hold.

To address the skills gap, economists and policymakers have proposed improving access to—and delivery of—job training and education. Workers themselves recognize the need for this kind of training, with nearly 35 percent of respondents in a recent Pew survey reporting that they do not have the education or training needed to grow successfully in their jobs.⁴

While workforce skills training is structured and delivered in different formats, it typically results in

some type of credential to demonstrate completion and competency. Labor market data demonstrate that nondegree credentials—that is, certificates, licenses, or industry certifications other than an associate or bachelor’s degree—add value to workers who hold them, providing them with greater earnings than those who do not possess such credentials. In some industries, the earnings premium for holding a credential is as high as the earnings premium for holding a college degree.⁵

These training programs are particularly useful because participating students are not tied to enrolling in credit-bearing programs, which usually have longer time requirements and course sequences and delay transition to the workforce. The longer time needed to complete a credit-bearing training program is particularly difficult for unemployed or low-wage workers who need enhanced earnings as quickly as possible.

Nondegree credentials may be obtained through both postsecondary credit-bearing and noncredit education and training programs at a number of institutions.⁶ Given the increasing need to more effectively and quickly upskill workers for unfilled occupations, an emerging option is expanding noncredit skills training at community colleges.⁷ Community colleges are already at the forefront of noncredit skills training. The expansion of noncredit skills training at community colleges, and the factors influencing its efficacy and use, provides an important framework

for policymakers to consider, especially in light of ongoing questions regarding college affordability and the return on investment of various postsecondary education alternatives.⁸

Educational Attainment and Employment

Approximately \$1.4 trillion is spent on human capital development in the United States each year.⁹ Data demonstrate that this investment typically has positive returns for those who complete postsecondary programs, but the extent of the payoff often depends on the program or college major.

Research by Anthony Carnevale, Stephen Rose, and Ban Cheah summarizes the relationship between postsecondary credentials, particularly college degrees, and jobs.¹⁰ Their findings include:

- Individuals with a bachelor's degree make over \$1 million more in lifetime earnings compared to individuals with only high school diplomas.
- People with less postsecondary education can make more than people with more education depending on the type of occupation. For instance, someone with a job in a STEM field and less education can make more money than someone in a non-STEM field with a bachelor's degree, depending on the job.
- Educational attainment matters within the same occupational area. For example, an engineer with a bachelor's degree will typically earn more than an engineer with an associate degree.
- Finally, 23.1 percent of people with some college and no degree and 28.2 percent of people with an associate degree earn more than the median bachelor's degree holder.¹¹

According to 2017 Census data, over one-third of Americans age 25 and older hold at least a bachelor's degree.¹² This is the highest reported rate in US history, but it also means that two-thirds of people age 25

and older are surviving economically without a bachelor's degree or higher. Many of these individuals turn to community colleges as a viable option to address their education or training needs to gain, or advance in, employment.

In recent years, community colleges have become a cornerstone of American workforce skills training.¹³ Business leaders, in particular, see community colleges as primary skills training providers.¹⁴ This is due, in part, to the traditionally dual role of community colleges, which serve as (1) transfer institutions, by providing the first two years of general education for students pursuing four-year baccalaureate degrees, and (2) workforce-connection institutions, by providing focused courses and programs designed for immediate entry into an occupation.¹⁵

Today, more than two out of five undergraduate students—and one out of four full-time undergraduate students—are enrolled at community colleges, and community college students attend on a part-time basis more often than their four-year-college counterparts do.¹⁶ As of 2015, over five million community college attendees were enrolled in non-credit programs, representing more than 41 percent of total enrollment and underscoring the demand for skills training.¹⁷

Data Limitations

Unfortunately, data limitations inhibit a full understanding of the impact of noncredit skills training programs on employment and household earnings. The Bureau of Labor Statistics relies on a taxonomy connected to postsecondary degree attainment, with the broad category of “some college/no degree” being the default category for people who participate in postsecondary noncredit programs.¹⁸ This taxonomy is a shortcoming that does not reflect current trends and innovations in employment requirements and training outcomes.

A review of available literature on the outcomes and impacts of noncredit skills training also points to the lack of available federal data. This forces information collection to take place on the state level and

limits researchers' ability to gain a comprehensive understanding of noncredit enrollment, completion, access, and outcomes.¹⁹

Lack of data is a serious limitation to effective evaluation of noncredit skills training programs. The Bureau of Labor Statistics should consider updating its data categories to include labor market outcomes for noncredit credential holders. In addition, new research documenting the impact of noncredit skills training, and factors influencing its use, should be initiated to highlight its effect in narrowing the skills gap and contributing to national and state college completion targets.

Lack of data is a serious limitation to effective evaluation of noncredit skills training programs.

Some research, however, does demonstrate the value of credentials, certificates, and postsecondary credentials (other than degrees) in helping workers achieve positive employment and earnings gains.²⁰ For instance, a report issued by the Georgetown University Center on Education and the Workforce found that the average certificate holder with a high school degree and no postsecondary education earned nearly 20 percent more than high school degree holders without a certificate.²¹ While the earnings premium from such programs varies based on socioeconomic status and industry sector, these findings are encouraging.

In light of the current use and potential growth of noncredit skills training, important research questions exist: What components influence whether and how community colleges provide noncredit skills training? Is noncredit skills training a viable option for improving employment and earnings for workers while addressing skills shortages?

The Role of Third-Party, Industry-Recognized Credentials

An emerging trend in noncredit skills training is the use of industry-recognized credentials to indicate proficiency, or readiness to perform, in occupations. Unlike college completion certificates, which are issued by community colleges themselves to indicate completion of a noncredit skills training program, industry-recognized credentials are issued by third-party industry or professional associations and are based on industry competency standards validated through a process that involves employers.²² Industry-recognized credentials hold noncredit skills training program providers to competency and performance standards developed by third-party industry experts and employers—which should facilitate a more direct connection to employment for students earning these credentials.²³ In a recent study, industry-recognized credentials were found to be representative of, and aligned with, the skills and competencies manufacturing employers needed for certain technical occupations.²⁴ Using industry-recognized credentials issued by four Kansas community colleges as part of noncredit skills training for manufacturing occupations, researchers conducted employer surveys and used labor market information to determine if employers recognized and used these credentials in their hiring practices.

Study results demonstrate the efficacy of using industry-recognized credentials as a barometer of skills acquisition needed for jobs. For instance, the community colleges in the study were both targeting the right technical skills training for occupations currently in demand and boosting the skills of the workers enrolled in training to the satisfaction of employers. However, employers were not always familiar with the industry-recognized credentials and did not consistently use them in hiring practices or position descriptions. They did, though, see value in prospective employees receiving the credentials because it showed diligence and commitment to completing a training program.

While various industry-recognized credentials have been available for two to three decades, only

recently has federal policy driven community colleges and other training providers to use these credentials in curriculum and workforce training program development. For example, under the 2011 Trade Adjustment Assistance Community College and Career Training (TAACCCT) grant program, community colleges could receive grant funding for noncredit programs only if the program led to an industry-recognized credential.²⁵ Further policy direction by federal agencies to increase the use of industry-recognized credentials is warranted and recommended.

Industry-Recognized Credential Development: An Example

Much of the recent effort of workforce training professionals has been focused on embedding industry-recognized credentials into credit-bearing education or noncredit skills training programs rather than aligning curriculum and industry-recognized credentials with employers' skill needs. Community college staff and faculty have invested significant time in creating or renewing relationships with national industry associations that create national skills standards and issue industry-recognized credentials to bolster noncredit curriculum and courses. An important next step, then, is the direct connection of noncredit training programs and industry-recognized credentials with employers' position descriptions and hiring practices.

Because industry-recognized credentials provide a crucial bridge between noncredit skills training and unfilled occupations, it is useful to examine how these credentials are created and how employers and industry experts are involved in creating and adopting these credentials. The following example provides unique insight into the credential-development process.²⁶

The National Institute for Metalworking Skills (NIMS) is a national industry association in Fairfax, Virginia. NIMS was founded in 1995 and is responsible for developing and maintaining industry training standards and skills validations in precision manufacturing. NIMS works with nearly 6,000 metalworking companies and five major industry trade associations

that have collectively invested \$7.5 million into NIMS standards and credential development.²⁷

NIMS is the recognized leader in providing industry-recognized credentials for machining-related occupations. These include machinists, tool and die makers, and lathe operators. According to NIMS:

Each NIMS credential represents a collection of skills and knowledge, and a person that earns one has demonstrated competency in that occupational area. As that person earns more of these stackable credentials, they show that they are a valuable individual with an array of skills that have been verified against an industry-written standard.²⁸

In 2013, NIMS began developing industry standards and certifications for occupations in Industrial Technology Maintenance (ITM). Occupations in this field range from maintenance technician to instrumentation control and include high-growth occupations for which companies are facing shortages in skilled workers.

As NIMS trade association members and employer partners identified a growing need for ITM standards and credentials, NIMS solicited Ivy Tech, the statewide community college system for Indiana, to pilot and test ITM standards. Employers and Ivy Tech invested in the costs of the standards and credential development.

The NIMS standards- and credential-development process for ITM contained three phases. Skill standards development involved employers, educators, and other subject-matter experts to develop and validate the industry standards that serve as the foundation for credentials. The purpose of national skills standards is to provide greater consistency across training programs and to equip employers with a means of evaluating workforce performance. Industry skills standards benchmark what individuals need to know and how they should perform to be successful on the job while also describing the primary knowledge, skills, and abilities needed for individual proficiency in meeting performance requirements and expectations in the workplace. To identify ITM skill standards, NIMS developed a National Validation

Survey for businesses, in which feedback was provided to a NIMS Technical Work Group to finalize and release standards based on business input and competencies needed for related occupations.

Credential development involved creating performance agreements and duty areas—or identifying the specific ITM duties leading to occupations—that lead to testing instruments for credentials. While competencies measure *whether* an individual has the requisite knowledge and skills to perform on the job, performance agreements indicate *how* to gauge success on the job. NIMS identified nine ITM duty areas, including maintenance operations, basic mechanical systems, electrical systems, and process control systems.

Noncredit training programs provide skills in a flexible and responsive way while maintaining quality, as employer hiring is the primary measure of success.

Piloting was the process of testing and rolling out the new industry-recognized credentials for public availability. To conduct the ITM pilot, NIMS recruited approximately a dozen educational institutions and over 50 employers. Representatives of these organizations assessed testing instruments for validity and provided feedback to the NIMS advisory committee for review. The NIMS advisory committee and staff finalized any needed changes to testing instruments and established scoring criteria for successful documentation of competency attainment.

Finally, the industry standards and credentials were publicly announced.

Responding to Employers' Needs for a Skilled Workforce

With the rapid pace of technological change and employers' challenges in filling close to seven million job openings, community colleges face increased pressure to implement new training programs quickly or modify existing programs to incorporate new technologies or customize the program for particular employers. To meet this need, community colleges are increasingly turning to career-oriented noncredit training programs as an alternative to traditional credit courses or two-year associate degrees. Indeed, the majority of the five million students who participated in noncredit programs at community colleges in 2015 did so to train in occupational areas.²⁹ Noncredit training programs offer a unique solution for community colleges because they provide skills in a flexible and responsive way while maintaining quality, as employer hiring is the primary measure of success.

A Tailored Approach to Skills Training. Community colleges often offer noncredit training programs directly linked to local employment needs. In a survey of the national noncredit landscape conducted by the American Association of Community Colleges (AACC), the authors note that community colleges regularly form partnerships with regional employers to directly understand their workforce needs and maximize students' employment outcomes.³⁰ The focus of noncredit training programs vary widely and are not limited to one particular model, but they are often short term and operate outside of the usual semester schedule. Decoupled from the general educational courses of degree programs, these programs can be purely skills focused.³¹

In the same AACC survey, the majority of colleges offered noncredit training programs in the information technology, allied health, and manufacturing fields, ranging from entry level to more advanced training. For example, programs in information

technology might include gaining a proficiency in Microsoft Office or learning a specific programming language such as C++ tied to industry certifications.³² The focused nature of noncredit programs often results in students successfully landing jobs in the related sector. A recent study by the Iowa Department of Education, for example, found that more than 90 percent of students exiting a career-oriented non-credit program were employed within one year.³³

Blue Ridge Community and Technical College: A Case Study of Responsiveness to Employer Needs. An institution's culture and structure are crucial components of successfully implementing employer-responsive training options.³⁴ The recent experience of Blue Ridge Community and Technical College (BRCTC) in Martinsburg, West Virginia, provides insight into several features that a workforce skills training program can incorporate to be more responsive to current employer and industry workforce skill and employment needs.³⁵

In 2015, Procter & Gamble announced construction of a large manufacturing facility near Martinsburg, West Virginia, requiring 900 employees by 2020.³⁶ Procter & Gamble tasked BRCTC to provide recruitment, intake, and training services for plant employees, serving as the main human capital development organization for occupations ranging from laboratory technicians to maintenance workers. BRCTC took several notable steps to effectively respond to this need.

Shaping Organizational Structure and Culture. BRCTC does not just have one vice president of workforce development or a person or small unit dedicated to responding to employers and labor market conditions. Rather, all leadership, from the president to all vice presidents, are invested in workforce development and looking for innovations in serving employers. This creates a top-down priority in the entire institution for engaging businesses to develop worker talent and aligns academic programs with workforce development priorities.

Prioritizing Innovation and Risk-Taking. BRCTC has incorporated innovation in serving employers into its strategic plan. This shifts the college away from a traditional liberal arts transfer mission to one that is responsive to labor market conditions. For instance, BRCTC has dedicated space for corporate training and business incubation where extended hours and weekends are available for businesses looking to grow their operations and employment.

Aligning Instructor Knowledge and Skills to Industry and Business Requirements. It is a challenge to find technical instructors who are both well versed in the technical field and adept at teaching and instruction. BRCTC has also encountered an even bigger challenge—having instructors who match the company's profile. To truly collaborate with employers and meet their workforce needs, instructors must have an awareness of the industry's culture and reflect that culture, including issues such as appropriate attire and professionalism. With Procter & Gamble, this means having instructors who have specific knowledge and experience with certain plastics manufacturing and chemistry.

Technically trained instructors cannot all be recruited. BRCTC has incorporated the philosophy that they must “grow their own.” This means that identifying and using the right professional development activities is crucial to meeting employers' training expectations. BRCTC used a US Department of Labor TAACCCT grant to pay for the costs of training instructors at facilities in Germany to ensure alignment with Procter & Gamble technologies and processes.

Accelerating Processes for Curriculum Development and Implementation. West Virginia devolves curriculum decisions and implementation down to the community college level, which enhances each college's ability to implement programs quickly. As a result, colleges have the flexibility to determine whether a credit or noncredit approach to a skills training program is appropriate based on skills and competencies that meet an employer's or local industry's needs. For BRCTC, college credit certificates and skill sets

credentials are issued upon completion of a skills training program.

BRCTC college officials acknowledge that quick curriculum-approval processes at the college level are key in their ability to respond to Procter & Gamble and other employers. They further stated that a traditional academic approach to workforce skills training does not effectively meet, or react quickly enough, to rapid, expansive employer hiring.³⁷

Noncredit “Speed to Market” Program Implementation. Because the speed to market of workforce skills training programs is essential to meeting employers’ constantly changing labor demands, it is appropriate to compare the relative ability of both credit and noncredit programming to deliver on this crucial need. In contrast to the time-intensive process of curriculum development under a credit-bearing framework, community colleges can implement noncredit skills training programs relatively quickly and in a way that is both more responsive to employers and easier to access for students.³⁸

Due to methodical requirements for developing credit-bearing programs, community colleges must use time- and labor-intensive processes to implement or modify credit-bearing training programs. (See Appendix B for an example of one college’s process.) Curriculum development and modification processes are focused on fulfilling requirements as outlined in regional and state accreditation approval policies. This contrasts with noncredit skills training, for which curriculum and training programs can be developed quickly with employers.

It is challenging to determine exact timelines for credit-bearing program approval. First, each community college has its own process. Second, depending on a state’s rules and regulations, approvals by state higher education agencies may take weeks or months. Sometimes published time frames are not maintained, and there is little evidence that processes are in place to impose penalties for delays in approvals by state higher education authorities. In fact, a recent survey of community college officials suggests that implementation typically takes 12 to 18 months.³⁹

In contrast to the weeks- or months-long process for implementing a credit-bearing skills training program, the timeline for a noncredit training program’s implementation is contingent on the employer(s) needing skilled workers and the number of clock/contact hours needed to develop the skills the employer(s) identify. A clock or contact hour is a 60-minute period that contains 50–60 minutes of (1) a class, lecture, or recitation or (2) a faculty-supervised laboratory, shop training, or internship.⁴⁰ Noncredit workforce training often contains blocks of clock hours tied to a credential.

Because clock hours are not tied to time-based accreditation standards, noncredit skills training programs can flexibly build the appropriate number of clock hours needed for a student to attain and demonstrate competency. This flexibility allows many noncredit skills training curricula and programs to be instituted in less than a month, as described in the case study below.

Polk State Corporate College: A Case Study in Rapid Deployment. Polk State Corporate College in Lakeland, Florida, is an example of an employer-focused, workforce training institution that uses noncredit skills training to meet employers’ skill shortages. The Polk State Corporate College experience is indicative of the value of noncredit skills training programs in contributing to economic development and providing benefits to industry and individual businesses.⁴¹ A part of Polk State College, the Corporate College arm provides workforce training through eight institutes: the Advanced Manufacturing Institute, Child Care Training Institute, Contractor Safety Training Institute, Insurance Institute, IT/Computer Institute, Professional Development Institute, Real Estate Institute, and Supply Chain Management Institute.⁴²

Howard Drake, executive director of the Corporate College, reports that noncredit skills training is a rapid-response mechanism that allows the college to address specific occupational skills and competency deficiencies for employers.⁴³ Unlike the steps and processes required to implement credit-bearing training programs, the Polk State Corporate College noncredit skills training deployment is contingent solely

on the time it takes to develop a training agreement with an employer. The steps to develop a noncredit skills training program involve the following:

1. *Identification of Occupational Competencies.* A strength of the noncredit Corporate College approach to training is aligning curriculum to competencies, not occupations. Manufacturing employment is an example. Multiple manufacturing employers may have multiple job titles for similar work. By aligning to competencies, the Polk State Community College develops curriculum and training that addresses industry skill shortages and specific employer challenges.
2. *Validation of Competency Attainment.* After identifying the occupational competencies to address through noncredit training, the Corporate College works with employers to understand what demonstration of competency looks like. At this juncture, the Corporate College identifies the types of employees who employers are targeting for skills upgrading—new entrants, incumbent workers who are not performing in current occupations, and current employees who need skills upgrading for different occupations. With this information, the Corporate College works with employers to identify industry-recognized credentials that reflect competency through testing that aligns with job performance. This is where industry-recognized credentials become essential; they serve as the link between training and occupational competencies.
3. *Time Frame to Completion.* The Corporate College works with employers on the amount of time they want the program to take and whether they want the training phased in. An advantage to competency-based noncredit training pathways is they are not tied to semesters or specific time periods. Classes can begin any time of the year and take as long as employers need for their new entrants and employees to gain and validate competencies for jobs.

4. *Curriculum Development.* Curriculum development and modification can occur quickly because there is a wealth of open-source curricula that can be tied to specific employer requests. The Corporate College team finds curriculum that is foundational to identified competencies, modifies or tailors it as necessary, and embeds the appropriate industry-recognized credentials and testing into the final noncredit pathway.
5. *Cost.* The Corporate College uses only full-time instructors who have industry experience and an affinity for teaching and learning. The costs of training are borne by employers, or the Corporate College seeks grant funding sources or Workforce Innovation and Opportunity Act (WIOA) training dollars. Costs of training are not passed on to workers.

According to Executive Director Drake, the outcomes that employers expect revolve around improved productivity and return on investment. These outcomes are manifested by (1) competencies received and applied on the job and (2) how quickly employees are back on the floor after training and focused on work full time. These outcomes demonstrate the efficacy of a noncredit skills training approach—a flexible, timely means to directly address business productivity through enhanced skills development.

Quality Concerns and the Bias Toward Credit-Bearing Courses

US Department of Labor administrators recently expressed a bias toward credit-bearing instruction as an indicator of quality and a preference for design training programs in which students receive college credit.⁴⁴ Is this bias correct, or can noncredit skills training instruction demonstrate appropriate rigor and quality?

As noted earlier, one challenge in addressing these questions is that no comprehensive data collection

“Some skills are better taught differently than traditional classroom settings and are often technical in nature. I believe that our non-credit skills training programs are taught with employer workforce needs in mind and are ever reevaluated and updated to keep up with changing needs.”

—A Survey Respondent

and reporting system exists for noncredit training in the United States.⁴⁵ Therefore, key indicators of quality, such as program completion rates, entered employment rates, and earnings rates, which allow for a comparison against credit-bearing programs, do not exist. As an alternative, qualitative evidence provided by surveys and interviews can provide initial information and understanding.

In a 10-question survey to community college staff, I asked survey respondents to respond to the following statement: “For-credit skills training programs are a better indicator of quality than noncredit skills training programs.” Respondents generally rejected the notion that credit-bearing skills training programs are inherently more rigorous or of a higher quality than noncredit training programs. Comments focused less on which method of training is “better” and more on the need for flexibility in training approaches to meet labor market demands.⁴⁶

There is no clear evidence that noncredit programs lack the quality and rigor of credit-bearing education programs. In fact, business satisfaction with noncredit training, innovations in noncredit training, and growing enrollments in noncredit training indicate the market is responding to noncredit options.⁴⁷ Addressing workforce skills shortages, it seems, is not contingent on a credit or noncredit training solution; rather, it is dependent on developing the best solution to address businesses’ skill and competency needs.

Another factor that mitigates any perceived quality advantage of credit-bearing skills training is the recent trend toward using Credit for Prior Learning (CPL). CPL methodologies vary but generally incorporate clock or contact hours, an industry-recognized

credential, standardized testing, or an experiential learning evaluation as the basis for conversion to college credit.⁴⁸ Clearly many noncredit training programs and credit-bearing programs demonstrate an equitable level of quality, as CPL methodologies demand this level of equity to provide the actual conversion to college credit.

Affordability of Noncredit Programs

During the past two decades, noncredit enrollment has grown, particularly among low-income and older individuals.⁴⁹ This is due, in part, to the lower costs of enrolling in noncredit courses.⁵⁰ These lower costs are due to factors such as course and program development time, community colleges’ flexibility in starting and ending programs and student cohorts, and the use of adjunct faculty with industry experience rather than full-time faculty.

Community colleges have responded to students’ financial concerns by increasing noncredit training options, often with the goal of offerings at no cost to students. For instance, some community colleges finance noncredit training through partnerships with employers seeking to train their own workforce (customized training) or by leveraging federal or state financial aid programs.

In a recent piece, Tamar Jacoby, president and CEO of Opportunity America, highlighted such a partnership between Lenoir Community College in North Carolina and a variety of regional companies to offer a series of noncredit training courses. In this arrangement, the employer partners pay for scholarships for students to participate in the courses, and the final skills assessment is financed through state-funded grants. This partnership has been remarkably successful, as many students can take these courses at no cost.⁵¹

It is not uncommon for employers to cover the costs of training. In 2013, businesses spent an estimated \$47 billion on postsecondary certifications, apprenticeships, and other workforce training.⁵² Employers invest in training with the expectation that there will be a return on this investment.⁵³ That

return on investment comes from improved productivity among workers, but sometimes that productivity is difficult to measure or realize in the short term.

Further, employers are often hesitant to cover the costs of upskilling if they fear employees will leave and join companies in the same industry, meaning the employer invested in skills upgrades for a competitor's workforce.⁵⁴ As a result, community colleges are often forced to look for additional or supplemental funding sources as they seek to offer new noncredit training programs.

Federal and state financial aid programs are an option, but, as noted, federal financial aid programs are biased against noncredit skills training. According to a recent Department of Education presentation, the Pell Grant program, the foundational federal financial aid assistance for low-income students, requires that clock-hour programs:

- “Must contain at least 600 clock hours over a minimum of 15 weeks of instruction OR
- Must contain at least 300 clock hours over a minimum of 10 weeks of instruction and admit as regular students only persons who have completed the equivalent of an associate degree.”⁵⁵

Since noncredit, industry-recognized credentials are typically shorter term, Pell Grants are not available to support students who might opt in to such training.

The WIOA—a US Department of Labor program that funds state and local workforce and job-training programs in all states—is another major source of job-training funds but is limited for noncredit program students. WIOA and its predecessor law, the Workforce Investment Act (WIA), fund state workforce agencies and local workforce development boards separately from community colleges.⁵⁶ The relationship between local workforce organizations and community colleges is often fragmented, and the WIOA/WIA laws have often worked in a manner inconsistent with the training needs of students, particularly noncredit program students.⁵⁷ These state and local workforce organizations provide an array

of workforce services in addition to job training. Historical trends demonstrate, for example, that a small proportion (between 10 and 12 percent) of the participants for WIOA/WIA programs are enrolled in training services.⁵⁸

To address this historical trend, states such as Florida have passed legislation mandating that a certain percentage of WIOA funding be used for training services.⁵⁹ This may make WIOA funds more available for noncredit training programs, but data are difficult to ascertain.

Several states have created financial aid programs for workforce training. For example, the West Virginia Higher Education Adult Part-Time Student Grant Program (HEAPS) aims “to encourage and enable West Virginia students that demonstrate financial need to continue their education on a part-time basis at the post-secondary level.”⁶⁰ Eligible students in approved programs may receive up to \$2,000 in grants covering tuition, testing costs, and class supplies. Students can receive grants for multiple approved programs, but they may not receive more than \$2,000 in a single academic year. In addition, noncredit skills programs that are part of West Virginia workforce development initiatives, such as promoting job creation and retention in targeted industries, are eligible for HEAPS funding.

State reforms help, but federal financial aid programs such as the Pell Grant and various grant programs under WIOA should also be reformed to provide support to students participating in noncredit skills training.

Conclusion

Noncredit skills training has evolved dramatically in recent years in response to the changing needs of both the workforce and businesses. While not appropriate for every industry or sector, noncredit skills training offers a viable solution for many individuals seeking a pathway toward employment.

As this kind of training grows in use and quality, federal policies and recognition of noncredit training must evolve in response as well. Community colleges should also continue to innovate and change

any internal bias that may persist against noncredit training options while improving their methods and processes of engaging employers in the design and outcomes of noncredit training programs.

Noncredit skills training can respond directly to employer and local labor market needs, and it often does so at a fraction of the cost to students. Policymakers, community colleges, and business leaders need to work together to ensure that these programs remain affordable and available to the individuals and businesses who use them and produce the future workforce for essential economic sectors such as manufacturing. As issues related to changing workplaces, skills requirements, and technology evolve, so too must the ways in which educational institutions develop human capital and align people with new and changing competency

needs. Noncredit skills training provides an important alternative to aligning worker skills with occupational competencies and opportunities.

About the Author

Mason M. Bishop is the owner of WorkED Consulting and a recognized national expert on employment and postsecondary education policy. Before his time at WorkED, Bishop was appointed as deputy assistant secretary in the Employment and Training Administration of the US Department of Labor during the George W. Bush administration. He also served as the vice president for institutional advancement at Salt Lake Community College in Utah.

© 2019 by the American Enterprise Institute. All rights reserved.

The American Enterprise Institute (AEI) is a nonpartisan, nonprofit, 501(c)(3) educational organization and does not take institutional positions on any issues. The views expressed here are those of the author(s).

Appendix A. Key Findings and Recommendations

Factor	Key Findings	Recommendations
Responding to Employers' Needs for a Skilled Workforce	<ol style="list-style-type: none"> 1. Noncredit skills training programs provide a viable "speed to market" tool to meet local human capital development needs. 2. Community colleges implement noncredit skills training programs much more quickly than credit-bearing programs, which may take 12–18 months. 3. Community colleges can implement noncredit customized training programs tied directly to a specific employer's workforce needs or an occupationally focused noncredit training program to address skills deficiencies within a career pathway or specific field. 	<ol style="list-style-type: none"> 1. Community colleges must seek to be more responsive to employers' skill needs by incorporating practices and organizational cultures aligned to business and industry. 2. Working with local business and industry, community colleges should realize the efficacy of noncredit skills training as a tool to rapidly deploy programs that address local labor market skill demands.
Quality Concerns and the Bias Toward Credit-Bearing Courses	<ol style="list-style-type: none"> 1. There is no consistent evidence that noncredit skills training programs lack the rigor of credit programs, especially teaching competencies needed for employment. 2. Recent trends tying industry-recognized credentials to noncredit skills training provide a viable mechanism for demonstrating competency to perform in occupations employers need. 	<ol style="list-style-type: none"> 1. Federal policy should recognize and foster noncredit skills training pathways tied to industry-recognized credentials as options for reaching employment and earnings outcomes. 2. The federal government should develop a clearinghouse of noncredit skills training and recognized practices that lead to positive labor market outcomes.
Affordability of Noncredit Programs	<ol style="list-style-type: none"> 1. Noncredit skills training programs are typically lower in cost than credit programs. 2. Federal financial aid programs are not structured appropriately to assist noncredit skills training students. 3. States such as West Virginia have implemented financial aid programs to assist students enrolling in postsecondary noncredit skills training programs. 	<ol style="list-style-type: none"> 1. Restructuring federal programs, such as the Pell Grant program and WIOA, would facilitate better outcomes using noncredit skills training. 2. States should incorporate postsecondary funding changes that reflect the viability of noncredit skills training.

Source: Author.

Appendix B. Santa Monica College: The Curriculum Development Process

The first step in the course development process at Santa Monica College is drafting a proposed course outline or a justification for a new course. A “Course Outline of Record” is developed using other recognized course outline models and a focus on action verbs when detailing course objectives.

The second step involves collaboration with a department chair and other faculty affected by the proposed course. The proposer of the course finishes an initial draft of the course outline or proposal and discusses the rationale for the new course and curriculum with the appropriate department chair and affected faculty. Additionally, the proposer connects with the college librarian to allocate appropriate resources. Course preplanning should incorporate faculty qualification requirements based on state or college requirements.

The third step furthers the collaborative process by consulting with curriculum development officers, such as the curriculum chair, articulation officer, and curriculum representative, for the affected academic area. The curriculum representative is a partner in the process and should be involved in discussions at the onset of course development. If the proposed course is part of a transfer program, then the articulation officer is a crucial resource and partner.

Step four is when the curriculum committee representative sees the course proposal and provides initial feedback. As part of the initial review process, the

curriculum reviewer will correct minor grammatical errors, but any major revisions will be turned back to the proposer to fix.

To complete the fifth step, a formal written proposal for the new course is submitted to the appropriate academic department for approval. The department chair and department faculty concurrently review the proposal, and then a vote is held to approve or return to the proposer for major revisions.

The sixth step is when the articulation officer and librarian review and approve the new course. Once approved by faculty, the articulation officer and librarian then must approve. After this approval, the proposal is sent to a curriculum panel.

Final steps involve a final technical review and presentation to the college’s curriculum committee. A final review is conducted by the department chair and other curriculum officers, and then the proposal is forwarded to the curriculum committee. The curriculum committee conducts an initial review and, if changes are needed, returns the proposal to the author. If the proposal is ready for final approval, the curriculum committee chairperson forwards a positive recommendation of the proposal and any courses to the Academic Senate. If the Academic Senate ratifies the course, the recommendation goes to the board of trustees for a final vote and then to the state chancellor’s office.⁶¹

Appendix C. State Examples of Curriculum Approval

Illinois	<ul style="list-style-type: none"> • Requests for new programs require approval from the Illinois Community College Board. • Staff will attempt to respond to the program request within 30–45 days. • Responses to career and technical education program requests are usually within 30 days.
Iowa	<ul style="list-style-type: none"> • The Iowa Department of Education Division of Community Colleges approval process uses CurricUNET. • Approval process timeline: <ul style="list-style-type: none"> • Colleges must submit the Notice of Intent Form at most one year and at least 90 days before program implementation. • The 14 Calendar Day Peer Review is sent to chief academic officers after consultant approval. • The New Program Proposal is submitted at least 60 calendar days before program implementation.
Kansas	<ul style="list-style-type: none"> • After the Kansas Board of Regents receives a program proposal, the proposal is made available to other institutions for a 10-day comment period. • The Kansas Postsecondary Technical Education Authority determines whether the program represents unnecessary program duplication. • Programs recommended for approval are normally presented to the Kansas Board of Regents for action within two months of receipt of a complete final proposal.
Massachusetts	<ul style="list-style-type: none"> • For (1) new certificate programs under 30 credits or (2) new minors, concentrations, tracks, or options in existing programs: <ul style="list-style-type: none"> • Colleges must notify the commissioner of higher education in writing at least 60 days before announcing such program changes. • These changes do not require action by the Board of Higher Education. • For a new program: <ul style="list-style-type: none"> • Colleges must submit a letter of intent at least one month before submitting a completed application. The program must be evaluated by two external reviewers. • Staff will review the proposed applications and forward them to the Board of Higher Education for action within 30 business days or at the next board meeting following the 30-business-day period.

Source: Illinois Community College Board, *Illinois Community College Board Program Approval Manual*, November 2014, https://www.iccb.org/iccb/wp-content/pdfs/manuals/Program_Approval_Manual_11-2014.pdf; Iowa Department of Education, *Program Approval Guidelines for Iowa Community Colleges*, May 2014, https://educateiowa.gov/sites/files/ed/documents/ProgramApprovalGuidelinesMay2014Version_0.pdf; Kansas Board of Regents, "Policy Manual," https://www.kansasregents.org/about/policies-by-laws-missions/board_policy_manual_2/chapter_iii_coordination_of_institutions_2/chapter_iii_full_text#programs; and Massachusetts Department of Higher Education, "Expedited Procedure for New Program Consideration in the Public Sector," <http://www.mass.edu/foradmin/academic/documents/ExpeditednProgramApprovalGuidelines.pdf>.

Notes

1. US Bureau of Labor Statistics, Civilian Labor Force Participation Rate, Federal Reserve Bank of St. Louis, January 7, 2019, <https://fred.stlouisfed.org/series/CIVPART>.
2. US Bureau of Labor Statistics, Civilian Unemployment Rate [UNRATE], Federal Reserve Bank of St. Louis, March 4, 2019, <https://fred.stlouisfed.org/series/UNRATE>.
3. US Bureau of Labor Statistics, “Job Openings and Labor Turnover Summary,” February 12, 2019, <http://www.bls.gov/news.release/jolts.nro.htm>; and US Bureau of Labor Statistics, “The Employment Situation—December 2018,” January 4, 2019, https://www.bls.gov/news.release/archives/empsit_01042019.pdf.
4. Pew Research Center, *The State of American Jobs*, October 6, 2016, <http://www.pewsocialtrends.org/2016/10/06/the-state-of-american-jobs/>.
5. Anthony P. Carnevale, Stephen J. Rose, and Andrew R. Hanson, *Certificates: Gateway to Gainful Employment and College Degrees*, Georgetown University Center on Education and the Workforce, June 2012, <https://cew.georgetown.edu/wp-content/uploads/2014/11/Certificates.FullReport.061812.pdf>; and Stephanie Ewert and Robert Kominski, “Measuring Alternative Educational Credentials: 2012,” US Census Bureau, January 2014, <https://www.census.gov/prod/2014pubs/p70-138.pdf>.
6. Postsecondary credit-bearing education and training programs are delivered by postsecondary institutions, such as community colleges and universities, that are accredited by one of six regional accreditation organizations recognized by the US Department of Education. Through regional accreditation, these postsecondary institutions issue credit based on seat time and successful demonstration of knowledge during the required seat-time block. By contrast, postsecondary noncredit education and training programs are programs in which course progression and completion are weighed on demonstration of competency rather than a credit-bearing seat-time schema.
7. Michelle Van Noy et al., *Noncredit Enrollment in Workforce Education: State Policies and Community College Practices*, American Association of Community Colleges, 2008.
8. Meghan L. Arena, “The Crisis in Credit and Rise of Non-Credit,” *Innovative Higher Education* 38, no. 5 (November 2013): 369–81.
9. Anthony P. Carnevale, Tamara Jayasundera, and Andrew R. Hanson, “Career and Technical Education: Five Ways That Pay on the Way to the B.A.,” Georgetown University Center on Education and the Workforce, 2012.
10. Anthony Carnevale, Stephen Rose, and Ban Cheah, *The College Payoff: Education, Occupations, Lifetime Earnings*, Georgetown University Center on Education and the Workforce, 2011, <https://www2.ed.gov/policy/highered/reg/hearulemaking/2011/collegepayoff.pdf>.
11. Carnevale, Rose, Cheah, *The College Payoff*.
12. US Census Bureau, “Highest Educational Levels Reached by Adults in the U.S. Since 1940,” press release, March 30, 2017, <https://www.census.gov/newsroom/press-releases/2017/cb17-51.html>.
13. Josh Sanburn, “The Case for Community College,” *Time*, June 1, 2017, <http://time.com/4800811/the-case-for-community-college/>.
14. Mark M. D’Amico et al., “A National Analysis of Noncredit Community College Education: Enrollment, Funding, Accountability, and Contextual Issues,” *Community College Journal of Research and Practice* 41, no. 4–5 (2016): 288–302, <https://www.tandfonline.com/doi/abs/10.1080/10668926.2016.1251349>.
15. Stanford Graduate School of Education, “Explaining the Role of Community Colleges,” March 17, 2018, <https://ed.stanford.edu/news/explaining-role-community-colleges>.
16. Jennifer Ma and Sandy Baum, “Trends in Community Colleges: Enrollment, Prices, Student Debt, and Completion,” College Board, April 2016, <https://trends.collegeboard.org/sites/default/files/trends-in-community-colleges-research-brief.pdf>.
17. American Association of Community Colleges, “Fast Facts 2017,” 2017.

18. Elka Torpey and Audrey Watson, "Education Levels and Jobs: Opportunities by State," US Bureau of Labor Statistics, September 2014, <https://www.bls.gov/careeroutlook/2014/article/education-level-and-jobs.htm>.
19. Norton Grubb, Norena Badway, and Denise Bell, "Community Colleges and the Equity Agenda: The Potential of Noncredit Education," *ANNALS of the American Academy of Political and Social Science* 586, no. 1 (March 2003): 218–40, <https://journals.sagepub.com/doi/10.1177/0002716202250226>; and Sarantsetseg Davaasambu et al., "Noncredit Program Data Collection at Community Colleges: A Scoping Review," *Community College Journal of Research and Practice* (June 2018): 1–15, <https://www.tandfonline.com/doi/full/10.1080/10668926.2018.1490217>.
20. Thomas Bailey and Clive Belfield, "Stackable Credentials: Do They Have Labor Market Value?" (working paper, Community College Research Center, 2017), <https://ccrc.tc.columbia.edu/publications/stackable-credentials-do-they-have-labor-market-value.html>.
21. Carnevale, Rose, and Hanson, *Certificates*.
22. Joseph Warta and Jenna A. Robinson, "The Future for Industry Credentials," James G. Martin Center for Academic Renewal, August 6, 2018, <https://www.jamesgmartin.center/2018/08/what-exactly-is-a-credential/>.
23. For the purposes of this discussion, the term "credential" is all-encompassing and includes postsecondary degrees, diplomas, licenses, certificates, and certifications. Examples of credentials include educational diplomas, certificates, and degrees; registered apprenticeship certificates; occupational licenses (typically awarded by state government agencies); personnel certifications from industry or professional associations; and other skill certificates for specific skill sets or competencies within one or more industries or occupations (e.g., writing and leadership). US Department of Labor, Employment and Training Administration, "Training and Employment Guidance Letter (TEGL) 15-10: Increasing Credential, Degree, and Certificate Attainment by Participants of the Public Workforce System," December 15, 2010, <https://wdr.doleta.gov/directives/attach/TEGL15-10.pdf>.
24. Mason Bishop, *KanTRAIN Pathways and Certification Evaluation: Final Report*, WorkED Consulting LLC, 2018.
25. US Department of Labor, Employment and Training Administration, "Trade Adjustment Assistance Community College and Career Training Grant Program: Program Summary," December 17, 2018, <https://doleta.gov/taacct/>.
26. National Institute for Metalworking Skills, <https://www.nims-skills.org>; and Rebekah Hutton (deputy executive director, National Institute for Metalworking Skills), in discussion with the author, September 2018.
27. National Institute for Metalworking Skills, "About NIMS," <https://www.nims-skills.org/about-nims>.
28. National Institute for Metalworking Skills, "Credentials," <https://www.nims-skills.org/credentials>.
29. Mark M. D'Amico et al., "An Exploration of Noncredit Community College Enrollment," *Journal of Continuing Higher Education* 62, no. 3 (2014): 152–62, <https://www.tandfonline.com/doi/abs/10.1080/07377363.2014.953438>.
30. Van Noy et al., *Noncredit Enrollment in Workforce Education*.
31. Tamar Jacoby, "Community Colleges and Career Education," *Education Next*, November 28, 2018, <https://www.educationnext.org/community-colleges-career-education-new-non-degree-programs-skip-general-education-requirements/>.
32. Van Noy et al., *Noncredit Enrollment in Workforce Education*.
33. Iowa Department of Education, *Iowa Community Colleges Employment Outcomes: Noncredit Career and Technical Education (CTE) Programs*, September 2018, https://educateiowa.gov/sites/files/ed/documents/Noncredit%20outcomes%20report%20final%20web_0.pdf.
34. Shayne Spaulding and Amanda Martin-Caughey, "The Goals and Dimensions of Employer Engagement in Workforce Development Programs," Urban Institute, December 14, 2015, <http://www.urban.org/research/publication/goals-and-dimensions-employer-engagement-workforce-development-programs>.
35. Peter G. Checkovich (president, Blue Ridge Community and Technical College), in discussion with the author, September 2018; and Ann Shipway (vice president, Blue Ridge Community and Technical College), in discussion with the author, September 2018.
36. Matthew Umstead, "Procter & Gamble to Hire Hundreds More at Berkeley County, W.Va., Plant," *Herald Mail Media*, February 7, 2018, https://www.heraldmillmedia.com/news/tri_state/west_virginia/procter-gamble-to-hire-hundreds-more-at-berkeley-county-wv/article_7601e080-0c22-11e8-8eb5-6f6c89511ae9.html.
37. Checkovich, discussion; and Shipway, discussion.
38. Di Xu and Ran Xiaotao, "Noncredit Education in Community College: Students, Course Enrollments, and Academic Outcomes"

(working paper, Community College Research Paper, September 2015), <https://ccrc.tc.columbia.edu/publications/noncredit-education-in-community-college.html>.

39. Results from an online survey developed by Mason Bishop, WorkED Consulting LLC.
40. US Department of Education, “Clock Hour Programs: Issues in Administering Title IV Programs in a Clock Hour Environment,” Fall Webinar Training Series, 2012.
41. Meghan L. Arena, “The Crisis in Credit and Rise of Non-Credit,” *Innovative Higher Education* 38, no. 5 (December 2012): 369–81, <https://www.deepdive.com/lp/springer-journals/the-crisis-in-credit-and-the-rise-of-non-credit-1z0N5M4z08>.
42. Polk State Corporate College, <https://www.polk.edu/corporate-college/>.
43. Howard Drake (executive director, Polk State Corporate College), in discussion with the author, October 2018.
44. US Department of Labor, Employment and Training Administration, “Scaling Apprenticeship Through Sector-Based Strategies,” 2018, <https://www.doleta.gov/grants/docs/FOA-ETA-18-o8.pdf>.
45. Davaasambuu et al., “Noncredit Program Data Collection at Community Colleges.”
46. Mason Bishop, survey developed through SurveyMonkey, 2018.
47. D’Amico et al., “A National Analysis of Noncredit Community College Education.”
48. Mary Beth Lakin et al., “Credit for Prior Learning: Charting Institutional Practice for Sustainability,” American Council on Education, 2015, <https://www.voced.edu.au/content/ngv%3A69082>; and Cathy Brigham and Rebecca Klein-Collins, *Availability, Use and Value of Prior Learning Assessment Within Community Colleges*, Council for Adult and Experiential Learning, July 2010, https://www.vcn.org/careerladder/Resourcespdfs/123_pla_communitycolleges.pdf.
49. D’Amico et al., “An Exploration of Noncredit Community College Enrollment”; and Grubb, Badway, and Bell, “Community Colleges and the Equity Agenda.”
50. Davaasambuu et al., “Noncredit Program Data Collection at Community Colleges.”
51. Jacoby, “Community Colleges and Career Education.”
52. Anthony P. Carnevale, Jeff Strohl, and Artem Gulish, “College Is Just the Beginning: Employers’ Role in the \$1.1 Trillion Postsecondary Education and Training System,” Georgetown University Center on Education and the Workforce, 2015, <https://files.eric.ed.gov/fulltext/ED558166.pdf>.
53. Drake, discussion.
54. Kevin Bauman and Cody Christensen, *Improving Skills Through America’s Workforce Development System*, American Enterprise Institute, September 2018, <https://www.aei.org/wp-content/uploads/2018/09/Improving-Skills-Through-Americas-Workforce-Development-System.pdf>.
55. US Department of Education, “Clock Hour Programs.”
56. Bauman and Christensen, *Improving Skills Through America’s Workforce Development System*.
57. Mark M. D’Amico et al., “State Director Views on Community College Workforce Development,” *Career and Technical Education Research* 39, no. 3 (December 2014): 191–211, <http://dx.doi.org/DOI:10.5328/cter39.3.191>.
58. Social Policy Research Associates, *PY 2015 WIOA Trends over Time*, US Department of Labor, Employment and Training Administration, Office of Performance and Technology, December 14, 2016, <https://doleta.gov/performance/results/WIASRD/PY2015/PY2015-WIOA-Trends.pdf>.
59. CareerSource Florida, “Individual Training Account Expenditure Requirements and Waiver Request Process,” September 26, 2018, <http://www.floridajobs.org/docs/default-source/lwdb-resources/policy-and-guidance/guidance-papers/2018-guidance-papers/ita-waiver-process-and-qualified-expenditure-reserve-requirements-9-10-18.pdf>.
60. College Foundation of West Virginia, “Higher Education Adult Part-Time Student Grant Program,” 2018, https://secure.cfwv.com/Financial_Aid_Planning/Scholarships/Scholarships_and_Grants/WV_HEAPS_Grant.aspx.
61. Santa Monica College, “The Curriculum Development Process,” August 30, 2017, <http://www.smc.edu/ACG/AcademicSenate/CurriculumCommittee/Pages/The-Curriculum-Development-Process.aspx>.