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Speed, Value, and Economic Mobility

How Community Colleges Are Developing Short-term, High-Value Credentials that Lead to Good Jobs and Careers

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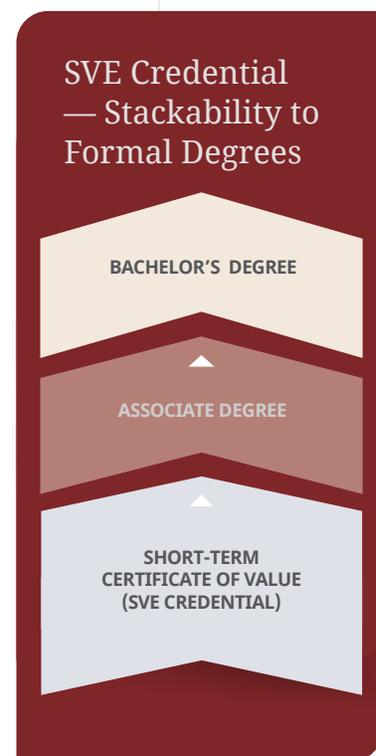
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Executive Summary

This report explores the experiences of ten CAEL member community colleges in their efforts to develop quality non-degree credentials that can be completed in in one year or less, lead to good-paying jobs in high-demand industries, and are stackable to a higher degree, allowing learners to unlock opportunities for even greater economic mobility. Throughout this report, we refer to these credentials as SVEs, for their Speed, Value, and pathways to Economic Mobility (SVEs). While the ten colleges in this study have vastly different local economies, student populations, and regional labor markets, our analysis found that their experiences in developing SVEs shared the following common themes:

- **The central role of regional economic drivers in program design.**
Colleges are developing short-term programs to address the specific needs of their local employers and industries, and, whenever possible, make changes to programming to quickly meet changes in demand or address unusual conditions in their local labor markets. Part of the process involves acquiring labor market data and intelligence; most colleges engaged in desk analysis of labor market data, and some supplemented this information through close and regular contact with industry advisory groups, local industry associations, or economic development organizations to gain insights about local hiring trends and skill needs. Colleges also engaged in a range of activities to involve employers on program design and development.
- **A recognition of the importance of seamless stacking of learning and credentials.**
The colleges are committed to providing opportunities for learners to stack additional credentials on top of their current programs as a way to boost future economic mobility. The data on credential stacking can be challenging to tease out, for example, in cases where students may enroll in both a certificate and degree program at the same time. For other institutions, the lack of a centralized collection and repository of data on the noncredit side makes it hard to map credentialing across programs.

Some of the colleges have established processes to award credit for prior learning, which can facilitate on-ramps to SVE programs as well as a mechanism to bridge noncredit and credit programs.



- **A commitment to equity-centered practices in design and delivery.**

The colleges are deeply aware of the barriers to access faced by many of the students that they serve and are attempting to address these barriers both at an individual and systemic level. An example of addressing equity barriers at the individual level includes offering transportation for those who lack the ability to get to campus, while systemic level solutions include partnering with community organizations to reach individuals who may not consider college as an option.

- **Continued data collection needs, particularly in the area of employment outcomes.**

While the SVEs may be meeting the mark in terms of directly addressing labor market needs, a key measure of success that is proving harder to assess is outcomes — do the students get good jobs in the desired industry, have they improved their wage-earnings, and are employers satisfied with their skills and abilities? In the absence of employment outcomes data, the colleges find proxies through regular alumni surveys and soliciting feedback from local employers who hire SVE graduates.

RECOMMENDATIONS

The report offers the following recommendations for institutions considering venturing into SVEs:

DEFINE OR REFINE SVE PROGRAMS WITH LABOR MARKET VALUE IN MIND.

1. **Rely on regional and local labor market data** to determine current and projected demand for SVEs and conduct a scan of existing programs offered by other regional institutions.
2. **Invest in partnerships with local industry**, workforce boards, and employers.
3. **Be nimble** and consider noncredit SVEs programs as incubators for developing for-credit options, while ensuring pathways to articulate noncredit courses to for-credit options.
4. **Generate internal buy-in** by advocating for SVEs among your administration and instructional faculty. Identify areas of expertise among your faculty to develop new credentials.

BE INTENTIONAL ABOUT ENGAGING AND SUPPORTING ADULT LEARNERS.

5. **Get creative to reach important and under-represented target populations** by partnering with non-profit, youth-based, and other local community organizations.
6. **Recognize and value all learning** by using CPL to provide on-ramps to all of your programs, and to bridge noncredit and credit-bearing programs.
7. **Encourage student engagement** with future learning through structured, guided, stackable pathways.
8. **Offer academic and non-academic support structures** for students on SVEs that are equivalent to those on longer academic programs.
9. **Be deliberate in onboarding students.** Some barriers are related to students' lack of familiarity with the way educational institutions work or their own fears of failure. Offer a required first semester seminar or similar orientation program for students on SVEs.

DEVELOP ROBUST STRATEGIES TO MEASURE THE IMPACT OF SVE PROGRAMS.

10. **Track progress and key indicators.** Develop data processes for tracking enrollment, persistence, and outcomes for learners on SVEs. Connect with your state's employment agency to explore agreements to access UI wage data for your students and graduates.
11. **Keep in touch with alumni** through annual surveys, and to assist with community outreach.
12. **Tap employers** for additional feedback as these partnerships will allow your institution to learn about your graduates' successes, as well as highlight areas of improvement.

Introduction

Microcredentials, short-term credentials, non-degree credentials — whatever the term you use, they are a hot topic in the postsecondary education world right now. The bachelor's degree may still be the ultimate goal for many Americans, but it is often expensive and hard for working adults to complete. In addition, the American public is increasingly skeptical as to whether a college degree is “worth it,” leading many to seek out alternative credentials that take less time to complete but that can still provide the skills that lead to good jobs.¹ That last part — *leading to good jobs* — is critical. Any bachelor's degree alternative won't be worth the effort unless it is valued by employers who are hiring. Bachelor's degree alternatives of course include associate degrees in technical fields — engineering, dental hygienist, computer science, and more. But they also include select programs that can be completed in less than a year — ideal for someone needing to upskill or reskill to a new career in a shorter period of time.

Many four-year colleges and universities are starting to recognize the value of offering shorter-term programs, whether as stand-alone offerings or embedded in their bachelors degree programs, as they contend with increasing pressure to demonstrate labor market relevance and prepare students for post-graduation employment. However, the main postsecondary home to shorter-term career-focused or technical programs has traditionally been community colleges, which offer some of the most affordable options for sub-baccalaureate credentials, including associate degrees, certificates, and microcredentials. Many of the shorter programs at community colleges have direct pathways to employment, but not all of the available options lead to good jobs. Most community colleges, for example, train the nation's nurse's aides, truck drivers, and salon workers — occupations that play a critical role in our economy, but do not tend to meet most “good jobs” standards because of low pay or benefits, minimal advancement opportunities, or working conditions that would be challenging for a variety of reasons, including family obligations..

This report explores the experiences of ten CAEL member community colleges in their efforts to develop non-degree credentials that do meet some kind of standard for good jobs: programs that could be completed in a short amount of time (one or year less), that lead to good-paying jobs in high demand industries, and that allow the learner to build or stack on that learning towards credentials that unlock opportunities for even greater economic mobility, including associate and bachelor's degrees. Throughout this report, we refer to these shorter, non-degree credentials — whether offered for college credit or on the noncredit side of the house — as SVE credentials, for their Speed, Value, and pathways to Economic Mobility. Through interviews with these colleges, CAEL focused on how they determined what SVEs to develop and how they are supporting new kinds of credentialing pathways that address both local business needs and individual upskilling and employment goals.

While universities are starting to recognize the value of shorter, career-focused programs, their home has traditionally been the community college.

¹ The Aspen Institute recently defined a good job as one that provides economic stability, supports economic mobility, and emphasizes equity, respect, and worker voice (2022)

PARTICIPATING CAEL COMMUNITY COLLEGE MEMBERS

**Bismarck State College,
North Dakota's Polytechnic
Institution**
Bismarck, ND (*Rural serving*)

**Columbus State
Community College**
Columbus, OH

Dallas College
Dallas, TX (*Hispanic serving*)

Edmonds Community College
Lynwood, WA

Frederick Community College
Frederick, MD

Metropolitan Community College
Kansas City, MO

**Northwest State
Community College**
Archbold, OH (*Rural serving*)

**City Colleges of Chicago
Richard J. Daley College**
Chicago, IL (*Hispanic serving*)

San Juan College
Farmington, NM (*Rural, Native
American serving*)

Community College of Vermont
12 locations throughout Vermont
(*Rural serving*)

Rural serving indicator from: www.regionalcolleges.org/project/ruralserving

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THE KEY THEMES DISCUSSED — AND DESCRIBED IN THIS REPORT — ARE:

- The **role of regional economic drivers** in the design of SVE programs, including how the colleges use labor market data, engage employers, and address any unusual conditions in their local labor markets.
- Whether and how the colleges were creating models for **seamless stacking of learning** that allows the student to build on what they already know, whether that learning is informal or formal, for-credit or noncredit.
- The ways in which the colleges are engaging in **equity-centered practices** to ensure that their SVE programs are creating opportunities for economic mobility for all.
- How the colleges try to understand the value and impact of their SVE programs, given their **lack of access to reliable employment outcome data**.

The colleges included in this study were selected from CAEL's community college membership based in part on whether they were offering short-term credentials in high-demand occupations, their stated intent to provide stackability, and their recognition of prior learning (see Appendix: Method and Data Collection). It is important to note that inclusion in this study is not an endorsement of the quality of the programs offered, but rather that these institutions are working to develop credentials that meet the criteria of an SVE.

Background

The number and type of sub-baccalaureate programs offered by postsecondary institutions are vast — according to [one estimate by Credential Engine](#), there were 162,224 certificate programs offered in 2020.² Obtaining accurate data on enrollment is challenging, however, as noncredit-bearing sub-baccalaureate course enrollment is not tracked at the national level. One estimate, based on a large-scale survey of community colleges conducted in 2020, puts the number of students enrolled in noncredit programs at 3.7 million (Jacoby, 2021). Learners in these programs tend to be older than traditional-age students (i.e., 18-24 year olds, going mostly straight from high school to college), and disproportionately female and people of color. Existing research on the value of short-term vocational and occupational certificates has in general shown positive labor market returns. However, when disaggregated by field of study, gender, and race, the results are mixed. Women, lower-income, older, and Black and Latino students are more likely to obtain short-term credentials for occupations that do not pay well (Rios-Aguilar et al., 2019).

The wide array of short-term program offerings combined with a lack of data collection on student outcomes has made it challenging to identify high or low quality non-degree credentials. A recent multi-state study of 29 community colleges by Van Noy & Hughes (2022) found that while institutions appeared responsive to the needs of their local markets and were able to establish new noncredit certificate programs quickly, very few tracked labor market outcomes. A national survey of community college educators conducted in 2020 further found that 92% of respondents relied on input from employers and 83% on regional labor market information to monitor quality and relevance (Jacoby, 2021).

Despite the apparent attention paid to labor market relevance by community colleges when developing SVEs, employers may not yet be valuing them in their hiring decisions and processes. Studies have shown that while employers have a mostly positive view of SVEs and perceive that they bring value to the workplace (Gallagher, 2022; SHRM, 2022; UPCEA/ InsideTrack, 2022), a lack of confidence in the quality of those credentials remains a factor in the hiring process. In a survey on alternative credentials (including certificates, certifications, apprenticeships, and digital badges), most executives, more than half of supervisors, and almost half of human resource professionals agreed that “if the quality were more consistent, my organization would be more likely to accept them as meeting job requirements” (SHRM, 2022).

Quality frameworks established by New America and the National Skills Coalition (see “Defining Quality” on page 7) emphasize stackability as a way to provide higher-level credential options that seamlessly build on the initial credential, with the intention of giving workers pathways to advance within their chosen field. A closer look at student enrollment behaviors, however,



² This includes both Title IV eligible and non-eligible programs.

DEFINING QUALITY

Efforts to identify the “quality” of SVEs continue to emerge. Two frameworks that have been proposed recently are by New America and the National Skills Coalition (NSC):

New America’s “Non-Degree Program Quality Criteria”

- The program leads to quality jobs with a local living wage, benefits, and decent working conditions.
- The program advances equity and diversity in occupationally segregated jobs.
- The program must open doors to advanced credentials and degrees through career-connected stackability.
- The program must be affordable and accessible.
- The program must have strong completion rates, including for certifications and licenses. (Jyotishi, 2022)

NSC’s four criteria of “quality credentials”

- Evidence of substantial job opportunities associated with the credential.
- Transparent evidence of the competencies mastered.
- Evidence of employment and earnings outcomes.
- Stackability to additional education or training. (Duke-Benfield et al., 2019)

suggests that students are not taking advantage of those opportunities as often as one might expect. Bailey and Belfield (2017), for example, found little evidence that learners were engaged in what they termed “progression” stacking, i.e. when an individual pursues a more advanced credential after their first one, while Bozick et al. (2021) found that the likelihood of returning to college to pursue additional credentials diminished as time passed after completing the first credential. In addition, the authors found that a strong job market influenced the likelihood of an individual not returning to college and that holders of short-term credentials in certain disciplines (engineering technology and manufacturing) were less likely to stack credentials than those in others (healthcare and IT).

The current environment has seen a continued proliferation of subsidized or free short-term credential programs, as states have engaged federal relief funds to expand workforce development offerings. City Colleges of Chicago, for example, used pandemic funding over the past year to develop more than 100 short-term credential programs that students could take tuition-free (Fain, 2022). What more can we learn about the development of short-term credentials — but particularly SVEs — in community colleges across the country, and how well do they serve learners’ long-term needs? These are the key questions that this study seeks to explore.

The Role of Regional Economic Drivers

As noted earlier, short-term, career-focused certificate programs do not always lead to jobs and careers that pay well or that have long-term employment prospects or career advancement opportunities. National data suggests that some of the lowest-paying, short-term certificate programs are in the areas of cosmetology, education, administrative support, culinary arts, healthcare, and transportation, while the highest are in engineering, manufacturing, public safety, construction, and information technology (Georgetown University, 2020).

National data can be a starting point for colleges to get a sense of overall economic trends, but they may not reflect what is actually happening within individual regions or labor markets. Community colleges' missions are to serve local students who are looking for jobs in their local community, so a short-term program that results in an industry-valued credential that is in demand a hundred miles away *but not right here* does not serve the students' nor the communities' best interests.



The colleges interviewed for this report all said that they were developing short-term credential programs to address the specific needs of their local employers and industries — and, whenever possible, they make changes to programming to quickly meet changes in demand. Some examples of how the college programming and credentialing options changed in response to employer and industry information or trends (and not just the needs of a single employer) include the following:

- **Credentials that Prepare Students for In-demand Occupations.** The Community College of Vermont (CCV) noted that the state's economy is largely built on small businesses that require services like accounting and bookkeeping. In response to that need, the college created a 29-credit bookkeeping certificate — stackable to associate degrees in accounting, business, and professional studies — that is in demand by both students and employers. Students can also earn industry recognized credentials (such as certifications from the National Association of Certified Public Bookkeepers) as a part of the program.

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- **Credentials That Are Designed to Quickly Meet Urgent Labor Market Needs.**

Also in response to market demand, CCV redesigned its associate in computer science degree to become a broader meta-major, associate degree in information technology, with short-term, stackable options toward that degree including a 28-credit IT Service Desk Specialist certificate that was specifically designed to quickly meet the need for tech workers in the state. In another example, during the early days of the pandemic, Daley College collaborated with local healthcare providers on a 16-credit certificate for community health. The immediate need was to train workers to serve as contract tracers — particularly those with language skills in Spanish and Arabic. But the demand exists beyond pandemic-related needs, with local clinics needing professionals who can help with community outreach, health screenings, and other preventive or educational activities.

- **Credentials to Meet Hiring Needs of a Region's Key Industries.** Based on its own local labor market analysis, Dallas College is prioritizing certificate options in three of its seven schools: the School of Manufacturing and Industrial Technology, the School of Health Sciences (allied health), and the School of Engineering, Technology, Mathematics & Sciences (ETMS). Prominent among these offerings are the 18-credit certificate in mechatronics technology, the 18-credit certificate in logistics, and various certificates in information technology. Similarly, Metropolitan College has identified eight different career pathway areas where local employers inform program development.

How the colleges acquired labor market data and insights varied, as did their approaches to engaging employers and industry on program design and development. This work often needed to be balanced with other considerations, such as internal resource constraints, a focus on developing interdisciplinary programs, and external labor market realities.

ACQUIRING LABOR MARKET DATA AND INTELLIGENCE

Most of the colleges mentioned a reliance on labor market data sources for helping to understand local labor market needs and trends, with some mentioning Lightcast, and others mentioning data from state agencies or economic development organizations. At CCV, multiple groups within the institution review labor market data; the workforce education team consults labor market data and trends, and so do the academic team and others within the institution who are focused on continuous improvement — specifically, the extent to which the institution is being responsive to employer needs and creating pathways to high-demand, high-wage careers.

Regular contact with industry associations and advisory groups provide insights about local hiring trends and skill needs.

Sheridan Nixon, assistant vice chancellor of career connected learning at Dallas, described an entire internal team focused on leveraging labor market intelligence to benefit students and employers. Dallas' Employer Resource Center is a self-proclaimed "one-stop shop for employers" and the college's liaison to employers for employment sourcing. Nixon explained that one part of that center is solely focused on analysis of the labor market: which employers are searching for which types of jobs, what the long-term outlook is for those jobs, and what skills or credentials a student would need to access those opportunities. That analysis is then taken into consideration as Dallas makes decisions about building out recognized credential programs for specific industries.

Several of the interviewed colleges also mentioned obtaining labor market intelligence from close and regular contact with industry advisory groups, local industry associations, employer organizations, or other economic development organizations. These connections provide insights about local hiring trends and skill needs. Sometimes, admittedly, these contacts resulted in the college developing customized programs for a specific industry or employer training need, even if the jobs were not high-paying jobs with long-term potential (e.g., front-of-the-house restaurant workers, customer service, or food service jobs at an airport). Several of the colleges also noted that they regularly design custom training programs in conjunction with economic development partners focused on business attraction and retention efforts, as well as with local workforce development boards.

AN INDUSTRY-LED SOLUTION TO A WORKFORCE PROBLEM

One noteworthy example of programs that have been developed in response to the unique labor market needs of a regional industry can be seen in the SVEs offered by Edmonds' Washington Aerospace Training and Research Center (WATR), advertised as "Twelve weeks that could change your life." In developing these very short aerospace mechanic-focused programs that are a blend of online learning and lab work, industry experts worked with instructional designers to map outcomes and the pathway to get there, from day one of the program through to the end of 12 weeks, developing a curriculum around this timeline.

"It's an industry-led versus an academic solution to a workforce problem," noted Danielle Carnes, vice president for innovation and strategic partnerships.

A few of the colleges highlighted specific examples of short-term, non-degree credential programs that were developed largely due to the influence of a single large employer partner. For example, Edmonds College has a partnership with Boeing and 140 employers in its supply chain to develop certificate programs for manufacturing needs such as assembly mechanics and tooling; this partnership has resulted in the creation of Edmonds' Washington Aerospace Training and Research Center ([WATR](#)) and daily meetings with representatives from Boeing. Columbus State Community College has credentialing partnerships with several major employers: a multi-credential pathway for current and prospective employees of Huntington Bank, an IT certificate valued by employer partner Nationwide, and partnerships with both Amazon and AWS for credential programs in areas like HVAC, which Columbus State has aligned with for-credit associate degree pathways. Noted Columbus State partnerships and programs interim project manager Erin Pfaff-McDonough, with respect to the Amazon HVAC program, Amazon "doesn't need the whole associate degree of HVAC. They just need the certificate [...] but Amazon is looking for our expertise in curriculum development and in instructional delivery in conjunction with what they've already developed."

Two of the colleges we interviewed — CCV and Bismarck State College in North Dakota — are located in states with relatively small populations. When they talked about labor market analysis, it was generally focused at the broader state level. Both of these colleges relied not only on information from available labor market data sets, but also on public officials and state labor market agencies who regularly informed the colleges about larger industry skill and labor needs. CCV, for example, developed a certificate program to support an alternative path to licensure for funeral directors to meet a critical need in the state conveyed by state and industry leadership. Public officials may also connect with colleges when the workforce training needs of key industry major companies are a state priority, as is the case with Edmonds and the aerospace industry.

ENGAGING EMPLOYERS ON PROGRAM DESIGN AND DEVELOPMENT

Labor market intelligence and employer/industry insights are important for making decisions about which credential programs to develop, but tapping business intelligence cannot stop there. Many of the colleges prioritized employer engagement in the process of designing, developing, and continuously updating those programs. In fact, at Dallas College, employer engagement is required by the Texas Workforce Commission in order to get approval for a new program.

The way most colleges appeared to engage employers was through employer or industry advisory groups that they had established. In some cases, those advisory groups seemed to be

Colleges will sometimes focus on a single employer or a single industry depending on state or regional priorities.

somewhat perfunctory and passive, providing some information on skills employers are looking for in graduates but not playing a major role in shaping the design of programs or curricula. However, three colleges shared more details about the ways in which they leverage employer and industry involvement through advisory board structures. Perhaps the most “traditional” advisory board setup of the three, CCV has established advisory boards that work directly with each of its curriculum committees, with the board members including employers, statewide agencies, professionals in the field, educators, technical centers, and organizations specific to that curricular area. The boards meet at least once per year, and the employers on those boards play a pivotal role in communicating current skill gaps or credential programs needed to meet labor market needs in growth or in-demand industries. The advisory boards then also inform the curriculum and new program development.

Not all institutions have employer advisory boards that follow that more traditional model. Taking things to the next level, Bismarck has established advisory boards that are led by the industry representatives rather than college faculty or administrators. The industry reps chair the committees, run the meetings, and recommend action items regarding needed programming changes for Bismarck to carry out. Bismarck likes that the employers are “driving the conversation.”

Metropolitan, in contrast, believes in more of a collaborative effort when it comes to determining which SVE programs to develop, and then reaches out to a national STEM-focused industry association, NC3 (www.nc3.net), to help ensure real-time relevancy in the curriculum. NC3 is a group of industry partners made up of large industry manufacturers such as 3M, Ridgid, and Trane who have joined together to advise education partners. Alicia Dickens, associate vice chancellor of workforce and economic development, said, “Traditionally,

“Because our industry partners are so in tune with what we’re doing now, we’re able to help them with those needs. That supports our economy a lot faster, and creates talent a lot quicker.”

POLYTECHNIC PROGRAMS OUTREACH DIRECTOR ALICIA UHDE
ON INDUSTRY INPUT IN PROGRAM DEVELOPMENT AT BISMARCK

“The short-term starts are the best way for us to react to changes in our economy; we can put them together and get them through governance very quickly...really the best way for us to react and provide that skilled workforce that our economy needs.”

BRAD GEER, NORTHWEST STATE COMMUNITY COLLEGE

institutions want to do their thing and then bring business and industry along and ask them to inform and bless it. We believe in industry having a larger voice and playing a major role in this process. Therefore, NC3 and other industry partners advise us on the curriculum in terms of what industry says is needed. NC3 also has consultants to help design what labs should look like to meet industry-specific standards. This helps us stay on the cutting edge from industry’s perspective.”

CHALLENGE OF MEETING MARKET DEMAND

Meeting the demands of employers and the larger labor market is not something that can be achieved in all circumstances. Brad Geer, prior and workplace learning coordinator at Northwest State Community College, noted that even though there has been growth in the college’s short-term program, they are nowhere near meeting market demand. He explained, “I probably have five opportunities for every graduate from these programs, so we need to scale up our student recruitment and increase volume to meet industry demand.”

Colleges that are in large markets where there are other education providers, including multiple community colleges, need to balance what they are hearing from employers with what is already being offered by other colleges in their regions or systems. For example, Daley College is part of the City Colleges of Chicago, a system where there is some degree of specialization on the part of the individual colleges in that system. The decision about which SVE programs to offer is to some extent determined by the mission of the individual college and the specialization of that college. Similarly, Metropolitan College in Kansas City considers decisions about SVE program offerings in the context of who else is offering those programs in their bi-state region — they examine job posting data through Lightcast to determine the extent of the demand. If there are already sufficient program offerings by other providers, Metropolitan will opt not to develop something new, but sometimes the labor market demand is great enough to justify offering programs that are similar to those offered nearby.

San Juan College in New Mexico has a slightly different challenge, which is that it is in a rural area where the extraction industry, previously a major employer in the region, is now very

STRUCTURES THAT SUPPORT FLEXIBILITY AND RESPONSIVENESS IN PROGRAM DESIGN

Several colleges have undergone re-organization of different departments that provided a more focused approach to accelerate and incubate new programs. In some cases, colleges combined workforce development departments with those focused on innovation, strategic partnerships, or advancement — changes that have allowed the colleges to develop SVE programs that are closely aligned with industry needs as well as to mobilize funding to support new programs.

It's well-understood that the noncredit side of a community college is often where SVE credentials are developed, since there is the ability to develop and deploy new offerings in a way that more quickly responds to changing labor market needs — a noncredit program can be put in place in a matter of weeks, while a for-credit program can take as long as 18 months to go through all of the required reviews. Several interviewees noted that they develop noncredit and for-credit versions of the same credential at the same time, allowing them to quickly meet market needs while putting the pieces in place for pathways to for-credit degrees and credentials.

much in decline. As workers are forced to seek new lines of work, there is not a clear picture of what the economy will look like in the long-term. Lorenzo Reyes, vice president for workforce, economic and resource development at San Juan, noted that they are looking at national trends, like the labor market needs that will likely emerge from the recent infrastructure law or growth industries more generally. But you can't train people for jobs that don't exist yet. So the college is investing in programs for jobs that can be "location neutral" while still developing the skills of the workforce in areas that could give the region an advantage down the road. For that reason, they are turning more and more to SVE programs in information technology where graduates could stay in the area and work remotely in jobs that pay well and have long-term employability.

Thinking strategically about the future and the long-term viability of programs and skill training is also on the minds of those planning SVE programs at Bismarck. The college's mission as a polytechnic institution is to encourage a multidisciplinary approach to learning. Whenever possible, the college tries to design programs that have value across multiple industries. Uhde gave the example of cybersecurity, which focuses on a set of skills that are needed broadly across every industry, so a cybersecurity fundamentals course needs to be applicable in many different types of workplaces. The college is also trying to think through — and bring into their programs — the kinds of skills and abilities that will be part of the future workplace. In a sense, this approach could prepare workers to be agile and ready to take on new challenges as industries collide, merge, re-align, and re-invent.

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Seamless Stacking of Learning and Credentials

As noted earlier, one criteria for high-quality “non-degree credentials” is stackability — ensuring that there are opportunities for learners to seamlessly build onto an initial credential toward higher-level credentials, including associate or bachelor’s degrees (Figure 1). For this reason, several of the participating colleges were chosen for this study because this is their goal as well. Stackability, coupled with established credit for prior learning practices, provides an opportunity for learners to make that connection between their previous work experience, the SVE credential, and a longer degree program.

STACKABLE CREDENTIALS

Stacking models generally involve ways of building on the initial credential towards an existing associate degree program, or as one interview described it, allowing the learner to take a “step into a degree.” Vaughn Alexander Hendriex, director of workforce development and community education at Frederick Community College, described one partnership with a local healthcare employer that paid students to enroll in college and stack credentials to become a qualified nurse. “The local employer will pay for your CNA (certified nurse assistant), and while you are completing your schoolwork they will give you a job in their hospital, so you are earning income while studying...Ninety days after you become a CNA, they will start paying for you to come to our RN (registered nurse) program,” said Hendriex. Several of the colleges in this study also had developed partnerships with regional four-year institutions that further enabled stackability to a bachelor’s degree.

As noted earlier, existing research has suggested that students are not taking advantage of stackability to the extent that one might expect. The colleges in this study acknowledged this challenge as well. An explanation may be the strong job market, where the opportunity cost of going back to college is high. One exception mentioned in these conversations was in Daley College’s welding program; President Janine Janosky said that approximately half of the learners on the college’s CNC welding program continued on another program right away. “It is driven by whether they take a full-time job or a part-time job. If they take a part-time job, they’re more likely to come back, and continue on immediately,” she said. The data on credential stacking can also be challenging to tease out, which is the case at CCV, where,



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associate academic dean Nicole Stetson said, students may enroll in both a certificate and degree program at the same time. For other institutions, the lack of a centralized collection and repository of data on the noncredit side makes it hard to map credentialing across programs.

FIGURE 1

Pathways from a SVE Credential to a Degree
Salary data from Lightcast

Community College of Vermont

Stackable Pathway: Information Technology



Northwest State Community College

Stackable Pathway: Industrial Technology



CPL TO SUPPORT ON-RAMPS AND BRIDGING NONCREDIT AND FOR-CREDIT PROGRAMS

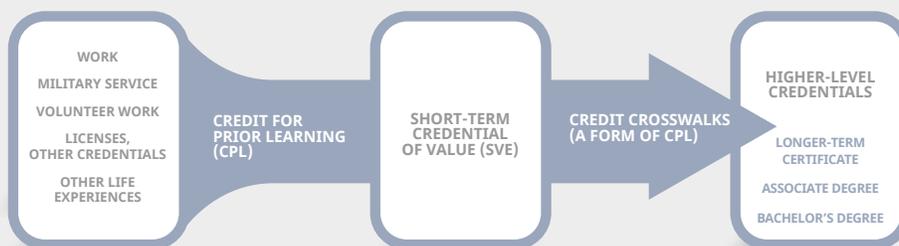
The importance of credit for prior learning (CPL) resonated strongly among the interviewees, both as an on-ramp to SVE programs as well as a mechanism to bridge noncredit and credit programs. With respect to the on-ramp function, several colleges viewed CPL as a way to recognize knowledge gained from life experiences and work outside the classroom within the SVE program itself. [As CAEL has found in previous research studies](#), CPL can be a powerful tool in boosting a student's confidence as a learner, saving them money and time, and boosting completion rates. CCV, Northwest State, and Dallas were among the colleges that described established CPL processes in place, while Frederick and Metropolitan described a credit crosswalk process where CPL was awarded for noncredit credentials, thus further enabling stackability.

While the interviewed colleges shared similar perspectives on CPL and its importance, it was evident that they are at different stages in terms of formalizing CPL processes. Some of the CPL practices highlighted in our conversations are detailed below:

- **Northwest State:** Learners with work experience can test out of SVE courses by taking hands-on assessments that award credit for what they know. Credits earned by students through the college's CPL methods are highly transferable to regional institutions.

FIGURE 2

Centering SVE Credentials in a Model that Recognizes All Learning



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- **Columbus State:** The college’s industry-focused programs are designed to be competency-based. In this way, learners who are already working in the field (for example, IT workers) can test out of some parts of their courses, giving them more time to focus where they need to.
- **Frederick:** Building trades courses are offered as both noncredit options (under their “continuing education” offerings) and academic credit, allowing students to choose what option fits their personal goal. Students who complete the noncredit version are able to articulate those courses to the matching credit course through an internal, CE-to-Credit articulation agreement. Additionally, students with industry credentials and high school graduates that have completed skilled trade vocational programs may also be eligible to earn articulated credit.
- **Daley:** A process is in place for students who take the noncredit version of a program to take one or two “bridge” credit classes in order to earn the for-credit version of that same credential.

Colleges that are interested in learning more about the value credit for prior learning can find more information and free resources to help them get started here:
www.cael.org/lp/cpl-pla

Equity-Centered Practices

Race- and gender-based underrepresentation in fields that lead to higher-paying careers is a pervasive issue in postsecondary education. In the STEM field, for example, a 2021 Pew Research Center report found that Black and Latino workers are underrepresented across all STEM disciplines, while women — despite outpacing men in college enrollment and graduation overall — are notably underrepresented in engineering and computer science (Fry et al., 2021).

The colleges in this study can and do track demographic data for credit-bearing SVEs, a requirement for programs eligible for federal financial aid. Several institutions disaggregate enrollment data by race/ethnicity in order to gather deeper insight into their student subpopulations and identify equity gaps. At San Juan, for example, this enabled the college to better understand areas where Native American students were outperforming other groups, and areas where they were underperforming. “The trend is still that outcomes are better for white students overall. And that means that we still have work to do,” noted Reyes. Hendriex described how Frederick Community College has been refocusing its marketing efforts by examining enrollment data, the demographics of surrounding counties, and the college’s marketing activities, in order to make sure they are not unintentionally leaving any key demographics out of their marketing pushes. “We are being very thoughtful about when we do events, how we’re doing them, and the format we are offering them in, to make sure we cast a wide net that reaches all individuals in our service area,” said Hendriex. One challenge for some of our schools was the fact that they may not have systems in place to collect demographic data in their non-credit programs. Columbus State’s Pfaff-McDonough noted, “We are implementing a new student services platform that will give us the ability to collect noncredit student demographic data in the same way that we can collect for credit students.”

In addition, many colleges in this study are actively working to dismantle barriers encountered by learners who face financial, time, or transportation challenges on a day-to-day basis, offering different kinds of non-academic support, both on and off campus. Serving urban and rural locations with low-income populations and groups that are racially and ethnically underrepresented in higher education, these colleges view their role as extending far beyond meeting labor market demands. Barriers to equity, it should be noted, exist at the individual level as well as at the system level. The participating colleges noted ways that they are addressing both in order to achieve more equitable outcomes:

- **Meeting basic needs (individual barrier):** The colleges noted that addressing equity often means addressing basic needs through services such as providing food banks, offering gap funding, and assistance with textbooks. In addition, transportation can play an outsized role in access to college for many low-income communities and



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inadequate or unsafe public transport presents a barrier to attending school. One college, for example, provides its own transportation service to avoid students having to change buses in a neighborhood perceived to be unsafe. Lack of transportation is also a barrier for rural students. At San Juan, housing insecurity was top of mind when the college opened a new residence hall to help Native American students who typically live far from the Farmington campus.

- **Addressing language challenges (individual barrier):** Columbus State, in collaboration with corporate partners, conducts basic ESL programs onsite with incumbent workers. Pfaff-McDonough said that in this way the college was better able to serve the local community, particularly new Americans. “In Columbus, we have such a diverse population. And that first big challenge for many of our folks here is that English language barrier. A lot of the employers that we currently work with are connecting the dots that not only is there a language barrier, but

ACADEMIC SUPPORT AT EACH STEP OF THE EDUCATIONAL PATHWAY

Many respondents stated that students seeking SVE or other short-term credentials at their institutions receive the same academic support services as degree-seeking students. While the existence of mechanisms to ensure parity in student support varies from institution to institution, it is embedded in the operations at CCV, starting with the first semester interdisciplinary seminar that all certificate students are required to take. This seminar, which is part of the college’s general education requirements, is required of short-term certificate programs, too, because of its proven impact on student success and retention. SVE students are also part of an academic monitoring system where faculty can provide early alerts to advisors on student performance, enabling advisors to conduct interventions with students at risk of dropping out. CCV also has introduced InsideTrack coaching in its advising team, which is offered to all students. Similar to CCV, Daley has instituted a process where its first-year experience program is extended to all students, including those in short-term programs. Commented Janosky, “It is secondary, what type of student you are. If you are an adult education student, if you are a credit student, if you are seeking a degree, if you are a continuing education student, you have access to all of our student development [support structures].”

accessibility to these programs is a barrier. So a lot of these ESL programs are running in conjunction with other onsite deliverables.”

- **Addressing systemic barriers through community-based recruitment and training:** Reaching “non-consumers” — individuals who did not have a good experience with education in the past or who are intimidated by college — is a priority at Dallas, which has a team dedicated to conducting outreach to targeted neighborhoods, identifying those students, and providing access to help them to get to campus. The college partners with community organizations, such as Boys & Girls Clubs, churches, and other local entities, building trust and developing relationships. The organizations then help the college share out messaging about its programs and opportunities. Metropolitan’s “ambassador program” is another example. This program collaborates with local nonprofits who support students with wrap-around services and serve as enrollment and training sites in return for a share of the revenue. Dickens said that this partnership, one of the college’s methods for open enrollment, helps the nonprofit partners stay viable, while helping the college get its messaging out repeatedly to a stream of potential students who may not otherwise have considered college, at multiple locations across the community. Another approach the college takes is to bring the educational opportunity to the students. Metropolitan teaches some programs on site, and has purchased equipment for that purpose.

“It’s one thing to want to be equitable and be mindful of increasing access and hoping you can send a message to draw them in. It’s another thing to just go out there and say, ‘Let’s get right in the mix of your everyday lives.’”

ALICIA DICKENS, METROPOLITAN COMMUNITY COLLEGE

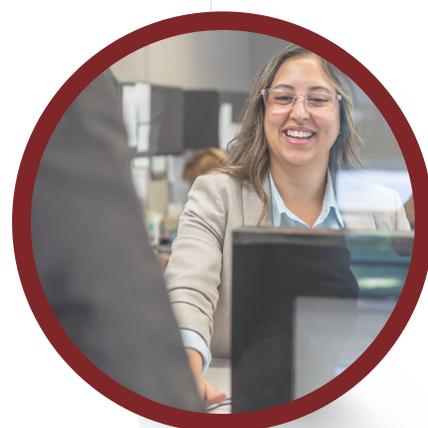
A Challenge for All: Employment Outcome Data

A continuing challenge faced by these colleges is the lack of access to data on employment outcomes. While many interviewees described high completion rates among their SVE program offerings, and a few, such as Northwest State and CCV, can track the progression of their graduates who go on to pursue higher credentials when they transfer and enroll at a different institution, they mostly conceded that they had to rely on indirect measures for data on employment outcomes. Alternative strategies included alumni success and employee feedback.

- **Alumni success — however it can be tracked:** Evidence of student employment post-completion provides an important indicator of success. Noted Dallas College’s Nixon, “We typically start with the end in mind. Are our students getting hired once they complete their programs?” He said that Dallas College works closely with Workforce Solutions of Greater Dallas on obtaining employment data. The challenge, he acknowledged, is that there is a ninety-day to six-month delay in gathering that information.

Other interviewed colleges said in the absence of comprehensive outcome data, they tend to rely on surveying their students after graduation, some on an annual basis. The surveys are used to determine whether the alumni are employed in the industry of their discipline, the current occupation/job title and wages, or whether they are unemployed, in the military, or continuing their education. Some colleges do their best to leverage successful alumni. For example, Northwest State has established one success indicator as their “Hire Two” philosophy: “Are our graduates able to come back and influence the hiring of two more students? If we can perpetuate that, that is the definition of exponential growth,” said Geer.

- **Direct employer feedback:** Hearing from employers is perhaps the most unfiltered way in which the colleges receive information about the quality of their programs. Noted Bismarck’s Uhde, when employers keep coming back to hire more students, or develop new programs, the institution views that as an important measure of success. At San Juan, employers are contacted six months after hiring a graduate, as a way to gather feedback on what is going well, or what needs to be improved. Reyes says that soft skills such as communication and teamwork are the most frequent issues cited by employers — skills that they plan to address in future iterations of their programs. Metropolitan’s Dickens was similarly forthright: “We go back to the business six months to a year later and conduct a service audit. We say, how did this training or service work for you? Did the outcomes align with your corporate goals?”



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Are you getting the type of worker and production outcomes you actually want?... So I would say, first and foremost, it's getting that thumbs up from business and industry in connecting the dots from what the company needs to move the needle, to the services we are providing through training and access to our students. It's great to hear them say, yeah, we want folks that come from you." For Dallas' Nixon, reaching out to employers directly is also a tactic used to identify what is working with their programs and what needs improvement. Nixon noted that while the labor market intelligence team had tools that could determine whether Dallas graduates are getting hired, the data do not identify individual students. This method however, enables the college to discover whether their graduates are getting employed as well as which companies are hiring or not hiring them.

Recommendations for SVE Development

Based on the themes discussed in this report, there are several recommendations that institutions should consider prior to venturing into SVE development:

DEFINE OR REFINER SVE PROGRAMS WITH LABOR MARKET VALUE IN MIND.

1. **Rely on regional and local labor market data**, including projections, to determine the SVE credentials that are not just in demand currently, but that also lead to higher-paying jobs and long-term careers in critical industries. Conduct an environmental scan of existing programs that are already offered by other regional institutions.
2. **Invest in partnerships.** Build partnerships with local industry, workforce boards, and employers. Institutionalize the ways in which their input can guide SVE-program development, curriculum design, and continuous improvement.
3. **Be nimble.** Consider noncredit SVE programs as incubators for developing for-credit options in tandem. Offer students both SVE options while ensuring that a pathway exists for students to articulate those noncredit courses to for-credit options.
4. **Generate internal buy-in.** Advocate for SVE credentials among your administration and instructional faculty — with the qualities of speed (for the employer and the learner), value, and a promise of individual economic mobility — and reinforce their potential to stack to a higher credential. Identify areas of expertise among your faculty that can be leveraged to develop new programs in areas of growth.

BE INTENTIONAL ABOUT ENGAGING AND SUPPORTING ADULT LEARNERS.

5. **Get creative to reach important and under-represented target populations.** Partner with non-profit, youth-based, and other local community organizations. Seek the students where they are, and enlist the support of these organizations in developing effective recruitment messages.



6. **Recognize and value all learning.** Use CPL to provide on-ramps to all of your programs, as well as a bridge between noncredit and credit-bearing programs.
7. **Encourage student engagement with structured, guided, stackable pathways.** Display these on your website and describe the pathways, what is required for each credential in that pathway, which occupations they lead to, and what those occupations pay.
8. **Provide a range of support.** Offer academic and non-academic support structures for students on SVEs that are equivalent to those on longer academic programs.
9. **Be deliberate in onboarding students.** Some barriers are related to students' lack of familiarity with the way educational institutions work or their own fears of failure. Provide support to help them navigate your systems and help them feel more welcomed at your institution. Offer a required first semester course or similar orientation program for students on SVEs to help them socialize into college.

DEVELOP ROBUST STRATEGIES TO MEASURE THE IMPACT OF SVE PROGRAMS.

10. **Track progress and key indicators.** Develop data processes for tracking enrollment, persistence, and outcomes for learners on SVEs. Explore the reasons behind the numbers, particularly stop outs. Connect with your state's employment agency to explore agreements to access UI wage data for your students and graduates — comprehensive wage data will help you better understand the effectiveness of your SVEs in supporting students' economic mobility.
11. **Keep in touch with alumni.** Their input on annual surveys can provide your institution with valuable career outcomes data; alumni can also assist with outreach and marketing efforts within their communities.
12. **Tap employers for additional feedback.** Employer partnerships will allow your institution to learn about your graduates' successes, as well as highlight areas of improvement.

Conclusion

This study explores the approaches that community colleges are using to determine which short-term credentials of value to develop, and how they are making connections to their local workforce ecosystem to ensure SVE credential program quality and student success. Not every short-term credential offered by the 10 institutions in this report was an SVE, yet the community colleges nevertheless recognized the role that SVEs play in local economic development goals, meeting employer needs, addressing labor market inequities, and providing their students with pathways leading to economic mobility. While structures and approaches varied, many of the colleges invested considerable time and resources into acquiring labor market data and intelligence, while also engaging employers on program design and development. They also recognized that a short-term credential is not a true alternative to the bachelor's degree if there are no pathways to continued learning and career advancement. Further, the colleges recognized that simply offering SVEs won't deliver on value and economic mobility if important target populations are not enrolling or are not successful. The colleges often had to be creative in both identifying and reducing a range of barriers for the students who have often settled for — or have been steered to — lower-paying or dead-end occupational options.

Adult learners are on a lifelong learning journey, and for postsecondary institutions to help them, there need to be seamless on- and off-ramps between learning and work. Offering credit for prior learning and developing models where graduates of SVEs are clearly presented with the option of continuing on in their studies or returning later to progressively stack towards a higher credential are ways that institutions can achieve this goal. Underpinning these considerations is the need to focus on strong wraparound supports that extend out beyond the campus and into the surrounding community. As Bismarck's Uhde noted, "Workforce development supports economic development, and it supports community development, and without a strong economy and a strong workforce, your community doesn't thrive."

The value of a short-term credential lies in part in there being pathways to continued learning and career advancement.

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APPENDIX: METHOD AND DATA COLLECTION

An initial Lightcast (formerly Emsi/BurningGlass) analysis of job postings was conducted to identify sub-baccalaureate credentials most sought-after by employers, focusing on the following industries with high-demand and well-paying occupations: energy, financial services, transportation, construction, telecommunications, advanced manufacturing, health, and education. Website reviews of CAEL's community college members were conducted to identify those that offered SVEs in one or more of these industries, particularly those that referenced either stackability or credit for prior learning in conjunction with the SVEs. We then further narrowed our targets to institutions whose student population's racial/ethnic make-up closely matched the diversity of their surrounding region, viewing that as an indicator that the college was doing a good job in serving various community subgroups. From this shorter list, we selected 10 institutions from different areas of the country to focus on for this study. Semi-structured interviews were conducted with representatives from each of these institutions. In addition, we reviewed webpages, advertisements, and other materials provided by the colleges as part of our analysis.

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