College enrollment has increased over the past 10 years and is projected to continue growing over the next 10 for both full- and part-time students. At the same time, institutions face low retention and graduation rates. On average:

- Four-year institutions have a retention rate (defined as students who return after the first year) for first-time, full-time students of 81 percent and a graduation rate (measured at 150 percent of the traditional time to graduate, or six years) of 60 percent.

- Two-year institutions have a retention rate for first-time, full-time students of 62 percent and a graduation rate (measured at 150 percent of the traditional time to graduate, or three years) of only 30 percent.

- These graduation rates are even lower for adult learners, military service members, part-time learners and under-represented minorities.

One policy that shows promise in increasing completion rates, especially for adult learners and those who served in the military, is credit for prior learning (CPL). CPL is defined by the American Council on Education (ACE) as “academic credit granted for knowledge and skills gained outside the classroom.” A prior learning assessment (PLA) is used to equate prior experience to college credit. PLAs vary across states and institutions; the four most common types fall into four categories:

- Standardized exams;
- Third-party evaluations;
- Individualized assessments; and
- Institution-led exams or assessments.

CPL originated after World War I with the creation of the College-Level Examination Program (CLEP) and General Education Development (GED) exams in an effort to bring veterans into higher education and the workforce. After World War II, ACE partnered with faculty to develop the College Credit Recommendation Service to understand course equivalencies for military training. By the 1970s, institutions more commonly used the Council for Adult and Experiential Learning (CAEL) guidelines to put in place an institutional assessment, typically a portfolio review. Simultaneously, CLEP exams became more accepted and understood by institutions. Since then, CPL has been formalized in state, system and institutional policy.
<table>
<thead>
<tr>
<th>WHO CREATES THIS ASSESSMENT?</th>
<th>EXAMPLES</th>
<th>HOW TRANSFERABLE IS THIS CREDIT?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Standardized Exam</td>
<td>These exams are nationally recognized assessments developed by national organizations, often with input from multiple parties.</td>
<td>Common examples include the College-Level Examination Program, the Defense Activity for Non-Traditional Education Support Subject Standardized Tests, Advanced Placement and International Baccalaureate. Because these exams are recognized nationally, they are the most commonly understood and accepted forms of CPL. It is not uncommon for acceptance of one of these exams to be outlined in state legislation, though the accepted score may be determined by the institution.</td>
</tr>
<tr>
<td>Third-Party Evaluation</td>
<td>These recommendations for aligning experience to credit are proposed by outside agencies, such as ACE.</td>
<td>These evaluations look at military-based training, civilian employment training and industry certifications for parallels to academic credit. The ACE College Credit Recommendation Service is one example. Though outside agencies recommend how to award credit, the individual institution ultimately decides whether or not to grant credit, and transferability is not guaranteed.</td>
</tr>
<tr>
<td>Individualized Assessment</td>
<td>These assessments are created at the institutional level to understand how prior work experience translates into college credit.</td>
<td>The most common form of individualized assessment is a portfolio review. Because these assessments are not uniform across institutions, transferability can be a challenge.</td>
</tr>
<tr>
<td>Institution-Led Exam or Assessment</td>
<td>These assessments are developed by the faculty.</td>
<td>These assessments are designed to understand all prior knowledge, not just work-based experience, that the learner might be able to apply to college credits. They are commonly referred to as “Challenge Exams.” Because these assessments are not uniform across institutions, transferability can be a challenge.</td>
</tr>
</tbody>
</table>
THE SIGNIFICANCE OF CPL FOR POSTSECONDARY ATTAINMENT

In 2010, CAEL profiled the CPL practices of 48 two- and four-year institutions and the associated student outcomes. The study found that adult learners who used CPL opportunities had higher graduation rates than other adult learners. For example, 56 percent of adult learners with CPL credits graduated within seven years, compared to 21 percent of non-CPL adult learners who graduated within seven years. Additionally, CPL students were able to shorten the time they took to obtain a degree, with adult learners who earned CPL credits shortening the time to graduation by between 2.5 and 10.1 months.

Across the 48 institutions, the most common form of PLA used was a standardized assessment, followed by portfolio reviews. However, 84 percent of the institutions offered four or more types of PLA to learners. CPL credits were allocated in various ways within an institution’s degree requirements.

Eighty percent of the institutions had a cap on the number of credits that could be accumulated through CPL. Most often institutions stipulated that half of the degree credits could come from CPL.

Research also explored the motivations behind institutions’ inclusion of CPL. The most common responses included:

- “To provide a time-saving avenue for degree completion”;
- “To fulfill our mission to serve adult learners”;
- “To encourage greater student persistence toward a degree”;
- “To recognize the value of learning that happens outside of the classroom”; and
- “To provide a cost-effective avenue for degree completion.”

Overall, research found that CPL practices increase access to and the affordability of postsecondary opportunities for a variety of learners — particularly adults and members of the military.

Overall, research found that CPL practices increase access to and the affordability of postsecondary opportunities for a variety of learners — particularly adults and members of the military. Furthermore, a 2012 Lumina Gallup Poll found that individuals are more likely to pursue postsecondary education if institutions credit the knowledge and skills that these learners have already gained.
WHO DETERMINES CPL POLICIES? STATE, SYSTEM AND INSTITUTIONAL ROLES

CPL policies can be found at the state, postsecondary system or institutional levels — and most often a combination of the three. Overall, control of CPL implementation tends to be greater at the local level than at the state level. Even when it has policy or legislation that dictates some form of acceptance for CPL, the state tends to provide general guidance, whereas a postsecondary system or institution will determine the specific way that CPL is accepted. Mandating that CPL policies must be established, but then directing the postsecondary system or individual college to determine that policy, is common among states.

This type of structure can be seen in Minnesota. Minnesota statutes include four mandates on CPL: (1) Credit must be granted for military training and service; (2) credit must be granted for Advanced Placement (AP) and International Baccalaureate (IB) exams; (3) credit must be granted for CLEP assessments; and (4) state colleges must create a process for turning world language certificates and seals into course credit.10 These mandates were adopted into statute in 2008 to be implemented beginning in 2009; the language was last reviewed in 2018.

The 15-member, governor-appointed Board of Trustees for Minnesota State Colleges and Universities (MnSCU) provides system-wide guidance for CPL.11 Institutions also rely on internal college and university assessments and military courses and occupations.12 The purpose of the CPL-related MnSCU Board policies is to ensure that the value of the learning experiences that occur outside of an academic institution is understood by faculty and to provide some consistency across institutions in the state’s higher education system for how those experiences are credited. Finally, at the institutional level, faculty have the final word in how CPL is implemented and can override state and MnSCU policy — with the exception of military-related policies. The Board requires that all institutions create and publish a CPL standard of practice, but faculty determine how that standard is implemented.

Minnesota is not unique in the role it gives faculty in developing CPL implementation policies. It is common for a postsecondary institution’s faculty to ultimately decide how exactly CPL is accepted and assigned to courses, with either the state or the postsecondary system providing guidance such as a crosswalk of accepted forms of PLA. However, the role the state has in raising CPL to an issue of importance and driving high-quality policies should not be underestimated. A state policy is able to promote equitable access and mobility in higher education. Implementation of statewide standards can ensure quality and consistency between and across two- and four-year institutions. Without state leaders supporting CPL, many learners have limited opportunities to receive academic credit for prior experiences — and to transfer that credit across colleges.

A rigorous research study found that learners who achieve even one credit-granting CLEP score are 5.3 percent more likely to graduate. At two-year institutions it increases probability of graduating by 17.3 percent.

---

Increased Likelihood of Graduating College If Receive Credit for CPL

<table>
<thead>
<tr>
<th></th>
<th>Students Who Earned at Least One Credit-Granting CLEP Score</th>
<th>Students Enrolled at a Two-Year College</th>
<th>Military Service Members</th>
<th>Adult Learners</th>
</tr>
</thead>
<tbody>
<tr>
<td>Students Who Earned at Least One Credit-Granting CLEP Score</td>
<td>5.3%</td>
<td>17.3%</td>
<td>18.1%</td>
<td>19.5%</td>
</tr>
</tbody>
</table>

Source: https://asps.gsu.edu/files/2017/12/17-14-Smith-CLEPMeOutofHere-1.pdf
One of the most widespread methods of awarding CPL is the College Board’s CLEP. CLEP offers a total of 33 assessments across five subjects, and the awarded credits are accepted at nearly 3,000 institutions across the country.13 Each institution determines its own policy on CLEP, including how many credits can be awarded, what score is considered as passing, and which courses those credits will count toward.

A rigorous research study found that learners who achieve even one credit-granting CLEP score are 5.3 percent more likely to graduate. At two-year institutions it increases probability of graduating by 17.3 percent.

The CLEP exam costs $85 and can save a learner thousands of dollars in tuition costs. CLEP is free for military members as the Department of Defense pays for it through the Defense Activity for Non-Traditional Education Support (DANTES) program. For more information on CLEP, see Advance CTE’s guide on the College-Level Examination Program and Career and Technical Education.

ALIGNING MILITARY SERVICE TO ACADEMIC CREDIT

As the rate of veterans who enroll in postsecondary education increases, CPL policies become a critical way to support these learners. CPL acknowledges the intensive military training that these learners have already received and values the role that their knowledge and competencies have in an academic setting. The PLAs that veterans typically use are CLEP, the DANTES Subject Standardized Tests (typically referred to as DSST) and Excelsior College Examinations/UExcel. Though institutions most often turn to a standardized exam to determine college credit, CAEL encouraged portfolio reviews, typically consisting of a written narrative and supporting documentation, for veterans to better understand the full scope of knowledge and skills attained through service.14

Kansas Employs a System-Level Approach

In Kansas, military CPL is the most used form of CPL. In the 2016-17 academic year, more than 45,000 out of the more than 86,000 CPL credits acquired by learners across the state were awarded for military experience. To put this number in perspective, the second highest category was AP, which accounted for about 22,000 credit hours.

The only state statute for CPL requires state universities to award equivalent academic credit for a CLEP score of 50 or higher. However, the Kansas Board of Regents (KBOR) — the governing body for all six state universities and the coordinating body for the 25 community colleges and technical colleges — developed a policy on the awarding of credit for AP and CLEP exams, as well as a policy on CPL in general. The CPL policy designates a Credit for Prior Learning Task Force to oversee implementation of the policy and the Credit for Prior Learning Guidelines.

The CPL policy also designates the Kansas Collaborative on Military Credit Advisory Council as the body to make recommendations to the CPL Task Force on the evaluation of military training for the awarding of college credit. To evaluate military training for credit, faculty from the institutions work directly with the military at ad hoc convenings to understand the learned occupational skills and military academic programs so they can make highly informed decisions about how to award academic credit. Faculty then align military training and occupations with any parallel courses. After approval by each chief academic officer, final course equivalency information is shared publicly on the KBOR website so any interested learner can match his or her military occupation to each college that has equivalent credit and know exactly what course name, ID number and credit amount will be accepted. Currently, 34 military occupational specialties are matched to academic credit.

Military-related CPL is unique from other forms of CPL across the state in that KBOR convenes system-wide meetings of faculty and military experts, who provide detailed information on training content, so that faculty from several institutions at a time can evaluate the training for credit. This process allows for some standardization among institutions across the state for how academic credit is granted for CPL, which benefits learners and leads to credit portability.
The Virginia Community College System Uses an Online Portal

Military service members have been the main constituency for CPL in Virginia. Legislation, codified in the Code of Virginia, specifically cites a requirement that all community colleges must have procedures in place to award credit for military service and registered apprenticeships. These procedures are included in the Virginia Community College System’s (VCCS) CPL policy. VCCS created a website, www.credits2careers.org, to easily guide learners through the CPL process. This website allows service members to upload their military transcript and then view the academic credit recommendations awarded and applied across all 1,700 VCCS programs. The website also provides information on potential careers related to each program, so users can get a comprehensive picture of the opportunities available.

Because CPL for military experience has been so well articulated, VCCS plans to use those practices as a model for expanding to a broader learner base. The State Council of Higher Education for Virginia (SCHEV) is realizing the need to include CPL in four-year as well as two-year institutions. However, ensuring the portability of credits earned from two- to four-year institutions is still a challenge. Ultimately, it is up to the four-year institutions to decide whether CPL credits from a two-year institution will be accepted. If a learner completes a transfer associate degree, which includes the Associate of Science and Associate of Arts & Sciences, he or she is ensured transfer to a state four-year institution with junior standing. If the learner transfers before getting a degree, not all credits are guaranteed to transfer since credit is assessed at the institution where the learner is currently enrolled.

CROSSWALKING REGISTERED APPRENTICESHIPS WITH ACADEMIC CREDIT

Apprenticeships are increasingly recognized as a way to provide individuals with academic and workplace skills, as well as to support the economy of a community, region or state. As high-quality apprenticeships for all ages become more commonplace, these experiences are also brought into the CPL framework.

Academic credit for those who completed registered apprenticeships is specifically cited in Virginia law. The Code of Virginia requires each community college to develop policies and procedures for awarding academic credit to any student who has successfully completed a state-approved registered apprenticeship credential in a field that is aligned with a credit-bearing program of study at the comprehensive community college in which the student is enrolled.15

This state law prompted the VCCS CPL policies as well as those of SCHEV, which is the governing body for all Virginia institutions of higher education and can play a role in promoting coordination among institutions. Community colleges are required to adhere to the policies established by VCCS and SCHEV, but the awarding of academic credit for experiential learning may still vary by institution. Therefore, portability cannot be ensured. VCCS is working on rectifying this situation and has initiatives underway to promote consistency. In the meantime, since apprenticeships can vary across regions and districts, accurately understanding them all can be a challenge, so determining how they may be translated to academic credit can be a time- and labor-intensive process for faculty. One approach the Virginia Department of Labor and Industry took was to create the Richmond Community College Consortium to look into how credit can be awarded for apprenticeships. Former Gov. Terry McAuliffe elevated attention to registered apprenticeships by including the goal of tripling the number of credentials, such as registered apprenticeships, earned by Virginians by the year 2021 in his strategic plan.
INCORPORATING CPL IN TRANSFER AGREEMENTS

CPL policies tend to be more formalized for two-year institutions than for four-year institutions. Louisiana, for example, has been able to build a thorough CPL policy specifically for the community and technical college system. Learners commonly move between two- and four-year colleges and can be faced with the loss of already obtained credits when transferring to a new institution. Because two-year colleges use CPL more often than four-year institutions, formalizing a transfer agreement is especially important.

Colorado Expands Guaranteed Transfer Pathways

Colorado education officials noticed that colleges were not always recognizing CPL course credits awarded by a transfer student’s previous institution and decided to address this issue at the state level. In May 2018, the Colorado Commission on Higher Education, housed within the Colorado Department of Education, approved a more comprehensive transfer policy within its CPL policy.

Faculty and administrators across both two- and four-year institutions came together to propose changes to the policy established in 2015 that guaranteed acceptance of credits earned through AP and IB exams and course challenge options when a learner transferred. This group advocated for the inclusion of PLAs such as CLEP, DSST and portfolio reviews in the transfer agreement. Course credits earned through CPL were also added to the statewide Guaranteed Transfer Pathways (GT Pathways) policy. These changes mean that now any general education requirements fulfilled through CPL remain valid and fulfill the matching general education requirements at the public two- or four-year institution of transfer.

Two- and four-year institutions also collaborated, with the input of faculty, to determine what minimum standardized PLA scores would be accepted, supporting cohesion between colleges. They agreed on minimum accepted scores for AP, IB, CLEP and DANTES assessments. Credits that go toward major requirements, though, are not part of the GT Pathways agreement, and each institution can determine its own policy on accepting those CPL transfer credits. Still, CPL academic credits that go toward major requirements are not universally accepted during all transfers. Receiving institutions have the final word in this situation. The inclusion of CPL in the GT Pathways is one step and reinforces the validity of credits earned by PLAs.

Virginia Develops Two- and Four-Year Consortium Programs

In Virginia, a partnership between Tidewater Community College (TCC) and Old Dominion University (ODU) is focused on creating pathways for adult and non-traditional learners to use non-academic, real-world experiences in attaining a degree, with an emphasis on military service. The partnership took into consideration the local labor market and worked with industry partners to understand how to translate workforce skills into academic credit to support those who needed postsecondary education to continue in that industry. Based on a learner’s workplace experience, he or she has the opportunity to earn almost half of the credits needed for an associate degree. ODU will accept all credits granted by TCC, leading to a seamless transfer process.

There are many two- and four-year consortium programs throughout Virginia, so the opportunity exists for others to implement a similar practice. Administrators are sharing the TCC and ODU model to encourage adoption and scaling at other institutions. This partnership was formed at the local level, without state endorsement. A state-level promotion of this type of partnership would bring greater attention to the benefits of such a program and create urgency around scaling.
Developing Credit for Prior Learning Policies to Support Postsecondary Attainment for Every Learner

ALIGNING INDUSTRY-RECOGNIZED CREDENTIALS WITH ACADEMIC CREDIT

In recent years, focus across states has expanded to consider how industry-recognized credentials can be matched to course credits. Industry credentials, often called certifications, are typically awarded through an assessment sponsored by a business or industry group, and they indicate mastery of specific skills and competencies required for employment in a particular field. In some cases, individuals take non-credit courses from postsecondary institutions to prepare for these assessments. High school students are also being increasingly encouraged to earn these credentials as part of their Career Technical Education (CTE) programs of study.

States and higher education systems are addressing industry-recognized credentials in their CPL policies in a few ways. One common practice is a policy that allows or requires colleges to follow the recommendations of published guides, such as ACE's National Guide to College Credit for Workforce Training. ACE has reviewed certifications granted by groups such as federal agencies, apprenticeship programs, online education providers and employers and compiled recommendations about how the certifications can be translated to academic credit. Each organization listed is accompanied by an overview of what can be learned at that organization, as well as links to all academic topics deemed relevant, the specific skills acquired and credit recommendations. Searching for a specific course or assessment to see where it aligns with prior experience is possible.

Some policies, such as Minnesota’s system-wide policy, state that “colleges and universities may recognize, and award credit for, industry recognized credentials, licenses and certifications, and registered apprenticeship programs that demonstrate college level learning,” leaving the decision up to institutions. In other states, such as Colorado, the State Board for Community Colleges and Occupation Education policy for the community college system states that “prior learning shall be assessed and awarded through: Portfolio, Challenge Exam, and Standardized Testing, the use of Published Guide or through the use of the PLA Credit Matrix in the PLA Credit Manual.” The official system...

FastForward in Virginia

Virginia's FastForward program (previously called the Workforce Credential Grant Program) offers in all 23 of Virginia’s community colleges short training courses that align with high-demand occupations and result in a credential. In 2017, state aid began funding the non-credit workforce training programs. The next step is formalizing how the non-credit courses coincide with credit. The CPL coordinator for Virginia is working to crosswalk initiatives around industry-recognized credentials to academic credit throughout the state's postsecondary system. The inclusion of a credential goal in former Gov. McAuliffe’s strategic plan brought statewide attention to this issue and has been pivotal in fostering the relationship between industry and education.

Louisiana Collaborates on Crosswalk

Louisiana has also incorporated industry-recognized credentials into the Louisiana Community and Technical College System (LCTCS) CPL policy. LCTCS is a public, multi-institution system serving a diverse student population seeking workforce development training, academic programs of study and the high school equivalency. Its enrollment reaches more than 150,000 students and 23,000 graduates each year. The faculty and staff from LCTCS institutions began the process of further developing the CPL policy by working with system office staff to review the list of industry-recognized credentials from the Louisiana Department of Education’s Jump Start High School Pathways and the Louisiana Workforce Commission’s Workforce Investment Council and then mapping the credentials with college courses. Currently, LCTCS has 100 credentials that have been equated to college courses and academic credits. This process is continuous, and relevant credentials will always be incorporated into the CPL and academic credit crosswalk.
procedures for carrying out the policy specifically mention ACE’s national guide as an approved method for awarding CPL, among other methods.

An additional way of awarding credit for industry credentials is for faculty to conduct their own assessments of training programs and the skills and credentials that result from them. The Colorado Community College System’s Prior Learning Assessment Manual provides detailed guidance for faculty on CPL, including a lengthy and detailed section on how to evaluate employer-based training, which includes questions (suggested by CAEL) to ask when conducting such evaluations.22

BRINGING AWARENESS TO CPL OPPORTUNITIES

Though CPL has gained some traction in the higher education realm, communicating the potential of CPL to learners and faculty remains a challenge. In fact, a survey by ACE in 2012 found that even though most higher education institutions implement at least one type of CPL, there is still a lack of awareness about CPL — both among learners in knowing that these opportunities exist and among faculty in understanding their full potential.23 Because CPL can differ among institutions, learners often find understanding the opportunities available a challenge.

Similar to Virginia’s website for military service members, the Colorado Community College System has worked to better publicize CPL opportunities. One way was by creating PLACredit.com, in partnership with CAEL, through funding from a Department of Labor Trade Adjustment Assistance Community College and Career Training grant.24 This website acts essentially as a database where learners can create a personal account and enter previous work and military experience and the standardized exams they have taken. Entering this information will allow the learner to get a general idea of what types of course credit he or she is eligible to receive. The learner also fills out information on his or her location to be automatically paired with a college adviser at a nearby community college. The adviser will assist the learner in understanding what credits match his or her experience and will help the learner ultimately enroll in college.

Another communications challenge is that faculty at an institution of higher education may not understand terminology used in the military or in an industry and vice versa. This lack of familiarity with terminology can lead to misunderstandings about how outside experience aligns with academic coursework. One way that MnSCU is addressing this issue is by incorporating CPL into professional development and webinars.

Tennessee Builds Prior Learning Into Drive to 55

Tennessee has a robust communications effort involving a media campaign and an in-person outreach plan that includes a regional team and college advisers to share and guide learners through CPL opportunities. TNReconnect.gov also provides a huge online presence, walking learners through what options are available to best fit their prior experience, how to connect with an adviser (or navigator), what type of college pathway is the best fit for them and a financial plan for enrolling. The main push behind the publicity comes from the state level. Former Gov. Bill Haslam’s Drive to 55 initiative, the statewide goal for 55 percent of Tennesseans to earn a college degree or certificate by 2025, includes CPL as one strategy. The attention to CPL from the Governor’s Office led to a greater awareness overall of the importance of CPL, as well as greater resource allocation for marketing CPL that would not have existed without state support. The governor set the tone around CPL for the system and institutional levels to follow. Without the state elevation, CPL would not have been communicated and employed to the same extent.
HOW TO SUPPORT CPL AT THE STATE LEVEL

CPL is an impactful avenue to postsecondary attainment for a wide range of learners. Creation and implementation of a formalized CPL policy typically falls to the state’s higher education system or, more commonly, the individual institution. However, state-level leadership can play a vital role in building support and momentum among stakeholders. This support leads to increased availability of opportunities, better consistency among institutions and greater participation in CPL — all of which, ultimately, benefit learners in their quest to earn a postsecondary credential of value. States should strengthen CPL in two ways: by passing state statute or by incorporating CPL into the state’s broader postsecondary agenda.

The strongest action a state can take is to enact a state statute that calls for implementation of CPL in all public two- and four-year institutions. CPL statute can take various forms of specificity depending on the level of institutional autonomy in that state, but the state has a role even in local control constructs. Minimally, every state should have statewide policies that address CPL’s quality and consistency and ideally make implementation mandatory at each public institution. States that operate in a local control environment can determine the specifics on an institutional basis, within the parameters of state statute. Each institution can cater to its learners within common guidelines that ensure consistency in access to high-quality opportunities. CPL has proven impactful; with state support and scaling, the impact on learners can only expand with state involvement.

State leaders must also incorporate CPL as part of the statewide priorities to motivate stakeholders at each level to support and advance implementation. Advance CTE recommends the following three ways that a state can support CPL, aside from statute:

1. Visible state leaders, such as State CTE Directors, governors and state higher education officials, should elevate CPL to be part of the conversation around education and workforce development. Especially as they create statewide attainment goals, states have an opportunity to incorporate CPL as part of a broader postsecondary strategy to engage more learners in successful completion of postsecondary credentials.

2. The state should lead the efforts to publicize what CPL opportunities exist. Instead of the postsecondary system, or each individual institution, being tasked with marketing CPL, a cohesive communications initiative can come from the state level. To maximize participation, there should be a statewide website or portal that clearly advises and explains the ways in which learners can earn CPL across the array of postsecondary institutions in a state.

3. The state should facilitate coordination among the state, system and institutional levels in how CPL policies are developed and implemented. A lack of consistency means that transfer of CPL academic credits is not guaranteed. It also can make understanding the opportunities for academic credit that are available confusing for learners. Coordination can mean anything from regular meetings between the relevant individuals at each level to see how practices differ and attempt to find a common policy to collaboration in developing these practices. The goal is to maximize portability of both prior experiences and accompanying academic credit.
ACKNOWLEDGMENTS

Advance CTE would like to thank the following individuals for contribution to this research: Samantha Christy-Dangermond, Associate Director, Academic Affairs, Kansas Board of Regents; René Cintrón, Chief Academic Affairs Officer, Louisiana Community & Technical College System; Todd Estes, Director, Career Education Programs & Workforce Partnerships, Virginia Community College System; Casey Haugner Wrenn, Assistant Commissioner, Division of College, Career and Technical Education, Tennessee Department of Education; Katherine Hughes, independent consultant; Jeralyn Jargo, State Director, CTE, Minnesota State Colleges & Universities; Michael Macklin, Associate Vice President for Workforce Development, Colorado Community College System; and Susan Moyer, Credit for Prior Learning Coordinator, Virginia Community College System.

TheJoyceFoundation  This resource was developed through a grant from the Joyce Foundation.
ENDNOTES
4. ACE is a higher education membership organization representing more than 1,700 college and university presidents from all types of accredited, degree-granting institutions in the United States. ACE established the College Credit Recommendation Service in 1974 to help students earn academic credit for learning and training outside of traditional degree programs.
13. https://clep.collegeboard.org/about-clep/key-exam-information
18. https://news.tcc.edu/odu-technical-studies-agreement/
21. http://www2.acenet.edu/credit/?fuseaction=browse.main
24. https://placredit.com/#/home