



THE PLA BOOST

Results from a 72-Institution Targeted Study of Prior Learning Assessment and Adult Student Outcomes

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The Western Interstate Commission for Higher Education (WICHE) received funding from Lumina Foundation and Strada Education Network from 2018-2020 to partner with several organizations to conduct original research and a broad landscape analysis focused on policy and practice issues related to the recognition of prior learning. The landscape analysis focuses on issues arising in the practice of the recognition of prior learning, policies that encourage or limit its adoption, and key research needs and future directions for the field. One of the research projects was conducted in partnership with the Council for Adult and Experiential Learning (CAEL), examining the use and impact of prior learning assessment (PLA) on adult student outcomes at 72 postsecondary institutions. This work resulted in this report.

The entire landscape initiative produced a series of briefs, reports, and actionable toolkits that can be found here: wiche.edu/recognition-of-learning.

This report and the various auxiliary documents—Executive Summary, appendices, and one-pager—can also be found at www.cael.org/pla-impact.

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All appendices, including the technical report, and other related materials can be found at the CAEL and WICHE websites: www.cael.org/pla-impact and wiche.edu/recognition-of-learning.

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Foreword

Prior learning assessment has a past, present, and future: 2010, 2020, 2030. People have always acquired learning from multiple sources—school, work, military, travel, self-study, and community and volunteer service. And long before learning was packaged into credentials awarded primarily by schools (K-12, colleges and universities, and specialty institutions), there were many ways of assessing, verifying, and even licensing that learning. Historically, that occurred for many skilled workers through quilds: Groups of workers set and maintained standards, and new entrants apprenticed to learn various crafts. The fields of knowledge were insular: Master weavers taught apprentices how to weave, master carpenters trained their charges in that craft, and so forth.

As educational systems evolved into more structured, complex organizations, they became somewhat insular as well—not so much within specific areas of knowledge, but as institutions. Though an institution might offer learning opportunities in many fields, it would limit students' opportunities to demonstrate any learning acquired outside the academy. Individuals were required to move through the academy mostly in lockstep, even if that meant they were sitting in classes where they had already mastered the learning competencies through other means.

I witnessed firsthand what this meant for individuals when I began my professional career. As an advisor at University Without Walls-University of Minnesota, I worked with 30 students who had acquired learning from outside sources and wanted to acquire new learning needed for the bachelor's degree. I helped them document that learning and determine what additional resources would help them complete the degree. The completed portfolio (PLA and coursework) was presented to a faculty committee, which decided if the student met the requirements for the degree. I also served as assessment specialist at Metropolitan State University in St. Paul, then a new upper-division university designed, in part, to recognize PLA for individuals who had acquired learning elsewhere. A chief concern of our assessment team was recency: If a student presented learning acquired 30 years earlier, which some did, did that learning still count for college credit without a current assessment?

Many lessons learned from PLA in the 1970s have stayed with me through decades of work in postsecondary education. I hoped our systems would evolve to enable learners to have their prior learning recognized at all colleges and universities, but that has not happened. Many adult students are still required to repeat (and pay for) courses they've already mastered. Paths to degree completion have been slowed, no doubt causing many students to give up and drop out.

Soon after I arrived at Lumina Foundation nearly 15 years ago, we adopted our goal that 60% of Americans should hold a degree, certificate, or other quality credential by 2025. To reach that goal, we knew that adult learners would have to be a major focus. And we knew that PLA would have to be embedded in any effective adult learner strategy.

So, we began asking questions: What data existed about PLA? How many institutions offered it? How many students participated and were earning academic credit? Was earning PLA credit helping students complete degrees?

Very little data was available to help us answer these questions. So we supported then ground-breaking research to answer PLA questions. CAEL conducted the baseline study. Its 2010 report, Fueling the Race to Postsecondary Success, garnered significant attention. The study showed that students with PLA credit were two and a half times more likely to complete baccalaureate degrees. The report also raised awareness of PLA, and we witnessed a growing commitment to PLA on many fronts—colleges and universities, foundations, policymakers, and government agencies. CAEL heard from many institutions that the findings from Fueling the Race were influential in advancing PLA with faculty and administrators. CAEL saw record attendance at its trainings and conferences, with many first-time attendees interested in learning more about PLA. Numerous states developed systemwide PLA policies (e.g., Tennessee, Ohio, Oregon, Washington, Utah, Idaho, Pennsylvania, Texas through the A&M system, Montana, and Colorado). Many states cited the Fueling the Race findings as





an important reason for the state to encourage more institutions to offer PLA. One state (Indiana) passed legislation to ensure that state financial aid would cover PLA-related assessments.

On the federal level, the U.S. Department of Labor required grantees in its \$1.9 billion TAACCCT program (Trade Adjustment Assistance Community College and Career Training) to increase the ability of community colleges to include PLA in initiatives to address the challenges of the workforce; and the U.S. Department of Education established an experimental site to test ways to use Title IV funding for PLA.

In short, the decade paid much welcome attention to adult learners and PLA. So it made sense to ask again: What has happened to PLA 10 years after the baseline research?

Recently, Lumina Foundation and Strada Education Network joined forces to support new research. WICHE and CAEL partnered to update the original study, especially to include more community colleges than were included 10 years ago; and to assess the landscape of PLA by commissioning a series of briefs on key aspects.

We are pleased to share this report and the briefs from this work. On the whole, the results from the 2020 study of PLA strongly reinforce the main takeaway from 10 years ago: PLA does boost credential completion rates for adult students. This positive effect is still evident for all student subgroups, regardless of race, ethnicity, income level, institutional sector, and many other categories.

This is good news, and frankly, not surprising, because we have always sensed that PLA makes a difference though we lacked good data to prove it.

But there are also many cautions in the news. For example, PLA take-up rates in the current study's sample were far lower, with only 11% of adult students in the new sample earning credit through PLA, compared to 25% of such students in the 2010 sample. Though there are several possible reasons for this which are shared in the report and the series of briefs, we're worried. Other studies have found that pick-up rates for PLA are low. The Southern Association of Colleges and Schools Commission on Colleges (SACSCOC) found, for example, that only 4% of students at the responding institutions earned PLA credit. We think we should be doing better—much better—after a decade of attention to PLA.

Which brings us to the future. The 2010 and 2020 studies reveal that even when PLA usage is low, the effect on adult student completion can still be substantial. Knowing that PLA can significantly increase credential completion, what is our responsibility?

Clearly, we must renew—and intensify—our call to action. This new research comes in the midst of a pandemic-caused recession, bringing the unheralded opportunity to design a "new normal" in our learning and workforce systems. We have the opportunity to build better systems—and we must.

We cannot afford to watch another decade pass while this warning message flashes before us: PLA works, but there aren't that many people who benefit from it. Let's take the lessons learned from this report and series of 12 briefs in this amazing body of work, and let's commit to helping students move expeditiously toward credential completion with their prior learning assessed and verified using the growing number of assessment tools available. Let's expand PLA services at every college and university in the nation, and let's raise our 8-10% take-up rate for students to 70%.

There is a past and present with PLA. We have the opportunity to build a better future, starting now. 2030 is waiting, impatiently.

Holly Zanville, Ph.D. Strategy Director, Lumina Foundation





Executive Summary

Postsecondary institutions that have focused on adult learners have developed a number of strategies and programs to help put learning and credentials within reach. One important strategy is ensuring that adults are not wasting time and money by taking courses in subjects that they have already learned. Adult students—whether just starting college or returning after stopping or dropping out—often have significant college-level learning they have acquired outside of academia. Postsecondary institutions have the option to evaluate that learning for the purpose of awarding credit or otherwise recognizing the learning so that it can count toward a postsecondary degree or other credential. The methods that colleges use to evaluate this learning are typically referred to with terms like prior learning assessment (PLA), credit for prior learning (CPL), or recognition of learning. (See box for specific PLA methods used by postsecondary institutions.) An important question is whether earning credit through PLA makes a difference for the adult student in terms of their ability to complete a postsecondary credential.

In theory, a combination of benefits from PLA—cost savings, time savings, credit accumulation, improved motivation and validation—help propel these students toward graduation. CAEL and the Western Interstate Commission for Higher Education (WICHE) jointly embarked on this new study funded by Lumina Foundation and Strada Education Network to examine the impact of PLA on adult student educational outcomes. A primary focus of the analysis was credential completion; examined credentials included bachelor's degrees, associate degrees and certificates.

This study examined data provided by 72 postsecondary institutions about the enrollment, credit-earning, and degree-earning of more than 465,000 students of all ages, focusing in particular on more than 232,000 adult learners (defined as students age 25 and older) from 69 of the participating institutions that were able to provide the most detailed data on PLA credit-earning. Academic record data was provided for the period between the academic year 2011-2012 and the end of 2018, a sevenand-a-half-year period. Because adults students with credit for military training make up a large percentage of the PLA credit-earners in the sample, the findings for all PLA credit-earners including military credit (group name: PLA) are frequently presented alongside results for students earning PLA from methods other than American Council on Education (ACE) credit recommendations for military training and occupations (group name: PLA-nonmilitary). (See box for specific methods of PLA included in the analysis.)

Methods of PLA

- Standardized exams (e.g., CLEP exams through the College Board, DSST military exams through Prometric, UExcel exams through Excelsior College)
- Challenge or departmental exams
- · Portfolio assessment
- Credit for military training (typically through American Council on Education, or ACE, credit recommendations)
- Credit for corporate or other external training (typically through ACE or National College Credit Recommendation Service, or NCCRS, credit recommendations)
- Institutional review of external training, licenses, or certifications.

High school exams (Advanced Placement and International Baccalaureate, "AP/IB") are another alternative credit-earning tool. They are sometimes included in the larger definition of PLA but, because they are not available to most returning adult students, are not the focus of this report.

Key Findingsⁱ

About one in ten (11%) of the entering adult students in the study's sample earned PLA credit. The number was dominated by students with credit earned through ACE credit recommendation for military training and occupations. The average number of PLA credits earned per student equaled a half-year or more of full-time study.

- PLA take-up (the share of students who earned PLA credit) for adult students at the participating study institutions was 11%, dropping to 4% among adult students with PLA credit from any source other than ACE credit recommendations for military training and occupations. Although there are no official benchmarks or standards, the overall take-up rate for our sample was much lower than the 25% take-up rate found at the institutions participating in CAEL's 2010 Fueling the Race to Postsecondary Success study."
- Adult students enrolled at two-year public institutions (community) and technical colleges) had the lowest take-up rates: 4% for PLA and 2% for PLA-non-military.
- Hispanic and White adult students were both more likely to have PLA than Black and American Indian/Alaska Native adult students; Asian students were also more likely to have PLA than Black students (among the 53% of the adult students for which race/ethnicity was reported)."
- Female adult students were less likely to earn PLA credits than male adult students, but the differences narrowed considerably when looking at PLA-non-military credits.
- · Adult students with relatively higher socioeconomic levels (non-Pell Grant recipients and students living in neighborhoods with lower concentrations of low-income individuals) were more likely to have PLA credit than adult students with lower socioeconomic status (SES).
- The average number of PLA credits earned at the participating institutions was 23.8 credits, dropping to 17.1 credits when excluding ACE credit recommendations for military. Across most student subgroups and institutional categories, the average number of PLA credits earned was equal to or greater than a half-year of full-time study.

PLA is indeed associated with better student outcomes. These included higher credential completion, cost savings, and time savings.

PLA students were more likely to complete college credentials than non-PLA students—this was true for adult students of all races, ethnicities, and income levels. The 24,512 adult students who earned PLA credits had a credential completion rate of 49% over the seven-and-a-half-year observation period, compared to 27% among adult students with no PLA credits. Credential completion was even higher (73%) for adult students with PLA credit from methods other than ACE credit recommendations for military (Figure A). The completion rate includes completion of bachelor's degrees, associate degrees, and certificates.





All comparisons described in the text of the executive summary report are statistically significant (p<.05). In the completion analysis, significance testing focused on comparisons of non-PLA to PLA adult students only.

The outcomes for this study differ somewhat from the results of the 2010 Fueling the Race to Postsecondary Success study due to differences in the specific cohort of institutions participating in each study. The main finding, that adult students with PLA credit are more likely to complete credentials, remains the same.

However, the results were not statistically significant for Native Hawai'ian/Other Pacific Islander compared to Hispanic/White.

QUICK DATA

Adult students credential completion rates:

49%

27%

With PLA

Without PLA

The PLA boost for adult student completion when controlling for other factors (PSM effect size):

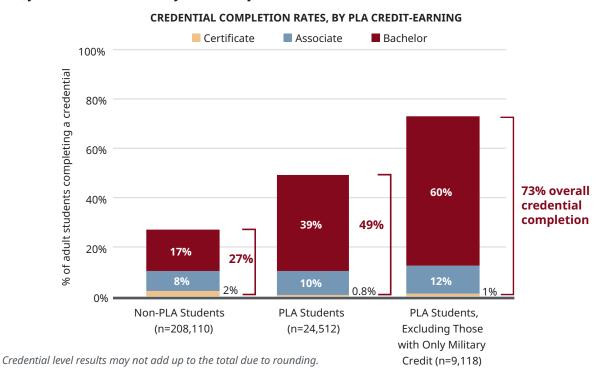
methods

Methods that were not ACE credit recommendations for military

Using propensity score matching to isolate the impact on credential completion from PLA alone, we found that PLA increased the likelihood of an adult student's completion by more than 17% (30% for adult students using PLA methods other than ACE credit recommendations for military). The impact of PLA on credential completion was also significant for students who were Hispanic (24% improvement in completion with PLA, and 32% with PLA-non-military), Black (14% improvement with PLA and 28% from PLA-non-military), community college students (25% improvement with PLA and 36% with PLAnon-military), students at minority-serving institutions (MSIs) (33% improvement with PLA and 42% improvement with PLA-non-military), and Pell Grant recipients (19% improvement with PLA and 33% with PLAnon-military) (Table A). *Note that these effect sizes are quite large relative to* standards established by the Institute of Education Sciences; an explanation of the relative strength of the PLA effect sizes can be found in Appendix A.

Across all of the major student subgroups analyzed, there were significantly higher rates of completing any credential for adult PLA students compared with adult non-PLA students. The subgroups studied included gender, age, race/ethnicity, socioeconomic status, academic performance, and types of institutions.

Figure A. Adult students with PLA credits had higher overall credential completion, compared to adult students without PLA, from 2011-2012 academic year to end of 2018.



¹ The propensity score methodology, which is designed to remove concerns about selection bias in examining PLA outcomes, is described in the main report and discussed in greater detail in Appendix A.



Table A. Propensity score matching analysis shows that there was strong positive PLA effect on credential completion for all student and institutional subgroups at the participating institutions, and that effect increased when examining credit from PLA-non-military methods

	PLA effect size (SE)	PLA-non-military effect size (SE)	
Overall	.17 (.005)	0.30 (.007)	
Student-Level Categories			
Student had received one or more Pell Grants	.19 (.007)	.33 (.010)	
Student had not received a Pell Grant	.13 (.007)	.26 (.011)	
Black	.14 (.018)	.28 (.027)	
White	.18 (.012)	.23 (.015)	
Hispanic	.24 (.021)	.32 (.026)	
Institutional Categories			
2-Year Public	.25 (.014)	.36 (.019)	
4-Year Public	.14 (.010)	.20 (.016)	
4-Year Private	.18 (.033)	.18 (.031)	
For-profit	.16 (.006)	Results not significant	
Minority-serving institution (MSI)	.33 (.022)	.42 (.025)	
Not MSI	.16 (.005)	.30 (.008)	

SE=Standard error, which is an indication of the reliability of the mean (measure). A small SE (relative to the reported effect size) is an indication that the mean effect size is a more accurate reflection of the actual population mean. A larger sample size will normally result in a smaller SE. Additional PSM analysis results can be found in Appendix D.

PLA has strong potential to be a tool for closing equity gaps in postsecondary achievement, provided PLA is made more accessible to students who could benefit the most.

As we face an economic crisis that has dislocated many millions of workers, and that has disproportionately affected low-income Hispanic, Black, and Native Americans, one possible response is for the country to invest in reskilling and upskilling of unemployed workers, and preparing those workers for high-demand jobs in growing industries through postsecondary learning and credentials. Our findings suggest that PLA can be an important tool for helping more adult students complete credentials—whether associate degrees, bachelor's degrees, or certificates—by leveraging what they already know from work and life experiences. We are mindful, however, of the fact that inequality in educational

PLA boosted completion rates for adult students of color, low income adult students, and adult students across the academic performance spectrum.

Credit through certain methods of PLA may help close equity gaps, provided that access to these methods is also equitable.

However, in this study, Black and lower income adult students were less likely to have PLA credit than other adult students.



attainment is a pervasive challenge in the U.S., with attainment rates varying significantly for different racial and ethnic groups, income levels, and educational histories. Investigating the equitability of PLA usage and impact was, therefore, an important focus of this study.

We found that credit through certain methods of PLA may help close equity gaps, provided that access to these methods is also equitable. Among the adult students with reported race/ethnicity, PLA adult students of each of the examined race/ethnicity groups had higher completion rates compared to their non-PLA counterparts, with the largest PLA boost to completion for Hispanic students and Black students (Figure B). For example, 40% of Black adult students with PLA credit completed a credential, compared to only 17% of Black adult students without PLA. Overall

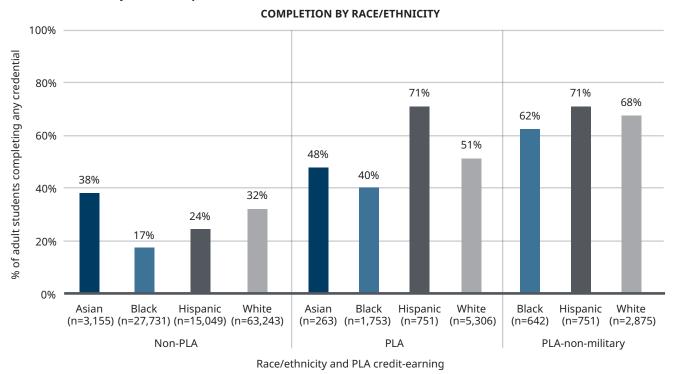
"For us, PLA is a huge component of accessibility and equity. It is an equitable practice that does not discriminate on the basis of how the knowledge and skills were acquired: college-level learning does not necessarily mean college-classroom learning only. Work-related learning and industry expertise can equal college-level learning and providing adults with an opportunity to petition for credit based on these types of learning experiences. It is a practice that removes barriers to higher education."

PLA administrator, 2-year public institution

completion rates were higher for White and Hispanic adult students compared to Black adult students, but those differences narrowed when looking at students with credit from non-military PLA methods.

Lower-income adult students with PLA were also significantly more likely to complete credentials, compared to similar students without PLA. For example, 55% of adult Pell Grant recipients with PLA credit completed a credential, compared to only 27% of adult Pell Grant recipients without PLA.

Figure B. Hispanic, Asian, Black and White adult students had higher overall credential completion with PLA credit compared to similar students without such credit; Hispanic, Black and White adult students had still higher completion with PLA-non-military credit, compared to similar students without such credit†



†Analysis of non-AP/IB and non-military PLA methods for Asian students was not possible due to small sample sizes.



Access to PLA, however, may not be equitable: Black and lower-income adult students in our sample were less likely to have credit from PLA compared to other groups (Table B), suggesting that institutions may need to focus more intentionally on improving PLA usage among Black and lower-income adult students.

Overall, the findings suggest that key adult student populations like Hispanic, Black, and low-income adult students, and adults with relatively less (or less recent) college preparation, could benefit from PLA for improved completion outcomes. However, PLA cannot be a tool for improving equity unless and until measures are carefully put into place to ensure all students have the same access, which would likely require special attention to messaging, outreach, advising, and supports.

Table B. The lowest PLA take-up rates were among adult students who are Black and lower income

	PLA take-up rates	PLA-non-military take-up rates		
All adult students (age 25+)	11%	4%		
Race/ethnicity - U.S. Department of Education method for categorizing†				
Asian	8%	4%		
Black	6%	2%		
Hispanic	8%	5%		
White	8%	4%		
Other/Multiracial (includes all NH/OPI- and AI/AN-identifying students)	7%	2%		
Race categories with too few students to be analyzed according to U.S. De	pt of Ed method†			
Native Hawaiʻian/Other Pacific Islander	7%	2%		
American Indian/Alaska Native	6%	3%		
Pell Status				
Student had received one or more Pell Grants	7%	3%		
Student had not received a Pell Grant	16%	6%		
Share of individuals in residential area at or below 200% poverty level				
Less than 15% of residential area at or below 200% poverty level (Proxy for high SES)	14%	7%		
Between 15 and 30% of residential area	12%	5%		
Between 30 and 45% of residential area	10%	3%		
Between 45 and 60% of residential area	8%	3%		
More than 60% of residential area is at or below 200% poverty level (Proxy for low SES)	7%	3%		

[†] Based on the 53% of the adult students in the sample whose race/ethnicity was reported. The PLA take-up rates by race-ethnicity therefore are different from the PLA take-up rates for the entire sample. For an explanation of how students were categorized by race/ ethnicity, please see note to Table 3 in the main report, or Appendix A.

Adult students saved time and money from earning PLA credit.

Cost Savings: The adult students in our sample saved an estimated average cost of:

- \$2,244 at 2-year public institutions
- \$4,829 at 4-year publics
- \$11,587 at 4-year private nonprofits, and
- \$7,067 at for-profits

For comparison, The College Board estimated the average annual tuition and fees in 2018 to be \$3,700 at 2-year public institutions, \$10,390 at 4-year public institutions, and more than \$36,000 at 4-year private nonprofit institutions.

PLA SAVES MONEY

\$2,200 to \$11,600

Estimated adult student savings through PLA, depending on sector

PLA SAVES TIME

7 to 12 Months

Estimated adult student time savings in earning degrees, with 12 or more PLA credits

Time Savings: When earning at least 12 PLA credits, associate degree earners at 2-year public institutions saved an average of 12 months in earning their degrees; and bachelor's degree earners saved more than 7 months, compared to similar students with no PLA credit.

Because PLA students were more likely to persist and complete, they earned more credits through regular course-taking at their institutions than non-PLA students.

Adult students with PLA earned, on average, 17.6 more traditional course credits than the adult students without PLA credit. In other words, on average, institutions earned roughly a full-time semester's worth of additional tuition revenue from adult students with PLA compared to adult students without PLA.

Adult students with PLA credit had higher completion rates, for any PLA method used

For the adult PLA credit-earners in our sample, the most common PLA methods were credits through ACE credit recommendations for military (68%), standardized exams (22%), and credit for certifications and licenses (7.5%). Credential completion rates for adult students for all non-military PLA methods ranged from 65% to 80%. Credential completion for those with PLA military credits were higher than for non-PLA students (35% and 27%, respectively), but not as high as for the other PLA methods.

Veterans and other service members had high PLA use, along with a significant completion benefit.

PLA shows great promise as a completion tool for veterans and other service members. The service members in our sample had very high PLA take-up rates (43%), compared to 3% of non-service members, and service members with PLA credit had higher credential completion (35%) compared to service members without PLA credit (21%). Compared with non-service member PLA-earners, service members with PLA credit had higher average numbers of PLA credits and lower completion rates.

INSTITUTIONAL BENEFITS

Institutions also benefitted from PLA—on average, PLA students took 17.6 more course credits than non-PLA students.



Our sample cohort matriculated in 2011-2012, when there were mass discharges from the military, a lack of available jobs that spurred many veterans (and many others) to go to college, large numbers of veterans enrolling with new GI Bill benefits, a lack of guidance for the newly-discharged on where to enroll and what to study, and institutions that may not yet have fully understood how to support students transitioning from the military. In this context, the veterans in our sample may have had expanded access to PLA, possibly because at that time public officials were encouraging colleges and universities to recognize the learning from—and award credit for—military training and occupations (two states had legislation to that effect by early 2012).

The high PLA take-up rates for service members suggest that when adult students know about PLA opportunities, when institutions have an interest in encouraging the awarding of PLA credits, and when the awarding of credit for prior learning has a simple process (like ACE credit recommendations for military), more students can earn credit through PLA. In other words, the overall average take-up rate of 11% in our sample may be a lot lower than what should ultimately be possible.

What Has Changed in Ten Years?

Compared to the results from ten years ago, the findings from this study of a broader spectrum of institutions still show a significant PLA "boost" to credential completion, evident for all student subgroups, including race, ethnicity, income level, institutional sector, and many other categories. Building on this finding, this more recent examination of PLA provides even stronger evidence by incorporating a statistical modeling approach that isolates the impact of PLA, while controlling for many demographic and academic characteristics as well as various institutional environments. Where this study's results differ from the one from ten years ago is in PLA take-up rates. The participating institutions in this study had lower PLA take-up rates, with only 11% of all adult students in the sample earning credit through PLA, compared to 25% of the adult students at the participating institutions in the 2010 sample. Taken together, both of these studies provide consistently positive evidence about PLA, and they provide information about PLA deployed within a range of contexts, even if in research terms neither study is generalizable to the universe of postsecondary education.

Recommendations

The findings from this study point to a number of recommendations for higher education, workforce development, public policy, and future research.

To Promote Equity

The findings from this research study show strong effects from PLA on completion for every student sub-group. PLA has great potential to be a tool for improving equity in educational attainment, but it cannot fulfill that promise if key student subgroups—particularly Black adult students and low-income students—are not utilizing it to a sufficient degree. In this study, both Black and lower-income adult students had significantly higher rates of credential completion when they had earned PLA credit. Yet, these students also had lower PLA take-up rates than other adult student groups. To ensure that PLA programs close opportunity gaps among students, institutions should:

• Ensure institutional data systems can and do link PLA credit, student demographics, and student outcomes, so that institutions can better understand how well PLA is serving key student populations—whether students of color, student parents, or student veterans. Not all institutions have established systems for tracking and reporting on PLA usage, even though existing data systems can be employed to do so (Klein-Collins, 2016). Institutions must establish systems and processes for tracking information on PLA credit-earning, and they must regularly analyze programs to assess the equitability of student access to PLA as well as student outcomes. If key populations, such as Black adult students, are not using PLA, the institution should investigate why and make changes to reach those students better. Similarly, if key populations, such as service members, have lower completion rates—whether with or without PLA credit—institutions should address how the success of those student groups might be improved.



- Target PLA marketing and advising efforts to student populations with completion and opportunity gaps. Institutions need to ensure their marketing and outreach strategies are not merely inclusive of all students, but also intentional in their focus on reaching those from underrepresented backgrounds, as part of an overall strategy to improve PLA usage by these groups. Institutions need to make PLA a mandatory component of adult student advising, with special strategies for encouraging key populations to pursue PLA options. For example, previous research has found that PLA administrators often encourage Spanish-speakers to pursue Spanish CLEP credit (Klein-Collins & Olson, 2014), which could be one reason why Hispanic adult students in our sample had higher PLA take-up rates, compared with the Black or American Indian/Alaska Native adult students. More proactive advising to discover work-related skills and knowledge for other groups could have a positive effect on PLA usage by other groups.
- Assess the institutional business case for scaled PLA offerings at low or no cost to the student. The data presented here show that students who earn PLA credit also take and complete more courses at their institution. The data also show that students receiving Pell Grants were less likely to receive PLA, suggesting that one barrier to PLA usage could be the additional cost to the student from PLA fees. Institutions might consider developing creative funding strategies to provide PLA opportunities to low-income students with an expectation that the institution could recoup costs through better retention and higher completion.

To Scale PLA Usage through Institutional Policies, Practices, and Partnerships

Given the strong, positive impact from PLA for students and institutions, scaling PLA usage should be a priority. To scale PLA usage, institutions should:

 Make sure that PLA options are available and promoted as a **key part of all credential programs.** Institutions should make sure PLA is able to be applied across all programs of study (e.g., degrees, certificates) and part of their overall adult learner marketing strategies. They can leverage data analytics to ensure their website is successful promoting PLA and provide information about the benefits of PLA during recruitment events.

"If a college doesn't have someone like the team that [I had] to help walk them through [PLA], they certainly need it. There are so many people out there who just need that little extra boost and this is the thing that helps it out."

Adult learner

- Embed PLA into all aspects of the student lifecycle, with faculty as key partners. Students should hear about PLA early in their enrollment and multiple times thereafter. Advisors and faculty (who also have an important advisory role) who are aware of PLA and what the options and benefits are can help students take advantage of it.
- Ensure availability of multiple methods of PLA and expand the range of coursework for which it can be applied. The vast majority of the PLA credit-earners in our sample used only one method of PLA. Students are possibly leaving credits on the table if they are not encouraged to explore whether other methods of PLA credit-earning could help them get closer to completion. When advising adult students about PLA, institutions should consider helping students use a combination of PLA methods. Institutions should also examine their internal policies to determine if they need to implement additional methods of PLA and to see whether PLA can be used for a broader set of courses and programs.
- Establish policies to accept PLA credits awarded by other accredited institutions. When students move between and among different postsecondary institutions, there is often risk of students not having all of their previous course credits accepted by the receiving institution. This can be particularly problematic for PLA credits that are listed on a student's transcript. Institutions should ensure that their transfer credit policies have clear guidelines for how to evaluate credits awarded by other institutions through PLA methods, and these guidelines should not treat PLA credits as "lesser" in value, compared to other transcripted learning.



- Engage employers in the PLA enterprise. An institution's partnerships with employers could help to expand uses for PLA. Employers will find it appealing to know that the skills their workers have developed on the job could count towards postsecondary credential programs, helping to save on tuition costs and time spent in the classroom. This speaks directly to employers' bottom line if that employer is providing tuition assistance or is needing for employees to accelerate their completion of certain credentials.
- Invest in making their PLA programs robust. Institutions need to train faculty and staff and provide appropriate staffing support and other tools to help in the advisement of students on PLA and to provide oversight and improvements to PLA programs.
- · Institutions should join with other postsecondary institutions and workforce development boards to build partnerships to scale PLA options and capacity. Institutions should collaborate with each other, connect with national organizations such as CAEL and WICHE that have produced best practice research, and seek out new models and practices from others writing or speaking about their lessons from and successes with PLA. Peer learning options include CAEL's membership community and the Prior Learning Assessment Network (PLAN), facilitated by SUNY-Empire State College.

To Build Support for PLA at the Institutional Level

To build buy-in for PLA programs across the institution (administration, staff, and faculty), institutions should:

- Include PLA as part of the strategic planning at the institution. By including PLA in the strategic plan, it becomes part of the institution's culture and shared priority. Institutional leadership, faculty, and staff will also have benchmarks to work toward. Provide evidence such as the results from this study of the student and institutional benefit, for building the business and academic learning case for PLA.
- Collaborate with other departments across campus to develop and implement PLA programs. Even prior to Spring 2020, institutions in this study reported that their PLA offices were not likely to have many FTE and were often constrained by small budgets and minimal staff support. By collaborating across the campus, PLA administrators can expand support for PLA by making it a shared priority.
- "I was very excited when I saw that the information that I had was credible and that it was noted as college material. And I think that it boosts anybody's self-esteem if you know that you've done a job and, yes, you have learned aspects that can be utilized as college credential."
- Adult learner
- Work with faculty to garner buy-in. PLA staff can educate and engage faculty through trainings, professional development, and discussions. PLA programs can gain buy-in from faculty by highlighting student successes and providing evidence such as from this study. Effective data systems that track PLA and student outcomes can help address faculty questions and concerns.
- Ensure quality assurance. It is essential that an institution's PLA program be grounded in high-quality practices for learning evaluations and assessments. For example, CAEL's standards for assessing learning stipulate that college credits should never be awarded based on a student's description of their work experiences alone, and assessments of learning need to be conducted by experts in the particular field for which credit is to be granted (Younger & Marienau, 2017). Institutions need to establish and adhere to clear processes, procedures, and oversight, as would be required for any other academic process.
- Conduct ongoing, systematic program evaluations. PLA coordinators can connect with institutional researchers to evaluate effectiveness of advising and outreach in promoting PLA usage, as well as student outcomes for individuals with PLA credits. In addition to analyzing data from institutional research shops, institutions should get feedback from students themselves on the ease of access to PLA as well as the value of PLA for understanding their own learning and for their overall academic success.





To Improve System, State, and Federal Policies

There are several potential policy and practice adjustments that can also boost usage of PLA:

- System leaders should encourage consistent PLA policies across all institutions. Students should not be faced with different PLA policies and practices within the same system. Leaders should work with institutions to encourage a range of PLA offerings and a harmonization of their policies and practices. In particular, leaders should encourage institutions within the same system should honor and accept each other's PLA credit awards to ensure that no PLA credits are lost due to student transfer.
- Policymakers at the state and federal levels should adjust financial aid models to cover expenses related to the assessment of prior learning. Costs associated with earning PLA credits are not currently covered by federal Title IV financial aid programs or most state financial aid policies (GI Bill benefits do cover the costs of many standardized assessments). This can be a barrier for students, particularly those from low-income backgrounds.
- State and federal policymakers should incent and invest in both colleges and workforce development organizations to expand PLA offerings across all of their programs. Given the current economic impact of COVID-19, there are millions of unemployed Americans who will be looking to reskill and upskill as they navigate a changing economy—while also bringing with them years of skills and knowledge they have acquired from their work

experiences. In workforce development and training investments that are designed to address dislocated workers during this recession, PLA needs to be an important component to use public resources more efficiently and to help workers complete their training more quickly.

To Support Future Directions and Research Needs for the Field

While this research has provided strong evidence of the positive connection between PLA credit-earning and adult student success, the analysis raises many questions for researchers to explore. For example, further study is needed on: past and current experiences of military service members, PLA credit productivity (the extent to which PLA credits that are awarded actually count toward a student's credential), time-savings from PLA using multivariate analysis, effective practices for using PLA as an equity tool, and effective strategies for increasing adult student awareness and usage of PLA, especially for dislocated workers in the pandemic recession who will be bringing learning acquired from the world of work.

"I could only apply for certain amounts of loans, [so] throughout the last two years, I was actually paying some money out of pocket. That was already weighing heavily on me. It was already a struggle throughout the two years trying to pay for tuition. But being able to radically reduce it [with PLA] definitely helped me."

Adult learner

Conclusion

While this report provides clear and compelling evidence that PLA can be an important tool to support adult student credential completion, there is still much work to do. For PLA to have a real impact, PLA can no longer be a best kept secret that adult students hear about through happenstance or word of mouth. Of critical importance is to make sure there is better access to PLA among adult students who have not traditionally had strong access to these programs. Institutions must make concerted efforts to encourage low-income adult students and adult students of color particularly Black adult students—to take advantage of PLA offerings and to understand why their benefit from PLA appears to be lower than that of other students.

At the time of this writing, regions and states are facing tremendous economic challenges in the months and years ahead as they rebuild labor market opportunities for workers dislocated during the pandemic recession. Workforce strategies could be more effective at helping workers reach their goals—and do so quicker and at a lower cost—by incorporating methods that recognize and value what these workers already know and can do.

By assessing learning, recognizing learning, and valuing learning, our postsecondary institutions and workforce agencies will help more learners and workers earn the credentials they need to reach their goals.



Introduction

In her early 20s, "Katrina" was full of hope for her future. As a Hispanic teen mother in a far suburb of Chicago, she had finished her high school diploma through an online program, gotten married, and was enrolled at her local community college with dreams of becoming a registered nurse. But then life got in the way. A divorce made it too challenging to continue with her schooling, so she quit her studies and started working for a forensic drug testing lab, eventually working her way up to the role of business development manager. She has been happy in this job as it has allowed her to still work in the health care industry, but she did not want to give up on getting a degree. More than anything, Katrina wanted to be a role model for her daughter, but she also knew that a degree could mean career advancement and greater earning power. In her late 20s, she enrolled in a flexible online program at a private adult-focused university. She was able to use skills and competencies gained from her work and life experience to earn 19 credits through CLEP exams, prior learning portfolios, and the university's review of the corporate training she received, in subjects ranging from sales to Spanish. She recalls that earning those prior learning credits gave her a boost and made her "more optimistic" about being able to balance family, work, and school. She later said, "Knowing that I had that option [to get credit for what I learned in these experiences] encouraged me to continue on with school. I didn't get discouraged." Katrina completed her bachelor's degree in business management, earning her an immediate salary increase from her current employer while opening up new doors for her in the future. Her employment status has remained stable during the initial months of the pandemic-related economic recession.

Katrina's story is that of a single parent in our pre-pandemic academic world: a student who is well aware of the value of a postsecondary credential, who is juggling her learning with both childcare and work, and who, when enrolling at a postsecondary institution, already had some college-level learning from her work and life experiences. In that world, prior learning assessment (PLA) helped Katrina earn college credit for what she had learned outside of the classroom and propelled her forward to a degree.

We are no longer in that same world: postsecondary learning and the entire global economy have seen enormous disruptions from COVID-19. Our path to economic recovery is far from certain, but it is undoubtedly going to be long. In the economy that emerges in the recovery, many workers will turn to postsecondary learning and credentials to regain a foothold. As reported by the Strada Center for Consumer Insights, 38% of American workers who lost a job or income during the pandemic say they are now more likely to enroll in education or training (2020). This is not surprising. Postsecondary education enrollment has, in the past, been counter-cyclical: when the economy is bad and unemployment high, individuals turn to higher education, and enrollment goes up, particularly part-time enrollment (Long, 2015). Although much is still unknown about how individuals will engage with learning in the recovery, colleges and universities will undoubtedly be planning for, and likely hoping for, an influx of returning adult learners.

This is not to say that adult students are not already present in colleges and universities. According to Lumina Foundation (2019), 37% of undergraduate students are age 25 or older; a majority (64%) work, and 40% of those work full time. Many adult students are balancing educational activities with work and childcare responsibilities; and 6% of all college students serve or have served in the U.S. armed forces (Lumina, 2019). In the near future, many adults enrolling in postsecondary programs are also likely to be in particularly precarious economic circumstances after months of reduced or nonexistent wages during the economic shutdown and its aftermath. Like Katrina, few will have the luxury of being able to take a full-time, weekday course load. Unless postsecondary institutions offer a different kind of higher education experience, many adult learners will have a difficult time persisting, no matter how committed they are to their goals.

Postsecondary institutions that have focused on working adult learners have developed a number of strategies and programs to help put learning and credentials within reach: self-paced learning, competency-based models,

¹ Information or quotes from study interviews are anonymized for confidentiality.

online or blended instruction, and new forms of stackable or micro-credentials. They also have been innovative in addressing affordability and providing support services and advising.

Another important consideration for adult-serving institutions is making sure that adults are not wasting time and money by taking courses in subjects in which they have already acquired the requisite knowledge. Returning adult students—like Katrina—often have acquired a great deal of learning outside of academia: learning acquired from work experience, on-the-job training, formal corporate training, military training, volunteer work, self-study, and other extrainstitutional learning opportunities available through low-cost or no-cost online sources. Colleges and universities have the option to evaluate that learning for the purpose of awarding credit or otherwise recognizing the learning so that it can count toward a degree or credential. The methods that colleges use to evaluate this learning are typically referred to with terms like prior learning assessment (PLA), credit for prior learning (CPL), or recognition of learning.

PLA's Potential. In theory, a combination of benefits from PLA—cost savings, time savings, credit accumulation and improved motivation and validation—help propel these students toward graduation. When students can apply what they already know toward a degree or credential, that can save them money; typically, the fees for assessing prior learning for credit are much lower than full tuition and fees for taking a course outright (Klein-Collins et al., 2015). Students can also save time, provided that their PLA credits reduce the overall number of traditional course credits they need to complete degree or credential requirements. In addition, many college administrators have come to view PLA as having a motivational effect on students: when students' learning is recognized and valued by higher education, students feel validated and more confident in their educational pursuits (See additional information and references in "Previous Research on PLA", page 6.)

But Is PLA's Potential Realized in Adult Student Outcomes? While it's hard to measure "motivation," it is relatively straightforward to see the extent to which students earn PLA credit and then to compare credential completion for two groups of students: those who earn PLA credit and those who do not. In 2010, CAEL published Fueling the Race to Postsecondary Success, a report on the first multi-institutional study of the relationship between prior learning assessment (PLA) and student academic outcomes, finding that, on average, adult students who earned credit through PLA were two-and-a-half times more likely to complete degrees, compared to similar students with no PLA credit.

Last year, CAEL and the Western Interstate Commission for Higher Education (WICHE) jointly embarked on a study funded by Lumina Foundation and Strada Education Network to revisit guestions about the impact of PLA on adult student educational outcomes. This new study examined data provided by 72 postsecondary institutions about the enrollment, credit-earning, and degree-earning of more than 465,000 students of all ages.

What We Found: Yes, PLA is Associated with Better Student Outcomes. Of the 238,760 adult students for whom there were sufficient data for analysis, 11% had earned some credit through one or more PLA methods, and academic outcomes for the PLA credit-earners were better than for those without PLA credit. Specifically, we found the following:

- Higher degree completion for PLA students. The 24,512 adult students (ages 25 and older) who earned PLA credits had a credential completion rate of 49% over the seven-and-a-half-year observation period, compared to 27% of adult students with no PLA credits.² Credential completion was even higher (73%) for adult students with PLA credit from methods other than American Council on Education (ACE) credit recommendations for military. The completion rate includes completion of bachelor's degrees, associate degrees, and certificates.
- Multivariate analysis strengthens the argument for the impact from PLA credit receipt. Using propensity score matching to isolate the impact on credential completion from PLA alone, we found that PLA increased the likelihood of an adult student's completion by more than 17% (30% for adult students using PLA methods other than ACE credit recommendations for military). The impact of PLA on credential completion was also significant for students who were Hispanic (24% improvement in completion with PLA, and 32% with PLA-non-military), Black (14% improvement

²The specific outcomes for this study differ somewhat from the results of the 2010 Fueling the Race to Postsecondary Success study due to differences in the specific cohort of institutions participating in each study. The main finding, that adult students with PLA credit are more likely to complete credentials, remains the same.





with PLA and 28% from PLA-non-military), community college students (25% improvement with PLA and 36% with PLA-non-military), and Pell Grant recipients (19% improvement with PLA and 33% with PLA-non-military).

- Cost Savings: The adult students in our sample saved an estimated average cost of \$2,244 at 2-year public institutions, \$4,829 at 4-year publics, \$11,587 at 4-year privates, and \$7,067 at for-profits.
- Time Savings: When earning at least 12 PLA credits, associate degree earners at 2-year public institutions saved an average of 12 months in earning their degrees, and bachelor's degree earners saved more than seven months, compared to similar students with no PLA credit.
- · Increased traditional course credit earning.

Consistent with adult students with PLA credit being more likely to persist to a degree, they also earned 17.6 more traditional course credits from the institution, on average, compared to non-PLA adult students.

Compared to the results from ten years ago, these findings still show a significant PLA "boost" to credential completion, and that effect from PLA is still evident for all student subgroups, including race, ethnicity, income level, institutional sector, and many other categories. Building on this finding, this more recent examination of PLA incorporates a statistical modeling approach that isolates the impact of PLA, while controlling for many demographic and academic characteristics as well as various institutional environments. This approach also found strong positive PLA effects on credential completion for every subcategory of student examined. Where this study's results differ from the one from ten years ago is in PLA take-up rates. The PLA take-up rates in this study's sample were far lower, with only 11% of all adult students in the sample earning credit through PLA, compared to 25% of the adult students in the 2010 sample. This difference may be explained simply by the fact that different institutions participated in this study versus the one in 2010. While one criterion for institutional selection was the offering of at least two PLA methods in 2011,

"I think PLA is essential. There's huge value for adult learners. We learn so much outside of formal settings, and we learn in formal settings that aren't documented in terms of formal credit."

PLA administrator, 4-year private non-profit institution

MAKING A DIFFERENCE...

increase in completion rate for adult students with PLA credit (propensity score matching effect size)

increase in completion rate for adult students with credit from PLA methods other than ACE credit recommendations for military (PSM effect size)

...BUT ONLY

of our adult student sample used PLA

Even lower usage by: adults at two-year public institutions, black adult students, and low income adult students

63% of the participating institutions indicated that their PLA offerings became more beneficial to students between 2011 and 2019 (possibly in the wake of the positive findings from *Fueling the Race).* It is possible that those enhancements were not implemented in time to make PLA more accessible to the adult student cohort that is the subject of this study. In addition, 30 2-year public institutions participated in the 2020 study, compared to only seven in 2010; both studies found that PLA usage was very low at the 2-year public institutions examined.

This targeted look at PLA usage and impact at 72 postsecondary institutions shows that PLA has great potential to be an important tool for helping adult students complete

postsecondary credentials. And yet, take-up rates for the study sample of adults who matriculated in 2011-2012 were especially low at the participating 2-year public institutions, the institutions where many low-income adult students and adult students of color find their entry to postsecondary learning. Take-up rates were also lower for Black adult students and low-income students in our study cohort. Information provided by the participating institutions also revealed that institutions may not be doing everything they can to inform students about alternate credit-earning opportunities like PLA. Making sure these opportunities are available to all students will be important for helping students reach their education and career goals, as well as for ensuring greater equity in academic attainment for adults overcoming significant personal and structural barriers to success.



Key Research Questions and Approach

The main research questions addressed in this report are the following:

- 1. Are there differences in persistence, degree completion, and time to degree for adult students with prior learning assessment credit compared to those without?
- 2. What are the outcomes for different types of students, particularly for students of different races/ethnicities and for students with transfer credits from other institutions?
- 3. To what extent are differences in completion for PLA students versus non-PLA students attributable to differences in student characteristics or institutional environment?

Following are brief notes on our approach, with full details on methodology and other technical notes provided in Appendix A (all appendices are included in a separate download on the CAEL and WICHE websites, www.cael.org/pla-impact or wiche.edu/recognition-of-learning.

Requirements for participating institutions. Because of the particular focus on students with PLA credit, the selection of institutions was focused initially on some basic requirements: most importantly, the institution needed to have offered at least two PLA methods in 2011-2012, it had to have at least 20 students with PLA credit in 2011-2012 (a small number of participating institutions ultimately did not have 20 or more of adult PLA credit-earners in their submitted cohort sample), and it had to have the ability to provide data about PLA credit earning between 2011 and 2018 (not every institution tracks this information well).

The Data. The 72 participating institutions constructed a cohort of all degree-seeking undergraduates who matriculated at their institutions in academic year 2011-2012 and provided deidentified student-level data that included student demographics, course credit earning, developmental education credit earning, PLA credit earning, and credential completion at their institution through the seven-and-a-half-year period ending on December 31, 2018. Most of the institutions were also able to provide data from the National Student Clearinghouse on any enrollment and credential completion by the students at other institutions. The institutions provided self-attested information about their PLA programs, PLA-related policies and practices, and other programs and services they offer to support adult learners. The research team supplemented this data with institutional characteristics in IPEDS, interviews with the PLA administrators at six of the participating institutions, and interviews with six PLA students from four of the participating institutions. Although 72 institutions provided data and other information on their PLA programs to the study, three institutions did not provide sufficiently detailed information about the PLA credits earned. Therefore, while this report's discussion on institutional and adult learner policies and practices includes all 72 institutions, the PLA impact analysis in this report uses data from the 69 institutions that could provide the more detailed data, rather than all 72.

Key Definitions

- Who counts as an adult learner? In recent years, there has been some resistance to the term "adult student" or "adult learner," particularly when defined by age. Instead, some have started using terms like "today's student," "posttraditional learner," or "non-traditional learner" that are more inclusive of students under age 25 who are balancing school with work or family obligations, are financially independent, have dependents, or have served in the military. Yet, unfortunately, we did not have access to detailed information about students' employment, family obligations, or dependents, and few institutions have complete data on the military service histories of their students. Therefore, this report is defining "adult learner" by age. The report provides a summary analysis for all students age 17 and older on page 29, and the analysis of service members includes 17-24-year-olds, but most of this report focuses on adult students defined as age 25 or older.
- What counts as PLA for this report? There are numerous methods for assessing prior learning. The methods most often considered under the umbrella PLA term include high school exams (Advanced Placement and International



Baccalaureate; "AP/IB"), standardized exams (e.g., CLEP through the College Board, DSST military exams through Prometric, UExcel exams through Excelsior College); challenge or academic departmental exams; portfolio assessment; credit for military training (typically through ACE credit recommendations); credit for corporate or other external training (typically through ACE or National College Credit Recommendation Service, or NCCRS, credit recommendations); and institutional review of external training, licenses, or certifications. For the purposes of this study, we asked the participating institutions to provide data about credits earned under each of these categories (attempted assessments for which no credit was earned was not included). We received this data for all degree- or certificate-seeking entering undergraduates, regardless of age. With this data, we were able to provide a robust picture of PLA-credit earning among the study students and institutions. In this report, the two main categories that we investigate for adult students are:

- PLA students, defined as students with PLA credit from any source other than AP/IB credits
- PLA-non-military students, defined as students with PLA credit from sources other than AP/IB or ACE credit recommendations for military training and occupations
- How is AP/IB credit treated for this report? The focus of our research guestions is on the adult learner and credit for college-level learning acquired through prior life or work experience. Since AP/IB credits are for prior academic learning (typically in a traditional high school setting), we treated students with only AP/IB credits (and no other PLA method) as non-PLA students in the main analysis; this affects 561 adults in the sample with only AP/IB credits. There is a brief examination of students with AP/IB credits as well as younger students in a sidebar on page 29.
- What do we know about PLA usage rates ("take-up") from the data we received, and what do we not know? We received data regarding the number of PLA credits earned for any student who had such credit awarded and posted to the student's record, categorized by the PLA methods defined above. We did not receive data about failed PLA attempts (for example, a submitted learning portfolio that did not receive a credit award). Therefore, where we report PLA take-up, the term refers to successful PLA creditearners only and does not include students participating in PLA activities without earning credit.

"I really had to think about things like, what is actually college level learning? ... To me that was kind of a challenge. You know, because to me, a lot of things I know are college level, I'm 35 years old. Like obviously, I've had a lot of experiences in life, but how do you put that into words and then submit that to someone else?"

Adult learner

Limitations

The results presented in this report are subject to several limitations of the data, including: a non-random sample, imperfect representation of all adult students and postsecondary settings, and an inability to control for significant factors that likely play a role in a student's academic success or PLA usage (for example, whether someone was a firstgeneration college student, number of dependents, personal support networks, non-classroom learning experiences including employment history). We did not have detailed information about the specific PLA policies and practices in place at the time of the student's matriculation; thus, we could not determine which specific PLA policies or practices might be helpful for encouraging PLA use. We also did not have information on whether any or all of the PLA credits in the students' records were credits that could be applied to an individual student's credential goal. Some of the PLA credits analyzed in this study, therefore, could be "excess" credits that do not meet a student's specific credit requirements.

In addition, there are some lines of inquiry that would be relevant to the focus on this report, but which we could not undertake because they covered too few students. For example, the sample did not include enough students identifying as Native Hawai'ian/Other Pacific Islander or American Indian/Alaska Native for a separate examination of the effect of PLA on these students' credential completion. For this same reason, for some questions like time to degree we present high level results for the entire sample or by institutional sector only, and not also for different student subgroups.

Tests of significance. All comparisons presented in this report were validated as statistically significant unless otherwise noted; significant comparisons are marked with * where p<0.05.



Previous Research on PLA

In 2010, CAEL conducted the first multi-institutional study of the relationship between prior learning assessment (PLA) credit-earned and student academic outcomes. In Fueling the Race to Postsecondary Success: A 48 Institution Study of Prior Learning Assessment and Student Outcomes, CAEL reported that, on average, adult students who earned credit through PLA at those 48 institutions were two-and-a-half times more likely to complete degrees, compared to similar students with no PLA credit. In addition, PLA credit was positively associated with degree completion at the participating institutions regardless of the student's age, race/ethnicity, gender, and GPA. PLA students also had a shorter time to degree attainment than non-PLA students. There is no "industry standard" for what the ideal PLA take-up rate should be (the proportion of adult students earning PLA credit). At the 48 participating institutions, PLA take-up varied considerably: 4% of adult students at 2-year institutions had PLA credit, 10% at 4-year institutions, 12% at for-profit institutions, 17% at public institutions, and 46% at private non-profit institutions (Klein-Collins, 2010).

Prior research had shown that students who earned credit through PLA had higher persistence rates (Billingham & Travaglini, 1981; Pearson, 2000; Snyder, 1990), higher graduation rates (Freers, 1994), and shorter times to degree attainment for non-traditional students (Hoffman, LeMaster, & Flickinger, 1996; Sargent, 1999). However, this prior research had been limited, with small sample sizes and typically limited to a single institution. The Fueling the Race report demonstrated on a national scale that PLA is strongly correlated to student academic success.

Other research studies focused on other kinds of benefits from PLA. Demonstrated benefits to students included a gain in problem-solving, academic, and organizational skills (Burris, 1997; LeGrow, Sheckley & Kehrhahn, 2002), as well as increased satisfaction, pride, and feelings of accomplishment (as cited in Pearson 2000: Boornazian, 1994; Dagavarian & Walters, 1993; Fisher, 1991; Freers, 1994). One explanation for these benefits is that the exercise of reflecting on one's prior learning helps the student create new learning (discussed more recently in Marienau, 2014).

Since CAEL published Fueling the Race, other researchers have conducted similar studies on PLA:

- One study of four community colleges found that the degree completion rate for students with PLA credit was 28%, more than double (12%) that of students with no PLA credit (Hayward & Williams, 2015).
- The Colorado Community College System found that their students with PLA credit had higher degree completion than those without PLA credit, and that PLA students completed their degrees more quickly (McKay, Cohn, & Kuang, 2016).
- Capella University found that students with PLA credit saved an average of \$4,319 in tuition costs, earned more credit, and completed their degrees at higher rates than non-PLA students (Plumlee & Klein-Collins, 2017; Klein, 2017).

Of concern among many study results is that students of color and students from low-income backgrounds are the least likely group of students to take advantage of PLA opportunities (Klein-Collins, 2010; Klein-Collins & Olson, 2014; Hayward & Williams, 2015; McKay, Cohn, & Kuang, 2016). In recent years, researchers have investigated why this might be. In her international piece, "Recognition of Prior Learning and Social Justice in Higher Education," Wong (2014) reports of the experiences of adults from Myanmar participating in an online, college-level certificate program in partnership with Australian Catholic University, several American Jesuit universities, and York University in Canada. Prior to participating in this program, these students had had no formal postsecondary education but clearly had collegelevel learning gained through such experiences as grant and report writing as part of managing an orphanage or managing the IT needs for a human rights documentation organization. Yet, the researchers found these adult learners





had difficulties completing PLA portfolios because of "cultural inhibitions around making explicit statements of personal accomplishments" (Wihak and Bourassa, 2013 as cited in Wong 2014). SUNY Empire State College faculty researchers heard from students who participated in their women-of-color PLA workshop series give reasons why they don't attempt to earn PLA: "Students reported that they routinely experience a range of microaggressions both within and outside our own academic setting, most often connected to race, but sometimes also to gender. Moreover, they noted that their experience with microaggressions affected their ability to value their knowledge and, even when they did value it, to submit it to institutional authority, and the threat of invalidation, through the PLA process" (Leaker & Boyce, 2015, p. 202). In their study of Latino students, PLA, and student outcomes, Klein-Collins and Olson (2014) found that the marketing of PLA opportunities with messages such as "prove what you know" and "demonstrate what you have learned" can be a hurdle for students "who are worried they do not belong in college" (p. 4). These reasons are not unique to PLA programs; rather these access issues are representative of systemic racism that has been prevalent in higher education for a long time.





Our Sample: The Students and the Participating Institutions

The goal for this study was to include students enrolled at a range of institutions that offered PLA opportunities. As noted earlier, the institutions selected to participate in this study self-nominated and were screened to meet minimum criteria for PLA offerings and number of PLA students.

In this section, we provide an overview of the 232,752 adult students enrolled at the 69 institutions that provided data for the student-level analysis.³

Select results for students under age 25 and for AP/IB creditearners are provided on page 29.

Student Demographics

- · Adult students from all major institutional sectors are included in the analysis, with particularly strong representation of for-profits due to the large size of their student populations. Twenty-four (24) percent of the adult students in this sample were enrolled at the 30 2-year publics, 16% at the 23 4-year publics, 7% at the 12 4-year private non-profits, and 53% at the four for-profits (Figure 1). Acknowledging that the results are dominated by a few of the larger online and/or for-profit institutions, we present most of our findings disaggregated by sector and by whether the institution was predominantly online.
- The adult student sample was racially/ethnically diverse. Comprehensive race/ethnicity data were provided for 127,402 (53%) of the adult students in our sample; a very small subset of institutions was not able to provide these data, but this accounts for a large number of students. Of the adult students whose race/ethnicity was known, just over half of the adult students (56%) were White, 24% were Black, 13% were Hispanic, 3% were Asian, 0.9% were American Indian/Alaska Native, 0.7% were Native Hawai'ian/Other Pacific Islander, and 1.5% were Multiracial (two or more race groups, non-Hispanic). *Note: we do not separately report out credential* completion rates for the three smallest race/ethnicity groups because there were too few students in the various reporting categories.
- Almost two-thirds (60%) of the adult students were female.
- Service members were a minority of the adult students (16%), but they were a majority of the PLA students. 63% of all PLA credit-earners had credit through ACE credit recommendations for

military training or occupations. *Because students* with military credit may be skewing results in the sample, our findings for PLA credit-earners are frequently presented alongside results for students without ACE credit for military.

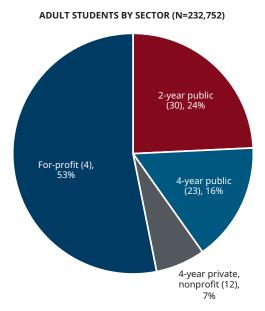


Figure 1. Sector distribution of adult students

in the study sample (number of participating

institutions in that sector)

See page 51 for an in-depth look at military service members and PLA

• A majority of the adult students were of lower-socioeconomic status (SES). This study did not have access to data on the household income or wealth of the students in the sample, but proxies for SES exist. One proxy is whether the students had ever received a Pell Grant (need-based financial aid for students from low-income families);

³ The total number of adult students included in the PLA analysis was 232,622 due to 130 adult students with insufficient PLA data.

• 60% of the adult student sample had received one or more Pell Grant. Since some students opt not to apply for federal financial aid, we also used American Community Survey data from the U.S. Census to approximate a "community" SES indicator related to student's reported residential zip code (see additional explanatory notes in Appendix A). At the time of matriculation, almost one-quarter (24%) of the adult students were living in communities where 45% or more of the individuals had incomes within 200% of the poverty rate.

Additional details on the adult learners in our sample are provided in Appendix B.

Characteristics, Policies, and Practices of **Participating Institutions**

This study used a sample that was limited in number and targeted to institutions which had minimum PLA offerings, and correspondingly, were presumably serving adult students who could benefit from PLA. The following summarizes the extent to which this sample relates to the broader spectrum of higher education institutions and particular contexts. We compared the PLA Impact Study Cohort with two formulations of U.S. higher education institutions: (1) all U.S. degree-granting institutions in

Adult students with reported race/ ethnicity identified as:

Black

Hispanic

Adult student in this study also identified as:

60% 16%

Service member *(current or former)*

60% had received at least one Pell Grant, indicating lower-income individual

2011-12, and (2) U.S. degree-granting institutions that are relevant to the topic of PLA because in 2011-12 they were open-access, or relatively so, and enrolled at or above the sector average rate of adult students. The latter subset is referred to as U.S. degree-granting "adult concentrated" institutions. Detailed comparisons are in Appendix C.⁴

- The public institutions in the cohort had, on average, a relatively lower percentage of adult students than the comparative subset of adult-concentrated U.S. degree-granting institutions in 2011-12.
- The cohort contains a larger proportion of students attending **primarily or exclusively online institutions** than a comparative subset of adult-concentrated U.S. degree-granting institutions.
- The adult students who did not attend one of the primarily or exclusively online participating institutions (i.e., were with more brick-and-mortar institutions) were more likely to be with an institution in the West or Northeast. In other words, adult-concentrated institutions and their students in the South and Midwest are not as well reflected by this study cohort.
- Precisely comparing the PLA study cohort to other institutions given nuances of IPEDS data was not possible, but there is some indication that the adult students in the study were less likely to attend part time than was average among adult students at the adult-concentrated segment of U.S. degree-granting institutions. On the other hand, overall, the study institutions were quite similar to the comparative adult-concentrated institutions in that roughly a third of their undergraduates were 25 or over and enrolled part time.
- The study institutions' entering undergraduate students were comparable in terms of race/ethnicity to the subset of adult-concentrated U.S. degree-granting institutions (although given the strong representation of institutions from the West, there is slight skew toward students identified as Hispanic⁵, Asian, Native Hawai'ian/Other Pacific Islander and American Indian/Alaska Native).

Of course, when one looks by sector, there is more variation than summarized here in terms of how similar the PLA study sample was to the broad swathe of adult-concentrated U.S. degree-granting institutions.

⁴ Unless otherwise noted, data points for the PLA Impact Study Cohort ("sample") are from the student-level data for the entering, degreeseeking students age 25 or over who enzrolled in AY 2011-2012, or only those who enrolled in 2011 (proxy for Fall enrollment); and data for comparative subsets of U.S. degree-granting institutions are from IPEDS 2011-2012 (Institutional Characteristics, Fall Enrollments, Student Financial Aid and Completions). The primary participating PLA study institutions/campuses are included in all institutional groupings. ⁵ The participating institutions included two very large Hispanic-Serving Institutions (HSIs).



PLA Policies and Practices at the Participating Institutions

Although some forms of PLA have been offered at American colleges and universities for more than a half century,⁶ there are no universal standards for how they should be provided. In addition to providing detailed academic records on student use of PLA, the participating institutions in this study were asked to share details about their current PLA programs. This information provides additional context for PLA usage and impact at these institutions, with some caveats.

First, the policies and practices presented here are most likely to summarize practices at the end of the observation period, rather than at the start of the observation period. The research team recognized that policy and practice details from the start of the observation period, academic year 2011-2012, might be difficult or impossible to determine eight years later; there is often turnover in administrative roles related to PLA, and, unlike with other kinds of adult-focused offerings, official policies and practices are sometimes not well-documented.

The second caveat is that the summary of the participating institutions' policies and practices should not be viewed as representative of higher education generally—the 72 participating institutions were selected for this study because they were more focused on PLA offerings than is typical. This is not to say that these 72 institutions were all PLA superstars throughout the observation period. According to the respondents themselves, opportunities to earn PLA credit and apply such credit to degree requirements were likely less generous when the student cohort first enrolled in 2011-2012, compared to the institution's PLA policies and practices for which they provided details in 2019.

Several of the policies and practices were identified as particularly relevant for the analysis of PLA take-up rates and average credit earning, and these are examined later in this report:

• PLA methods offered. Two methods were available at all institutions: CLEP test credit and ACE credit recommendations for military. Other common methods offered by the participating institutions included portfolio assessment (93% of institutions), credit for professional licenses (83%), credit for industry certifications (82%), challenge exams (82%), and DSST exams (81%). The least common methods were UExcel exams (43%), ACE/NCCRS credit recommendations for MOOCs and other noncredit courses (51%), and performance assessments/skills demonstrations (54%), Institutions did not always offer individual methods for all credit programs (Table 1).

Table 1. PLA methods offered at the participating institution

PLA Method	% of institutions offering method for at least some programs
ACE credit recommendations for military training	100%
CLEP exams	100%
Portfolio assessment	93%
Credit for professional licenses	83%
Credit for industry certifications	82%
Challenge exams	82%
DSST exams	81%
Credit recs based on internal review of external training	72%
ACE/NCCRS credit recommendations for corporate or other external training	71%
Performance assessment/ skills demonstration	54%
ACE/NCCRS credit recommendations for MOOCs and other noncredit courses	51%
UExcel exams	43%

⁶ According to American Council on Education's website, ACE credit recommendations for military were used as early as 1954 (www.acenet.edu); CLEP tests were created in 1966 by the College Board, and formal processes for portfolio assessment were advanced by CAEL in the mid-1970s (Travers, 2011).

- Credit Limits. The extent to which institutions had limits on the number of PLA credits that can be applied to degrees was highly variable among the participating institutions. Among the 47 associate-granting institutions in this study, 28 (60%) said that PLA can account for 51% or more of associate degree requirements. For bachelor's degree-granting institutions, the 4-year publics and 4-year private nonprofits were more likely to have stricter credit limits (allowing a smaller proportion of the degree's requirements to be met through PLA credits), compared to the 2-year publics (14 of the 2-year public institutions responded to this question about bachelor's degrees) and for-profits. (This question was not explored for certificates due to the high variability among such programs, particularly in terms of length, making cross-credential comparisons difficult.)
- Marketing and student outreach. Most of the participating institutions (75%) said that they use PLA in their outreach and marketing to adult students, but very few report doing so "a great deal" (17%) or "a lot" (13%); a slightly larger proportion (80%) use PLA in their outreach to veterans or active military. As noted in a recent NASPA survey report, students often do not know that there are PLA options available to them and do not know the right questions to ask, resulting in PLA being like "a secret club" for the small number of students that learns about it and understands how to access it (Parnell & Wesley, 2020, p.8).
- Advising and coaching. All four of the participating for-profit institutions directed coaches and advisors to ask about PLA with all students at least a moderate amount, compared to only 52% of public 2-years, 52% of public 4-years, and 42% of private nonprofits. All of the participating for-profit

"When you are working at a job, sometimes you don't really think about what you're doing, you don't really consider what you're learning in the process of doing it. I think that that was interesting for me [was] to look back on and see what I learned throughout the process."

Adult learner

institutions also directed their coaches and advisors to talk about PLA with a specific category of students at least a moderate amount. More of the public 2-year institutions and for-profits institutions provided one-on-one guidance to students inquiring about PLA.

Further discussion on and details of these and other policies and practices can be found in Appendix E.

A note on TAACCCT involvement. Several of the institutions began to offer a more robust PLA program between 2011-2018 partly due to their involvement in the U.S. Department of Labor's Trade Adjustment Assistance Community College and Career Training (TAACCCT) program, which required all grants to include PLA components. Nineteen (61%) of the participating public 2-year institutions were part of one or more TAACCCT grant initiatives; two of the public 4-year institutions and only one of the private non-for-profit 4-year institutions also were part of TAACCCT grant programs. Of the public institutions that participated in TAACCCT grants, 13 of the 2-year institutions (68%) and both of the 4-year institutions reported that their TAACCCT projects supported changes/improvements to their institution's PLA offerings. (We did not choose to evaluate the outcomes for students attending TAACCCT institutions separately since significant changes in PLA offerings were likely made several years into the observation period.) (Source: project questionnaire).





PLA Credit-Earning at the Participating Institutions

Summary of findings: Across the entire sample, a small percentage of adult students earned PLA credit. But, the average number of PLA credits earned per student was the equivalent of a half-year or more of full-time study.

- PLA take-up for adult students at the participating study institutions was 11%, dropping to 4% among those with PLA credit from sources other than ACE credit recommendations for military.
- PLA credit-earning was lower for Black adult students, female adult students, lower-income adult students, and adult students at 2-year public institutions.
- The average number of PLA credits earned at the participating study institutions was 23.8 credits, dropping to 17.1 credits among students with sources other than ACE credit recommendations for military. Across most student subgroups and institutional categories, the average number of PLA credits earned was equal to a semester or more of full-time study.

Usage of PLA is of interest in terms of take-up rate, meaning the percentage of students who had PLA credit, and average PLA credit earning. This section provides descriptive statistics for PLA take-up rates and average PLA credits earned for the total adult population and for various student and institutional subgroups.

QUICK DATA

of entering adult students earned credit for college-level learning acquired outside of the classroom through PLA.

Adult students earned:

Non-military PLA Credits

or at least a half-year or more of a full-time semester's worth of study.

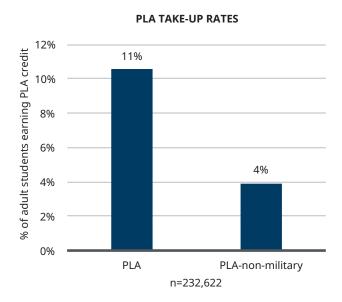
PLA Take-up Rates

PLA Take-up Rate (the share of students with PLA credit) for adult students at the participating institutions was 11%. Eleven percent of the adult students in the study had earned any PLA credit from the participating study institution.⁷ As noted earlier, this study sample had high numbers of students earning PLA credit through ACE credit recommendations for military; when examining adult students using PLA methods other than ACE credit recommendations for military, the take-up rate dropped to 4% (Figure 2).

At 27 of the institutions in the study (39%), fewer than 3% of adult students had PLA credit of any kind, including ACE credit recommendations for military; and the remaining institutions had a wide variation in take-up rates. Outlier institutions had take-up rates of 33%, 38%, 47%, and 68%; three of these institutions had very high concentrations of adults in their undergraduate populations (73%-99% adult-serving) (Figure 3).

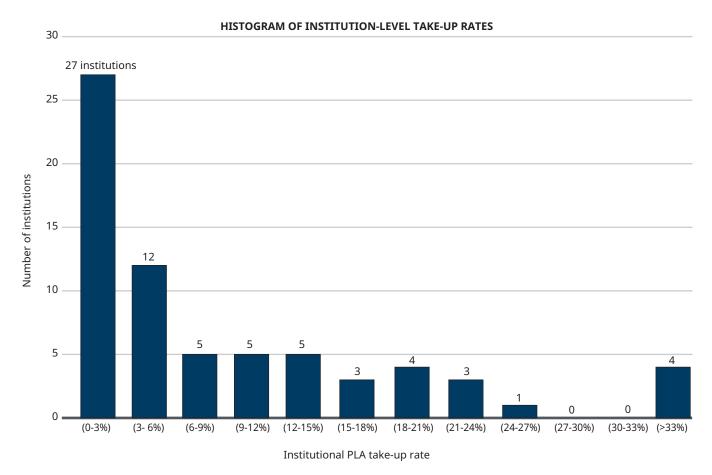
⁷ The institutions also provided information about students who had received PLA credits in transfer from another institution. As these numbers were small and did not apply to the vast majority of students in our sample, they have not been included in the analysis presented in this report.

Figure 2. 11% of adult students had any PLA credit



Because the large number of students with military credit may be skewing results in the sample, our findings for PLA credit-earners are frequently presented alongside results for students without ACE military credit.

Figure 3. At 27 of the institutions in our sample, less than 3% of adult students had PLA credit (histogram)



Institutional mean = .10, Std Dev = .12, n=69

Sector. PLA take-up rates varied considerably by sector, with the lowest rates of PLA credit-earning at two-year public institutions. Due to the influence of several large institutions, PLA take-up rates also varied depending on whether we examined the take-up of all students in the sector (regardless of institutional affiliation) or whether we used an average of the institutional PLA take-up rates within each sector. When looking at the PLA take-up of all students in the sector, take-up rates were highest at 4-year publics (14%) and for-profits (13%), and in both cases, the rates were driven primarily by a handful of large institutions in these sectors with very high take-up rates. Take-up rates dropped dramatically when not counting adult students who only had ACE credit recommendations for military, to 5% and 4% among students at public and for-profits respectively. However, when looking at the average of institution-level take-up rates within each sector, 4-year private non-profit institutions had the highest median take-up rates for both PLA (22%) and PLA-non-military (21%). Regardless of method used to calculate PLA take-up, 2-year public institutions (community colleges) had the lowest take-up rates: between 3-4% for PLA and 2% for PLA-non-military (Table 2).

Table 2. PLA and PLA-non-military take-up rates were lowest at two-year public institutions and minority serving institutions, whether examining across the sample or by the average of institutional medians

	Across all adult students in the sample		Median institutional take-up rate	
	% of adult students with PLA credit	% of adult students PLA-non-military credit	% of adult students with PLA credit	% of adult students PLA- non-military credit
Sector				
2-year public (student n=56,330)	4%	2%	3%	2%
4-year public (student n=37,147)	14%	5%	6%	3%
4-year private nonprofit (student n=15,444)	7%	7% 7% 22%		21%
For-profit (student n=123,701)	13%	4%	8%	4%
Minority-Serving Institution (MSI)				
MSI (student n=22,148)	4%	3%	3%	2%
Not an MSI (student n=210,474)	11%	11% 4%		3%
Online Institution				
Predominantly online (student n=142,794)	12%	4% 5%		4%
Not predominantly online (student n=89,828)	9%	4% 5%		2%
Adult-Focused Institution				
Institution with more adult-focused policies and practices, 2011-2018 (n=180,656)	12%	4%	10%	4%
Institution with fewer adult-focused policies and practices, 2011-2018 (n=51,965)	6%	3%	4%	2%

Other institutional categories. A greater percentage of adult students at predominantly online institutions had PLA credit than at institutions that were not predominantly online* (12% and 9%, respectively). And, a higher percentage of adult students at institutions that were not minority-serving had PLA credit than at institutions that were categorized as minority serving* (11% and 4%, respectively). There was less variation in median institution-level take-up rates for those categories (Table 2). While it is relevant to look at overall sector-level take-up rates, for example for considering scalability for serving students in the most voluminous sectors, the variation by institution suggests that other factors, such as institutional policies and practices regarding the administration of PLA, may be what matters in terms of PLA usage.

"I looked through everything [and asked] is it something that I actually have a prior knowledge on? Is it worth going through with? Would I be better off taking the courses to learn more than what I already had? Once I looked through the questions that [my advisor] had given me, I saw that I understood [the content] pretty well. So, I thought I would take a shot at it, and I ended up doing really good on it."

Adult learner

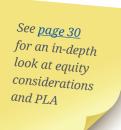
In addition to looking at whether an institution was minority-serving or predominantly online, we also considered whether the institution had an adult-focused environment. The participating institutions indicated which adult-focused practices they had (responding to a list of possible options), and whether those were in place throughout the cohort enrollment period of 2011-2018, or at least in place at some time during that period. Examples of policies included: having a specific strategy to recruit adult students, support services in a format accessible to working adults, accelerated learning formats, alternative modalities convenient for working learners, affordable childcare, and others. This information was then used to identify the institutions that consistently offered a greater number of the adult-focused policies during most or all of the cohort's enrollment period. A category of "adult-focused institution" applied to 26 institutions of the 69 institutions in the PLA impact analysis. (See Appendix A for more information about how this variable was derived.)

We hypothesized that an institutional environment that is generally supportive of adult students could also be a more supportive environment for PLA. While the results were not statistically significant, we found that the adult students at the "adult-focused" institutions had a 12% take-up rate, compared to only 6% for adult students at institutions with fewer adult-focused policies; as with

the other institutional categories, the rates were lower and the difference was reduced when looking at PLA-non-military students (Table 2).

Student demographics and other characteristics. (Select take-up rates shown in Table 3; all take-up rate details can be found in Appendix D.) PLA and PLA-non-military take-up rates were higher for some adult students in our sample than others:

- · Hispanic and White adult students were both more likely to have PLA than Black and American Indian/Alaska Native adult students*; Asian students were also more likely to have PLA than Black students*.8
- Female adult students were less likely to earn PLA credits than male adult students, but the differences narrowed considerably when looking at PLA-non-military credits*.
- Adult students with relatively higher socioeconomic levels (non-Pell Grant recipients and students living in neighborhoods with lower concentrations of low-income individuals) were more likely to have PLA credit than lower SES*.
- Adult students who were not studying exclusively online (regardless of whether their institution was predominantly online or not), were more likely to have PLA credit than students who studied exclusively online*.9
- · Adult students with higher enrollment intensity (i.e., closer to full-time enrollment), were more likely to have PLA credit thanstudents enrolled at 60% or a full-time rate or less*.
- · Adult transfer students were more likely to have PLA credit than adult non-transfer students*.
- Adult students with higher academic performance indicators (based on first term GPA, course success rates, and no enrollment in developmental education courses), were more likely to have PLA credit*.





⁸ However, the results were not statistically significant for Native Hawai'ian/Other Pacific Islander compared to any other race category.

⁹ This is the reverse of what we might expect, given that take-up rates are higher for students attending predominantly online institutions; of note is that some of the online institutions had large numbers of adult students with at least one course in a face-to-face format.

Table 3. PLA take-up rates were lowest for Black adult students*, American Indian/Alaska Native adult students*, female adult students, Pell Grant recipients*, and adult students with lower course success rates*; average PLA creditearning was lowest for Black adult students*

	Take-Up Rates		Average PLA Credits Earned	
	PLA	PLA-non-military	PLA	PLA-non-military
All adult students (age 25+)	11%	4%	24	17
Gender				
Male	18%	5%	25.9	17.5
Female	6%	3%	19.5	16.8
Race/ethnicity - U.S. Department of E	ducation method for	r categorizing†		
Asian	8%	4%	19.6	17.1
Black	6%	2%	16.9	14.3
Hispanic	8%	5%	18.4	14.1
White	8%	4%	20.3	18.5
Other/Multiracial (includes all NH/OPI- and AI/AN-identifying students)	7%	2%	22.2	16.4
Race categories with too few student	s to be analyzed acc	ording to U.S. Dept of Ed n	nethod†	
Native Hawaiʻian/Other Pacific Islander	7%	2%	22.0	13.0
American Indian/Alaska Native	6%	3%	23.5	17.9
Pell Status				
Student had received one or more Pell Grant	7%	3%	21.0	16.1
Student had not received a Pell Grant	16%	6%	26.2	16.7
Transfer student				
No transfer credits	6%	2%	26.7	20.7
Some transfer credits	15%	6%	22.5	16.1
Enrollment intensity				
Less than 20% enrollment	9%	1%	25.2	20.8
21-40% enrollment	10%	3%	24.5	18.1
41-60% enrollment	12%	5%	22.6	16.8
61-80% enrollment	15%	7%	25.0	17.6
81-100% enrollment (full-time)	14%	6%	23.6	17.9
Course Success Rate				
0% to less than 70%	6%	1%	23.0	16.9
70% to less than 90%	11%	3%	23.2	15.7
90% to 100%	14%	6%	24.5	17.7

† Based on the 53% of the adult students in the sample whose race/ethnicity was reported. The PLA take-up rates by race-ethnicity therefore are different from the PLA take-up rates for the entire sample. Hispanic, Asian, Black and White students were defined using the U.S. Department of Education's method, in which any student identifying as Hispanic is designated as Hispanic, and then non-Hispanic students were categorized into one or more racial categories. There is great value in examining the specific experiences of additional minority groups in U.S. higher education, particularly Native Hawaiʻian/Other Pacific Islander (NH/OPI) and American Indian/Alaska Native (AIAN), but in our sample, these groups were very small; for the purposes of understanding their usage of PLA, we conducted a separate analysis using a definition of these groups that included any student that identified as that group, even if they also identified as Hispanic or another race. These categories were, however, still too small to include in the credential completion analysis.

Additional take-up details provided in Appendix D.



The above results raise important questions about why certain students were less likely to utilize or acquire PLA, particular those who were:

- Black
- Female
- Enrolled exclusively in online programs
- · Lower-income
- Juggling their education with work or other responsibilities (and thus not able to attend more than half-time)
- · Attending community colleges, or
- · Needing additional help academically

Average PLA Credit-Earning

The average number of PLA credits earned by adult students across all of the participating study institutions was equal to a half-year or more of full-time study. This was the case for most student sub-groups and institutional characteristics. The average credits earned was higher for all categories when including credits earned through ACE credit recommendations for military. There was, however, a wide range in average PLA credit-earning across the various participating study institutions; some of this variation may be due to different policies and practices with respect to PLA at those institutions, including any institutional PLA credit limits. These issues are discussed in the final section of this report.

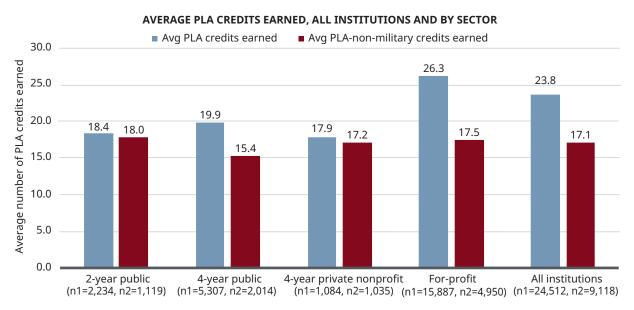
On average, adult students with PLA credits earned 23.8 credits through PLA.

When examining credits earned by adult students using methods other than ACE credit recommendations for military, the average dropped to 17.1 credits, or slightly more than the number of credits students typically earn in a half-year of full-time study (based on 15 credits per half-year for "on-time" degree completion). By institution, the average number of PLA credits earned per student (including ACE credit recommendations for military) ranged from a low of 2.7 to a high of 54.8. There was only slight variation in the average number of any PLA credits or non-military PLA credits earned, by sector, except for for-profit institutions where the influence of military credit on average PLA credits earned is particularly evident: the average

See <u>page 51</u> for an in-depth look at service members and PLA

number of PLA credits earned at for-profits when including ACE credit recommendations for military was 26.3 and when excluding ACE credit recommendations for military was 17.5 (Figure 4). The fact that adult students at 2-year public institutions had roughly the same average number of PLA credits as adult students at 4-year institutions is noteworthy, given that most degrees at the 2-year publics require half the amount of credits.

Figure 4. Average number of PLA credits earned by adult students, by institutional sector



Other institutional categories. Predominantly online institutions had higher average PLA credit-earning per student (26.4 credits), compared to institutions that were not predominantly online (18.5 credits)*. Minority-serving institutions had lower average PLA credit-earning per student (16.8 credits), compared to institutions that were not minority-serving (24.1 credits)*. A similar pattern was found for these types of institutions for PLA-non-military credits (Table 2).

Student demographics and other characteristics. Adult students who were not transfer students or not Pell Grant recipients earned greater average numbers of PLA credits, compared to other student groups* (Table 3). Within the other demographic and academic categories, notable is the consistently low average credit earning (whether PLA or PLA-non-military) by Black and Hispanic adult students*. The PLA credit-earning of these groups may have been influenced by the specific institutional environments (and associated PLA policies and practices) where these student groups were concentrated; in other words, this may reflect reduced access to PLA credits for certain students based on where they are enrolled.





PLA and Credential Completion

Summary of findings: PLA credit-earning is strongly associated with higher credential completion.

- · Forty-nine (49) percent of the adult students with PLA credit completed any degree or credential within the sevenand-a-half years, compared to 27% of adult students without PLA*. Students with PLA-non-military credit had an even higher credential rate of 73%.
- PLA students attending institutions in each sector had significantly higher rates of credential completion compared to non-PLA students*. The differences were largest for students at 2-year public institutions—where PLA students were more than twice as likely to complete than those without PLA credit (48% and 18% completion, respectively)—and smallest for students with the four-year public institutions (41% and 31%, respectively).
- · Across all major student subgroups analyzed, there were significantly higher rates of overall credential completion for adult PLA students compared with adult non-PLA students*. The subgroups studied included gender, age, race/ ethnicity, socioeconomic status, academic performance indicators, and types of institutions.
- · Using propensity score matching (PSM) to isolate the impact on overall credential completion from PLA alone (controlling for various institutional and student characteristics), PLA increased the likelihood of an adult student's completion by more than 17% (30% for adult students using PLA methods other than ACE military). Related modeling indicates that relative "dosage" of PLA interaction appears to matter for completion: Students with 30 or more PLA credits (or seven credits or more of non-military PLA credits) realized even larger impacts of PLA participation.
- · Applying PSM to each of the student subgroups and institutional environments, we found that all of the PLA effect sizes are strongly positive—none was less than 13% (18% for PLA-non-military credits)—indicating that there was a positive effect of PLA on completion for each student subgroup. Additional assessment of relative impact for specific subgroups shows that PLA had the strongest effect for the following students: Pell Grant recipients, students identifying as female, Hispanics students, students age 35-44 and 55-64, 2-year public students, and students who attended an MSI.

As shown in the previous section, a relatively small percentage (11%) of adult students in our sample earned credit through PLA, and those who did earned an average of a half-year's worth of college credits. The main question this report set out to answer is whether this subgroup of adult students who earn PLA credits benefitted from earning those credits: were they more likely to complete degrees or other credentials, compared to similar students without such credit?

We compared the credential completion of non-PLA students with both PLA students and PLA-non-military students in a few different ways:

- Overall completion rates at the study institution regardless of the credential goal
- Overall completion rates at the study institution while controlling for the student's initial credential goal
- Overall completion rates that include credentials from both the study institution and an institution to which the student transferred during the seven-and-a-half-year observation period

"For students who have certification and work experience, PLA is building their confidence to finish their degree. A student just came to thank us—he said that if it wasn't for us, he wouldn't have been as motivated. He was told by an employer that he had to go back to get a degree. He was worried because he thought he wouldn't be a good student, and he didn't have time or money. He received [his] degree much faster than he thought [and now] he's overseeing a health system [and] making a ton of money. He says that if it wasn't for PLA, he wouldn't be where he was today. This builds their confidence and they continue their learning."

PLA administrator, 2-year public institution



"I was super excited to learn that I earned credit because I feel at the age of 31, I have learned so much through life experiences [and] through trial and error. I call it "life college." Knowing that I had that option [to get credit for these experiences] encouraged me to continue on with school. [It] motivated me to continue with school because I didn't see it so much weighing heavily on me."

Adult learner

In addition, we recognize that the presence or absence of PLA credit is but one of many factors that plays a role in degree completion. For example, institutional environments, policies, and practices also contribute to degree completion. Students furthermore bring different experiences, academic skills, resources, and advantages to their postsecondary engagements that can play significant roles in their academic outcomes. We therefore examined many of these factors in our descriptive analysis as a way to understand whether PLA offers benefits across institutional environments and for all types of students.

To truly isolate the effect and identify the causal effect of PLA, students would need to be randomly assigned to either receive PLA or not receive PLA. In the absence of random assignment, we used propensity score matching (PSM), which is in the quasi-experimental design family of research designs because it attempts to approximate causal inference (Murnane & Willett, 2011). Although we use PSM in

this analysis, we do not make causal inferences in this study because our data and design do not meet the strongest standards for the underlying PSM assumption (described in greater detail in Appendix A). Yet, we elected to produce PSM estimates rather than standard regression estimates because PSM offers methodological advantages, namely by reducing bias and increasing the precision of our estimates. Even with methodological limitations we believe that this approach strengthens the overall evidence about the important impacts of PLA, but further research is clearly needed.

Throughout this section, as we present completion results, we provide PSM estimates alongside the related findings from the descriptive analysis to show the effect of PLA while controlling for multiple factors.

Overall Results

Half (49%) of the adult students with PLA credit completed a degree or credential within the seven-and-a-half-year observation period. Breaking down the 49% completion number by credential types, using the highest credential earned: 39% of the adult students earned bachelor's degrees, 10% earned associate degrees, and 1% earned certificates. 10 In comparison, only 27% of adult students without PLA completed any credential during the same seven-and-a-half-year period: 17% of the adult students earned bachelor's degrees, 8% associate degrees, and 2% certificates (Figure 5). Adult students with PLA credit of any type completed 22 percentage points higher than adult students without*. Adult students with PLA from a method other than ACE credit recommendations for military had an even higher overall completion rate of 73% (60% bachelor's, 12% associate, 1% certificate).

QUICK DATA

Adult students credential completion rates:

With PLA

Without PLA

The PLA boost for adult student completion when controlling for other factors (PSM effect size):

17%

All PLA methods

Methods that were not ACE credit recommendations for military

Using propensity score matching (PSM) to isolate the impact on overall credential completion from PLA alone (controlling for various institutional and student characteristics), we found that PLA increased the likelihood of an adult student's completion by more than 17%, and for PLA-non-military credit earners, PLA increased the likelihood of completion by 30%. Note that these effect sizes presented here and throughout this section are quite large relative to standards established by the Institute of Education Sciences; an explanation of the relative strength of the PLA effect sizes can be found in Appendix A.

¹⁰ Note: These numbers add to 50% due to rounding.



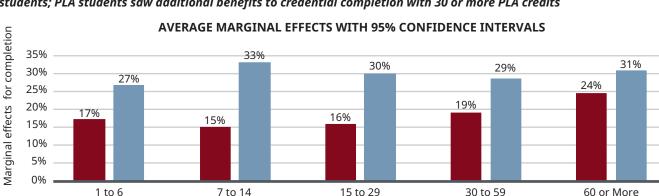
CREDENTIAL COMPLETION RATES, BY PLA CREDIT-EARNING Certificate Associate Bachelor 100% % of adult students completing a credential 80% 60% 60% 73% overall 40% credential completion 49% 39% 20% 17% 27% 8% 12% 10% 2% 0.8% 1% 0% Non-PLA Students PLA Students, **PLA Students** (n=208.110)(n=24,512)**Excluding Those** with Only Military Credit (n=9,118)

Figure 5. Adult students with PLA credits had higher overall credential completion, compared to adult students without PLA, from 2011-2012 academic year to the end of 2018*.

Credential level results may not add up to the total due to rounding.

Credential Completion and PLA Dosage: Is There a PLA Tipping Point?

The PSM results above suggest that PLA credit-earning has a relatively strong effect on student outcomes, and we wanted to understand if there were differences in the effect of PLA based on dosage, or the number of credits that students had earned. To assess this, we implemented logistic regression modeling to examine PLA effect sizes at different ranges of PLA credit accumulation. Figure 6 displays the marginal effects for different groups of PLA creditearning, which are interpreted similar to the PSM estimates and represent the difference in degree completion for PLA students relative to non-PLA students.



Number of PLA credits ■ PLA ■ PLA-non-military

Figure 6. PLA credit-earning provided a consistent boost to completion for both PLA students and PLA-non-military students; PLA students saw additional benefits to credential completion with 30 or more PLA credits





"What I love is the transformational aspect. I see this all the time, especially with women who have taken time off of work. [They transform] as a person, coming full circle, seeing themselves in a different light. They haven't been taught that what they've learned and done is valuable. For some students it can be a game changer in terms of self-awareness and self-esteem."

PLA administrator. 4-year private non-profit institution The results for PLA credit-earners (including military credit) leads to two observations. First, even students with the lowest level of PLA credit (6 or fewer credits) see a 17% increase in completion, which provides strong evidence of the boost and effect of PLA credit. Second, the figure illustrates that students with 30 or more PLA credits begin to realize even larger impacts of PLA participation. At 30 credits, the effect increases to 19% and at 60 or more credits, the effect jumps to 24% (Note that the standard errors are larger for students with more than 59 credits). In other words, PLA credit accumulation pays off rather consistently up until about 30 credits, where the effects begin to increase even more (i.e., even greater credential completion).

When disaggregating these results for method of PLA, and specifically examining PLA methods other than ACE credit recommendations for military, the marginal effects for students with more than 6 PLA-non-military credits were consistently higher

than for students with 1-6 PLA-non-military credits, but there was no clear additive value to completion with each additional dose above 6 credits. In fact, the highest marginal effect was for adult students with 7-14 PLA-non-military credits.

As noted earlier, this study did not include data about which PLA credits earned actually counted toward a credential at the participating institutions. Similar to transfer credits, PLA credits are sometimes posted to a student's transcript, whether or not those credits will ultimately meet or be counted for credential requirements. It may be that "excess" PLA credits awarded to the adult students in our sample may be influencing some of the results from this dosage analysis.

Completion by Credential Goal

Another way to approach the completion question is to examine completion more narrowly to determine whether the adult students with declared degree goals at the time of matriculation were more or less likely to complete those goals when also earning PLA credit. Notwithstanding the many possible reasons why students might deviate from the credential goal they originally stated at the time of matriculation, we found that adult students who earned credits through PLA in this study were more likely to complete their credential goal over a seven-and-a-half-year period, compared to similar students without such credits*.

• Adult students with associate degree as the initial goal. For adult students with the initial goal of earning an associate degree, 29% of those with PLA earned an associate degree, and an additional 10% exceeded that goal by earning a bachelor's degree as their highest credential (Figure 7). This is almost double the rate of adult students without PLA who stated the same goal but earned an associate degree (17%) or higher (4%)*. Having PLA seemed especially beneficial for associate degree-seeking students whose PLA credit was from methods other than ACE credit recommendations for military: 50% of those students completed an associate degree, and an additional 15% earned a bachelor's degree.

COMPLETION RATES Completion rates for associate seeking adults were 85% higher with PLA than without. **9%** Higher Completion rates for bachelor's seeking adults were 49% higher with PLA than without.

• Adult students with bachelor's degree as the initial goal. Of the adult students with the initial goal of earning a bachelor's degree, 52% of those with PLA credit completed that degree, compared to 35% of non-PLA students with that goal*. Again, completion was even greater for students with PLA credit from a source other than ACE credit recommendations for military (75%) (Figure 7).

Completion was also higher for the PLA credit-earners among the small number of students (8,046) with the goal a certificate: 35% of those with PLA completed a certificate, compared to 29% of non-PLA adults*.

Figure 7. Adult students with the goal of an associate degree and those with the goal of a bachelor's degree, when earning PLA credits, had higher degree completion rates, compared to similar students without PLA credits*.

COMPLETION BY CREDENTIAL GOAL

■ Degree goal met ■Goal exceeded Goal exceeded. 15% of adult students Goal exceeded, 10% Degree goal met, Degree 75% Degree Goal exceeded. goal met, 4% 50% goal met Degree Degree 52% goal met, goal met, Degree 35% 29% goal met, 17% Non-PLA (n=97.979) PLA (n=7,223) PLA-non-military Non-PLA (n=87,435) PLA (n=16.754) PLA-non-military (n=1,906)(n=6,948)Goal of associate degree Goal of bachelor's degree

Completion by Sector of the Participating Study Institutions

PLA students attending institutions in each sector had significantly higher rates of credential completion compared to non-PLA students*. The differences were largest for 2-year publics — 48% of PLA students completed compared to 18% for non-PLA students — and smallest for four-year public institutions (41% compared to 31%). Completion rates for all four institution sectors were even higher for students with credit from non-military PLA methods (Figures 8 and 9).

The PSM analysis found that PLA increased the likelihood of completion by students at 2-year public institutions by 25.2% (35.6% for PLA-non-military), by students at 4-year publics by 13.8% (20% for PLA-non-military), by 4-year privates by 17.7% (17.6% for PLA-non-military), and by for-profits by 16.3% (PLA-non-military analysis was not significant) (Table 4).

The results indicate that earning of PLA credit could be valuable across institutional sectors as a possible degree completion strategy. In addition, adult students at community colleges (2-year publics) saw particularly strong benefits compared to adult students at other types of institutions, although, as noted previously, usage rates of PLA at 2-year publics lagged behind other sectors.

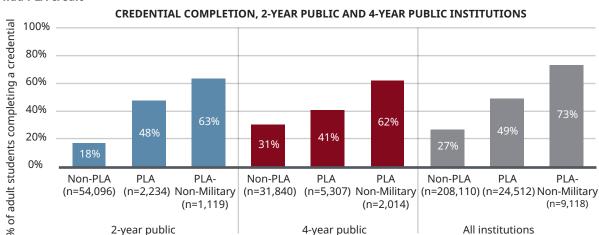


Figure 8. Adult students at both 2-year public and 4-year public institutions had higher credential completion if they also had PLA credit*

Figure 9. Adult students at both 4-year private and for-profit institutions had higher credential completion if they also had PLA credit*

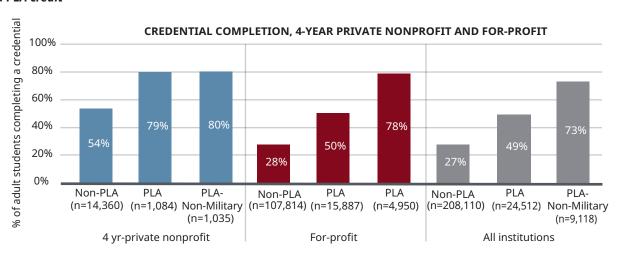


Table 4. Propensity score matching analysis shows that there was strong positive PLA effect on credential completion for adult students in each sector, and that effect increased when examining credit from PLA-non-military methods

	PLA effect size (SE)	PLA-non-military effect size (SE)	
Overall	.17 (.005)	0.30 (.007)	
Sector			
2-Year public	.25 (.014)	.36 (.019)	
4-Year public	.14 (.010)	.20 (.016)	
4-Year private nonprofit	.18 (.033)	.18 (.031)	
For-profit	.16 (.006)	Results not significant	

SE=Standard error, which is an indication of the reliability of the mean (measure). A small SE (relative to the reported effect size) is an indication that the mean effect size is a more accurate reflection of the actual population mean. A larger sample size will normally result in a smaller SE.

Additional PSM analysis results can be found in Appendix D.

Credential Completion Beyond the Participating Study Institution

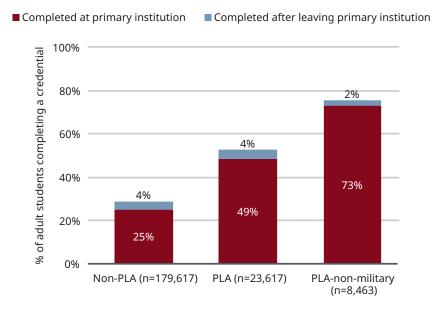
The reality for today's students is that many are enrolling at multiple institutions throughout their path to a postsecondary credential. The National Student Clearinghouse found that the total six-year transfer rate for first-time students was 38%; the transfer rates for adults are somewhat lower at just over 17% of enrolled students over age 24 end up transferring to another institution (Shapiro, et al., 2018, pp. 9-10). In our sample, 18% of all adult students and 22% of all non-completing adult students transferred to a different institution during the observation period. We were particularly interested in learning whether the non-completing adult students in our sample had gone on to earn credentials from a different institution, and whether that additional completion data differed for PLA earners versus non-PLA earners.

Using a revised sample,¹¹ we examined degree or other credential activity for students who did not complete a credential at the participating study institution. Still using the same seven-and-a-half-year observation period, the rate that adult students completed any credential from *any* institution during the study period increased by 4 percentage points for both PLA students and non-PLA students (Figure 10).¹²

The PSM analysis found that PLA increased the likelihood of a completion at either the participating study institution or another institution by 17% (essentially the same effect as at the participating study institution alone). There are differences in completion when examining institutional and student characteristics, but in no case did total completion for non-PLA adult students exceed that of PLA adult students; select results by individual and institutional characteristics are found in Appendix D.

Figure 10. Credential completion for adult students (age 25 or older), at participating study institution or another institution, by PLA method

COMPLETION INCLUDING AT OTHER INSTITUTIONS



¹² Note: of the adult students in the sample who started at a participating 4-year private non-profit institution, we could only include 22% in this analysis due to missing data.





¹¹ Excluded were 29,388 adult students at seven institutions that did not provide the NSC data.

A Closer Look at Adult Community College Students: PLA, Transfer, Completion

Students enroll at community colleges with diverse educational goals. One common enrollment pattern is for students to start at a community college and then transfer to a four-year institution in order to complete a bachelor's degree. Completing an associate degree from the community college is not always—or even necessarily—part of the student's plan. For many community college leaders and faculty, therefore, understanding the complete enrollment and completion patterns of students who begin their studies at community colleges is important.

We examined the various transfer pathways taken by the adult students at the 2-year public institutions participating in this study over the seven-and-a-half-year observation period. We found that, overall, adult PLA students had similar 2-year to 2-year transfer rates compared to non-PLA students (5% each), but higher 2-year to 4-year transfer rates (15% for PLA adult students, compared to 8% of non-PLA adults*). In addition, the adult PLA students were more likely to have earned associate degrees* (3%) and bachelor's degrees* (13%) after leaving the study institution, compared to the non-PLA students (2% and 4%, respectively). There was a similar pattern for the adult students who did not complete any credential at the participating study institution (Figure 11).

This suggests that PLA within 2-year public institutions can support students in both their completion and continued enrollment, even as they transfer to other institutions.

Adult student educational pathways after leaving 2-year public institution

Figure 11. Adult student educational pathways after leaving 2-year public institution

15% 13% of adult students 11% 9% 8% 7% 7% 6% 5% 5% 5% 4% 3% 3% 2% 2% PLA students Non-PLA students PLA students Non-PLA students (n=1,919) (n=38,151)(n=1,007)(n=31,483)Adult students originally enrolled Non-completing adults originally enrolled at 2-year public institution at 2-year public institution

COMMUNITY COLLEGE PATHWAYS

- Attended different 2-year public institution after leaving participating institution
- Attended different 4-year institution after leaving participating institution
- Earned associate at later institution
- Earned bachelor's at later institution



Differences in Credential Completion for PLA Students by Individual and **Institutional Characteristics**

The descriptive analysis found that across all major student subgroups analyzed—including race, ethnicity, and income levels—there were significantly higher rates of total/combined credential completion for adult PLA students compared with adult non-PLA students. The subgroups studied included:

- Gender*
- · Age*
- · Race/ethnicity*
- Socioeconomic status* (Pell Grant recipient, low-income residential area)
- Academic performance indicators* (transfer credits, enrollment intensity, online enrollment, enrollment in developmental education)
- Institutional sector* (presented above)
- · Attending predominantly online institution vs. not a predominantly online institution*
- Attending an MSI vs. non-MSI*

Additional discussion of several of these subgroups is found in this report's section on equity considerations; all completion results tables for the above groups can be found in Appendix E.

In addition, we ran the PSM modeling to examine effect heterogeneity for specific student and institutional categories, while controlling for all other categories. Each estimate in Table 5 represents a separate PSM model that restricted the sample to the relevant student or institutional category, thus allowing us to identify the PLA effect size (for PLA generally, and for PLA-non-military) for the category and assess the effect size for each category relative to the overall effect size. As previously mentioned, the PSM estimates found that overall, PLA increased completion by approximately 17% and non-military PLA by 30%.

"I was very excited when I saw that the information that I had was credible and that it was noted as college material. And I think that it boosts anybody's self-esteem if you know that you've done a job and, yes, you have learned aspects that can be utilized as college credential."

Adult learner

All of the PLA effect sizes are strongly positive—for PLA, none was less than 13%, and for PLA-non-military, none was less than 18% indicating that there was a positive effect of PLA on completion for each student subgroup. Additional assessment of relative impact for specific subgroups shows that both PLA and non-military PLA had the strongest effects for the following students in this study: Pell Grant recipients, students identifying as female, Hispanic students, students age 35-44 and 55-64, 2-year public students, and students who attended an MSI (Table 5). In other words, for students in these categories, the effect of PLA was even stronger, suggesting that they benefitted more from PLA than did other students at the institutions who participated in this study.

For some of these categories, there may be other factors influencing the effect size that were not included in the modeling.

Overall, the results suggest that across all types of institutional environments, and for all student-level subgroups, adult students can benefit from the earning of credit through PLA, with the largest benefits from PLA experienced by students at 2-year public institutions and MSIs.



Table 5. Propensity score matching analysis shows that there was strong positive PLA effect on credential completion for all student and institutional subgroups at the participating institutions, and that effect increased when examining credit from PLA-non-military methods

	PLA effect size (SE)	PLA-non-military effect size (SE)
Overall	.17 (.005)	0.30 (.007)
Student-Level Categories		
Student had received one or more Pell Grant	.19 (.007)	.33 (.010)
Student had not received a Pell Grant	.13 (.007)	.26 (.011)
Female	.23 (.008)	.34 (.009)
Male	.14 (.006)	.27 (.012)
Black	.14 (.018)	.28 (.027)
Hispanic	.24 (.021)	.32 (.026)
White	.18 (.012)	.23 (.015)
Age 25-34	.16 (.006)	.30 (.010)
Age 35-44	.20 (.010)	.32 (.013)
Age 45-54	.22 (.014)	.29 (.019)
Age 55-64	.24 (.038)	.32 (.043)
Transfer	.15 (.006)	.23 (.013)
Non-Transfer	.16 (.008)	.32 (.021)
Institutional Categories		
Predominantly Online	.16 (.006)	.32 (.008)
Not Predominantly Online	.16 (.009)	.30 (.007)
MSI	.33 (.022)	.42 (.025)
Not MSI	.16 (.005)	.30 (.008)
More adult-focused policies	.17 (.005)	.31 (.007)
Fewer adult-focused policies	.18 (.015)	.23 (.021)

SE=Standard error, which is an indication of the reliability of the mean (measure). A small SE (relative to the reported effect size) is an indication that the mean effect size is a more accurate reflection of the actual population mean. A larger sample size will normally result in a smaller SE.

Additional PSM analysis results can be found in Appendix D.

Does it matter if an institution has other adult-focused policies and practices?

One line of inquiry is whether institutions that offer other adult-focused policies and practices (besides PLA) might have different completion results for PLA students compared with non-PLA students. One hypothesis is that the presence of other kinds of programming for adults would lessen the additive impact of PLA, since non-PLA students would be benefiting from some of the other adult-focused policies.

When examining institutions based on the degree to which they offered adult-focused policies and practices during the observation period, the PSM analysis found that there were strong PLA effect sizes for both adult-focused institutions (17%) and non-adult focused institutions (18%) (Table 5). When looking at PLA-non-military students, the PLA effect was lower for students at institutions with fewer adult-focused policies and practices (23%) compared to students at institutions with more adult-focused policies and practices (31%), yet both are still very strongly positive. The findings suggest that adult-focused policies and practices can only enhance the contribution of PLA credit-earning for adult student completion. PLA provided a boost to adult students in both adult-focused environments and in environments that may not have provided as many adult completion-focused initiatives or practices.



What about AP and IB Credits? What about younger students?

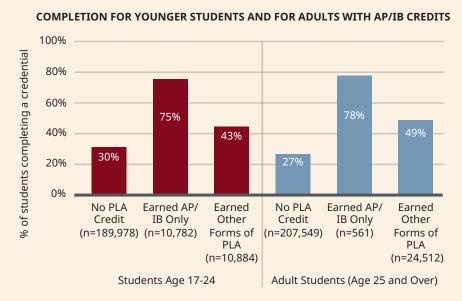
PLA is a term that is used for recognizing learning that happens outside of a college classroom, so some definitions of PLA include credits earned through high school exam programs that offer the possibility of college credit such as Advanced Placement (AP) and International Baccalaureate (IB). These are credits for prior *academic* learning (at a high school level) and not alternative credit options that recognize learning from an adult's *life or work experiences*, which is the focus of this report. Adult students who had only PLA credit from AP or IB and no other source of PLA credit that we tracked, are in the category of "non-PLA" credit-earner that we are using for most of our analysis. In addition, we are focusing on an age-based definition of "adult," even though we recognize that many students under age 25 benefit from the full range of PLA methods, particularly CLEP and ACE credit recommendations for military.

Yet, there are many who are interested in the broader definition of PLA that includes AP/IB, and there is also value in examining how younger students use and benefit from PLA. In our sample, 10.4% of students age 17-24 had credit from some form of PLA. Of this group, 51% had earned credit through AP/IB, 27% through ACE credit recommendations for military, and 26% from other PLA methods.

In terms of credential completion, the data show that the younger students (age 17-24) with AP/IB had significantly higher completion rates (75%) compared to younger students earning credit through other forms of PLA* (44%) as well younger students with no PLA credit* (31%). A similar pattern exists for adult students (Figure 12). Of note is that AP/IB students are generally students who are the high performers in high school, and so it is not surprising that this group of students would also perform well at the postsecondary level. The completion rate for younger students earning non-AP/IB forms of PLA credit is likely influenced by the large number of students in that group earning ACE credit recommendations for military, the possible reasons for which are discussed in the section on service members later in this report.

The PSM analysis found that earning any form of PLA increased the likelihood of completion for students under age 25 by 15.6%, and 30.3% for students under age 25 using PLA methods other than ACE credit recommendations for military). (See Appendix D for additional PSM coefficients for younger students using all methods of PLA.)

Figure 12. Students age 17-24 had higher credential completion with the various forms of PLA—and particularly with AP/IB credits—compared to similar students without PLA credit*





Equity, PLA, and Degree Completion

Summary of findings: PLA has strong potential to be a tool for closing equity gaps in postsecondary achievement, provided that it is made more accessible to adult students who could benefit the most.

- PLA adult students of each of the major race/ethnicity groups had higher completion rates compared to their non-PLA counterparts,* with the largest difference among Hispanic adult students and Black adult students (based on the 53% of adult students with reported race/ethnicity). Yet, completion gaps between Black adult PLA students and adult PLA students of other races/ethnicities persist despite the boost from PLA, and Black adult students in our sample had lower PLA take-up rates compared to other groups*.
- The PSM analysis found that PLA increased the likelihood of a Hispanic adult student's completion by 24%, Black adult students by 14%, and White adult students by 18%.
- · Lower-income adult students with PLA were also more likely to complete credentials, compared to similar students without PLA*. For example, 55% of adult Pell Grant recipients with PLA credit completed a credential, compared to only 27% of adult Pell Grant recipients without PLA*.
- Usage of PLA was associated with higher academic preparedness or other achievement indicators, yet adult students at all points of the academic performance spectrum had higher credential completion when they earned PLA credits*.
- · The lower rates of PLA acquisition, and in many cases lower completion benefit found among some specific student populations in this study, suggest that without attention to equitable access and utilization, the overall positive benefits of PLA could exacerbate educational inequities.

As we face an economic crisis that has dislocated tens of millions of workers, and that has disproportionately affected low-income Hispanic, Black, and Native Americans (Fain, 2020; Feir, 2020; Aratani, 2020; and Aratani & Rushe, 2020), one possible response is for the country to invest in reskilling and upskilling of unemployed workers, and preparing those workers for high-demand jobs in growing industries through postsecondary learning and credentials. As suggested by the results in this report, PLA could be an important tool for helping more adult students complete credentials whether associate degrees, bachelor's degrees, or certificates—by leveraging what they already know from work and life experiences. (In addition, responses to our current recession could include applying strategies to recognize learning to shorter-term job training programs with a proven track record for helping dislocated workers position themselves for in-demand occupations more rapidly.)

We are mindful, however, of the fact that inequality in educational attainment is a pervasive challenge in the U.S., with attainment rates varying significantly for different racial and ethnic groups and income levels; individuals can also be at a disadvantage if their previous educational backgrounds did not sufficiently prepare them for college-level learning.¹³ Investigating the equitability of PLA usage and impact is, therefore, an important focus of this study.

¹³ According to 2018 U.S. Census data, 36% of White, non-Hispanics and 55% of Asians had a bachelor's degree or higher, compared to only 22% of Blacks, 17% of Hispanics, 15% of American Indians/Alaska Natives, and 19% of Native Hawai'ians/Other Pacific Islanders. The 6-year graduation rate for first-time, full-time undergraduate students in pursuit of a bachelor's degree for the cohort starting in 2010 was 64% for White students, 54% for Hispanic students, 40% for Black students, and 39% for American Indian/Alaska Native students (NCES, 2019). Postsecondary attainment is also higher for those with higher incomes (Roble, 2017), and research shows that undergraduate students who had low high school GPAs have lower rates of graduating from college (Allensworth and Clark, 2020).

In this section, we examine PLA usage and impact for:

- Students of color, particularly those identified as Black or Hispanic, and other racial/ethnic populations as sample numbers allow¹⁴
- Lower-income students
- Students at varying levels of traditional measures of postsecondary preparation

With respect to equity, we evaluated PLA data at the participating study institutions through two crucial questions:

- 1. Does receipt of PLA credit confer the same advantages to different student groups?
- 2. Do students take advantage of PLA opportunities at similar rates? Or are there disparities in access to PLA credit by important characteristics, including income and race/ethnicity?

Answering these questions definitively is a complicated task, and the descriptive information about the students in our sample points to potential issues with making rough comparisons of student groups. In particular, the categories that are most important to equity discussions are often overlapping in our sample, as they are in broader demographic contexts. For example, compared with White and Asian adult students, Hispanic and Black adult students in the sample were more likely to have a lower-income indicator (e.g., Pell Grant recipient, residence in lower-income neighborhoods), and to have been enrolled in developmental education courses*. In addition, Black students in our sample were more likely to have lower levels of enrollment intensity compared to students of other races and ethnicities*. Further, compared to higher-income adult students, the lower-income adult students in our sample were more likely to have lower enrollment intensity*.

The overall finding that PLA positively impacts credential completion does hold true across the primary subgroupings available to analyze to equity in these data (race/ethnicity, socioeconomic status, or academic (dis-)advantages). However, there were variations in this study, in the absolute and relative benefit from PLA, which provide caution about whether and how PLA can contribute to equity, or could instead perpetuate inequities. Particularly, in this study, take-up rates were lower for Black adult students, lower-income adult students, and adult students with fewer academic advantages*.

Race/Ethnicity

PLA adult students of each of the examined race/ethnicity groups (among those students whose race/ethnicity was reported) had higher completion rates compared to their non-PLA counterparts*, with the largest differences among Hispanic students (52% completion for PLA students compared to 24% for non-PLA students) and Black students (40% compared to 18%). White and Asian students with PLA also had higher completion rates, compared to similar non-PLA students*,

PLA boosted completion rates for adult students of color, low income adult students, and adult students across the academic performance spectrum.

Credit through certain methods of PLA may help close equity gaps, provided that access to these methods is also equitable.

However, in this study, Black and lower income adult students were less likely to have PLA credit than other adult students.

but the differences were somewhat smaller—51% completion for White PLA students, compared to 32% for White non-PLA students, and 48% completion for Asian PLA students compared to 38% for Asian non-PLA students. Noteworthy, however, is that completion gaps between Black PLA adult students and PLA adult students of other races/ethnicities persisted despite the boost from PLA. So, while the White and Hispanic adult students with PLA credit in this study completed, on average, at relatively the same rate, completion rates for Black adult students who also had PLA credit remained significantly lower* (40% for Black PLA adult students compared to 51% for White PLA adult students and 52% for Latino PLA adult students). Completion rates for Black adult students with non-military PLA credit edge quite a bit closer to their White or Hispanic peers, but still lag somewhat (62%, 68% and 71%, respectively) (Figure 13).

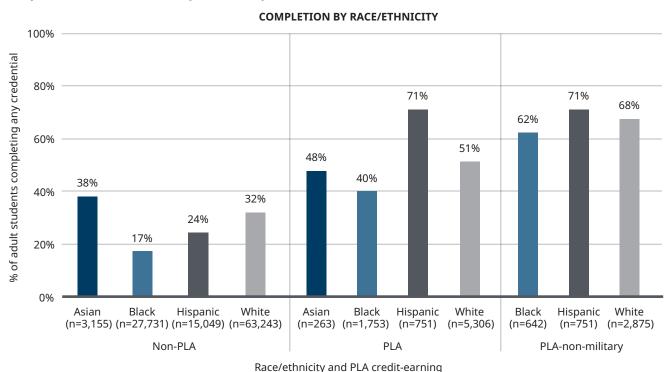
¹⁴ Future PLA research should prioritize obtaining larger samples of key target populations, particularly Native Hawai'ian/Other Pacific Islander and American Indian/Alaska Native.



The PSM analysis also suggests that some methods of PLA could be an important tool for creating greater equity in completion. PLA increased the likelihood of a Hispanic adult student's completion by 24%, Black adult students by 14.1%, and White adult students by 18%; this analysis further found that methods of PLA other than military credit recommendations increased the likelihood of credential completion by Black students by 28% compared to 23% for White students. To reiterate important features of the model, it controls for individual characteristics like Pell status, sector of attendance, and other student and institutional characteristics.

From an equity standpoint, however, the lower rates of PLA usage among some traditionally underrepresented student populations are problematic. Turning to the second question from this section, as is noted in the section on PLA usage, Black adult students in our sample were less likely to have credit from PLA compared to other groups*—just 6% of adult Black students had PLA credit, compared with Hispanic (8%), Asian (8%) and White (8%) adult students (Table 6). Enrollment patterns presumably relate to some of these differences, as the Black adult students in our sample were disproportionately enrolled at for-profit institutions, where Black adult students had lower PLA take-up rates compared to other adult students (Table 7). A lower utilization/access to PLA for Black adult students could potentially increase achievement gaps since fewer of these students would benefit from PLA's effect on completion. Overall, the findings suggest that institutions may need to focus more intentionally on improving PLA usage among Black adult students. One promising strategy for this might be found in findings from previous research studies, in which it was discovered that PLA administrators often encourage Spanish-speakers to pursue Spanish CLEP credit (Klein-Collins & Olson, 2014). This potentially explains why the Hispanic adult students in our sample had higher PLA take-up rates, compared with the Black or American Indian/Alaska Native adult students; in addition it suggests that a similarly proactive advising approach to discover work-related skills and knowledge for other groups could have a positive effect on closing opportunity gaps for PLA.

Figure 13. Hispanic, Asian, Black and White adult students had higher overall credential completion with PLA credit compared to similar students without such credit*; Hispanic, Black and White adult students had still higher completion with PLA-non-military credit, compared to similar students without such credit†



†Analysis of non-AP/IB and non-military PLA methods for Asian students was not possible due to small sample sizes.

Table 6. The lowest PLA take-up rates were among adult students who are Black, Pell Grant recipients, and students who lived in lower-income communities*

	PLA take-up	PLA-non-military take-up
All adult students (age 25+)	11%	4%
Race/ethnicity†		
Asian	8%	4%
Black	6%	2%
Hispanic	8%	5%
White	8%	4%
Other/Multiracial (includes all NH/OPI- and AI/AN-identifying students)	7%	2%
Any identification with smaller race groups†		
Native Hawaiʻian/Other Pacific Islander	7%	2%
American Indian/Alaska Native	6%	3%
Pell Status		
Student had received one or more Pell Grant	7%	3%
Student had not received a Pell Grant	16%	6%
Share of individuals in residential area at or below 200% poverty level		
Less than 15% of residential area at or below 200% poverty level (Proxy for high SES)	14%	7%
Between 15 and 30% of residential area	12%	5%
Between 30 and 45% of residential area	10%	3%
Between 45 and 60% of residential area	8%	3%
More than 60% of residential area is at or below 200% poverty level (Proxy for low SES)	7%	3%

[†] For explanation of how students were categorized by race/ethnicity, please see note to Table 2, above, or Appendix A.

Table 7. Overall PLA take-up rates for race/ethnic groups were influenced in part by sector of enrollment, particularly for Black adult students who were disproportionately enrolled at 2-year public and for-profit institutions in our sample

	2-year public		4-year public 4		4-year private nonprofit		For-profit	
	Take-up rate	Number of adult students	Take-up rate	Number of adult students	Take-up Number of adult students		Take-up rate	Number of adult students
Asian	5%	1,137	12%	1,499	4%	488	7%	294
Black	3%	11,159	12%	7,917	7%	2,220	4%	8,188
Hispanic	4%	8,720	15%	4,778	14%	1,249	7%	1,653
White	5%	27,909	16%	17,410	5%	10,782	6%	12,448

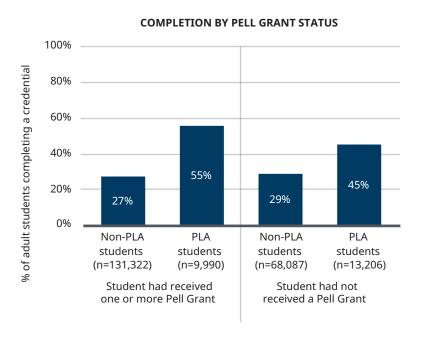
Socioeconomic Indicators

There is considerable and consistent research showing that socioeconomic status (SES) is highly correlated with both enrollment in postsecondary education and degree completion (Roble, 2017). That makes it particularly important to consider the benefit to Pell Grant recipients from PLA credit. Students who had received Pell Grant(s) and who had PLA credit had a significantly higher overall credential completion rate (55%) compared with students who had received Pell Grant(s) but did not have PLA credit (27%)* (Figure 14). The PSM analysis found that PLA increased the likelihood of completion for Pell students by 19%, substantially more than the completion benefit for non-Pell students (13%) the difference in the PSM results between Pell and non-Pell students was one of the largest differences within a given student characteristic category. We also confirmed the benefits for lower-income students along the alternative SES proxy of residential zip codes. Regardless of the degree to which a student's residential areas were low-income, PLA students significantly outperformed non-PLA students in credential completion*.



Although these results suggest that low SES adult students can benefit from PLA, the same issue exists as with Black adult students, namely, that low SES students were less likely to have PLA credit (Table 6). Low income adult students who have the greatest need for economic mobility have the potential to benefit from PLA in terms of improved credential attainment, and yet in this study they were the least likely to have earned any PLA credits.

Figure 14. Adult students who had received Pell Grants (low income) and PLA credit had higher overall credential completion compared to Pell Grant recipients without PLA credit*



Academic Indicators

The process for earning credit through PLA varies by method; some methods offer a very simple process for the student, while others can require considerable time and effort. For students with military training, for example, obtaining college credit for that learning can be as simple as submitting their military transcript for review (on the other hand, this option is only available to students with military training, so while it is an example that is relatively "easy" to obtain, it is not a universal PLA option). In contrast, other methods of PLA can require studying for and taking an exam or preparing a lengthy and well-documented learning portfolio. Anecdotal evidence from PLA administrators suggests that often students who are already academically strong tend to pursue credit through those kinds of methods (Parnell & Wesley, 2020). Students who have test anxiety or who do not have confidence in their writing skills may prefer to just take the course outright rather than opt for credit through PLA. Similarly, students with demanding schedules (due to work or family obligations) may not have the time available to participate in a portfolio preparation course (Parnell & Wesley, 2020).

Looking at overall take-up rates for the different PLA methods, we found that having PLA credit was associated with academic preparedness or achievement indicators. Adult students with higher first-term GPA, higher course success rates, and no developmental education enrollment were more likely to have PLA credit* (Table 8). Students with higher first-term GPA and higher course success rates were also more likely to have PLA credit from a method that requires students to take part in individual assessments of their learning (standardized exams, challenge exams, portfolio assessment)* (Table 9).



Yet, even though PLA take-up rates were lower for students with lower first-term GPAs, lower course completion or who had developmental education credit, the data showed that students at all points of the academic performance spectrum had higher credential completion when they earned PLA credits. Adult students with lower first-term GPAs and lower course completion rates had higher credential completion rates when they also earned PLA credits than peers without PLA credit* (Figures 15 and 16). The same was true for adult students who had English language or developmental education courses* (Figure 17). Similar to the race and ethnicity analysis, these findings provide evidence that credit through certain methods of PLA may help close equity gaps for students across the academic spectrum—provided that access to these methods is also equitable. Helping remove access barriers for students at different levels of preparedness could help support greater academic success through PLA.

Table 8. PLA take-up rates varied by academic characteristics, with highest take-up rates for adult students who had higher first-term GPAs, had higher course completion rates, and did not enroll in English language or developmental education courses*

		Take-up rates
	PLA take-up	PLA-non-military take-up
All adult students (age 25+)	11%	4%
Student academic characteristics		
First-term GPA		
1.00 or less	4%	0.8%
1.01 to 2.00	7%	1%
2.01 to 3.00	9%	2%
3.01 to 4.00	14%	7%
Course success rate		
Less than 70%	6%	0.9%
70 to less than 90%	11%	3%
90% to 100%	14%	6%
ESL participation		
Any ESL enrollment	3%	Not shown
No ESL enrollment	8%	Not shown
Developmental education participation		
Developmental education credits (any)	7%	Not shown
No developmental education credits	11%	Not shown

Table 9. Usage of PLA methods varied by academic characteristics; adult students with higher first-term GPA, higher course success rates, and no developmental education enrollment were more likely to have earned credit through PLA methods involving individual assessments (standardized exams, challenge exams, portfolio assessment).

	Developmental Education Participation		First-Term GPA			Course Success Rate			
	No Dev Ed Credits	Dev Ed Credits (Any)	1.00 or less	1.01 to 2.00	2.01 to 3.00	3.01 to 4.00	Less than 70%	70 to less than 90%	90% to 100%
Standardized exams (e.g. CLEP)	22%	18%	7%	10%	17%	26%	9%	16%	25%
Challenge exams	1%	4%	1%	1%	1%	2%	1%	1%	2%
ACE/NCCRS credit recs	4%	3%	4%	4%	1%	4%	2%	3%	4%
ACE credit recommendations for military	67%	67%	83%	83%	78%	60%	87%	76%	60%
Portfolio assessment	4%	6%	3%	1%	2%	5%	1%	2%	5%
Credit for certificates or licenses	8%	6%	6%	3%	4%	9%	3%	5%	9%
Other	2%	4%	1%	1%	1%	2%	1%	2%	2%

All results are statistically significant* except the following: first-term GPA and course success rate values are not statistically different for ACE/NCCRS credit recommendations and developmental education course participation values are not statistically different for ACE credit for military training.

Figure 15. Adult students at every first-term GPA level had higher credential completion when they had also earned PLA credit*

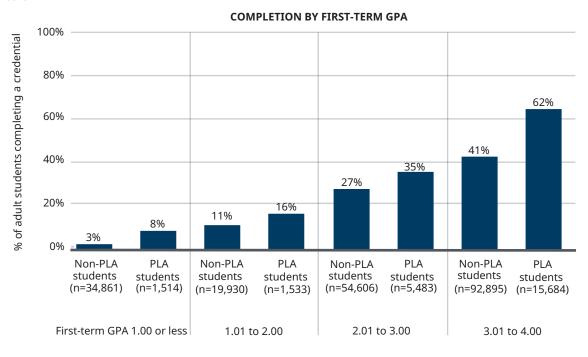
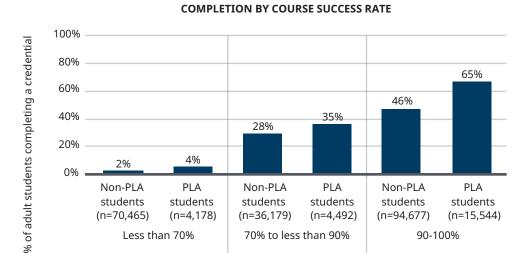


Figure 16. Adult students at every level of course completion rate had higher credential completion when they had also earned PLA credit*



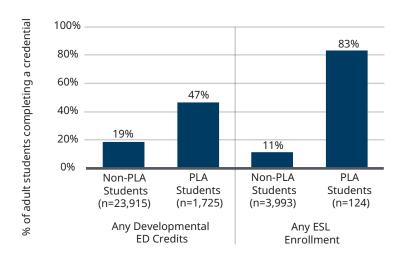
70% to less than 90%

90-100%

Figure 17. Adult students who had taken developmental education or English language courses had higher credential completion when they had also earned PLA credit*

Less than 70%

COMPLETION FOR STUDENTS IN DEVELOPMENTAL EDUCATION OR ESL COURSES



Equity and PLA Summary and Discussion

The results from this study suggest that key adult student populations like Hispanic, Black, and low-income adult students, and adults with relatively less (or less recent) college preparation, could benefit from PLA for improved completion outcomes. However, PLA cannot be a tool for improving equity unless and until measures are carefully put into place to ensure all students have the same access, which would likely require special attention to messaging, outreach, advising, and supports.

Thirty-eight percent (38%) of the Black adults and 53% of Hispanic adults in our sample were enrolled at the participating 2-year public institutions, which, in our sample, also had the lowest PLA take-up rates by sector. For PLA to be a tool to support equity goals—to ensure that it equitably benefits all students and that it does not intentionally exacerbate existing achievement gaps equal access at the institutions that are most likely to enroll lower-income students and students of color is essential.15 Part of the solution is ensuring that PLA credits earned at 2-year institutions will be accepted in transfer at 4-year institutions. In addition, strategies that 2-year institutions could implement to increase usage of PLA include: abundant and relevant PLA offerings, more intentional marketing and outreach, trained advisors who inform students about PLA and support them in their efforts, affordable fees for all PLA methods or fee waivers (assessment fees generally are not eligible instructional expenses under Title IV financial aid), and a stronger institutional culture around PLA so that students regularly hear about PLA and at multiple stages of interactions with the institutions (Klein-Collins et al., 2015).¹⁶

"For us, PLA is a huge component of accessibility and equity. It is an equitable practice that does not discriminate on the basis of how the knowledge and skills were acquired: college-level learning does not necessarily mean college-classroom learning only. Work-related learning and industry expertise can equal college-level learning and providing adults with an opportunity to petition for credit based on these types of learning experiences. It is a practice that removes barriers to higher education."

PLA administrator, 2-year public institution

But, as a starting point, institutions would need to know if they have a problem with equity in their PLA programs. Among the 72 participating study institutions, only 12 reported that they regularly examine their own data on PLA usage by student demographics. In a recent survey of more than 400 undergraduate, degree-granting institutions, less than one-third did any tracking of PLA-related data, and only 19 (5% of respondents) said that they tracked data in a way to support student demographic level reporting (Kilgore, 2020, p. 12).

The findings here provide evidence that certain methods of assessing and granting PLA credit have the potential to support greater completion of key student groups, but access to PLA may not be equitable. As is discussed in the recommendations and areas of further research, these findings have important implications. Equitable PLA may involve an examination and execution of policies and practices that balance out barriers or impediments to PLA access or acquisition.

¹⁶ A further step beyond institutional control involves improvements in federal and state policy to allow financial aid to be used for expenses related to PLA. Currently, the U.S. Department of Education is evaluating the results of experimental programs that have tried this approach, while Indiana is the only state to allow state financial aid to be used for these expenses.





¹⁵ Additionally, improving access by students of color to 4-year institutions is a necessary goal for improving equity in higher education, but beyond the scope of this report.

Awarding PLA Credit Does Not Mean the Loss of Tuition Revenue

Summary of findings: Because PLA students were more likely to persist and complete, they earned more credits through traditional course-taking at their institutions than non-PLA students.

Adult students with PLA earned, on average, 17.6 more traditional course credits than the adult students without PLA
credit*. In other words, on average, institutions realized roughly a full-time semester's worth of additional tuition
revenue from adult students with PLA compared to adult students without PLA.

Many of those who advocate for PLA within their institutions report that a common concern among both faculty and administration is that awarding PLA credit at prices much lower than tuition will result in the institution losing tuition revenue. What that argument fails to account for is the value of increased student retention and completion to the institution. Students who do not stay enrolled at the institution are not paying tuition, either. On the other hand, when students persist, stay enrolled, and complete their credentials, institutions might save money that they might otherwise need to spend on additional student recruitment.¹⁷ In addition, institutions whose funding depends in some way on student outcomes would also benefit financially from the higher completion rates of PLA students.

There is yet another possible financial benefit that institutions derive from PLA. When students persist to completion, the institution can earn *more* in tuition revenue because of the additional courses that those students end up taking at that institution. When examining average credits earned by traditional course-taking at the participating institutions, we found that adult students with PLA earned, on average, 17.6 more traditional course credits than the adult students without PLA credit* (Table 10). In other words, on average, institutions earned roughly a full-time semester's worth of additional tuition revenue from adult students with PLA compared to adult students without PLA. The difference was 19.4 credits at 2-year publics, 13.5 at 4-year publics, 16.7 at 4-year private non-profits, and 31.1 at for-profits.

The greater number of earned credits indicates that there is a potential retention benefit to institutions who support PLA usage. However, institutions would have to design and track whether this leads to a win-win benefit of both increased retention (and revenue) for the institution and affordable and productive credit-earning that supports student credential completion for students.

Table 10. PLA adult students in all sectors earned more credits from traditional course-taking compared to adult students without PLA*

	Non-PLA adult students	PLA adult students PLA-non-military adult students		Number of additional traditional course credits earned by PLA students compared to non-PLA adult students
2-year public	21.1	40.5	43.6	19.4
4-year public	40.7	52.8	55.8	12.1
4-year private nonprofit	43.7	60.4	60.7	16.7
For-profit	41.3	72.3	84.3	31.1
All institutions	32.5	50.2	53.2	17.6

¹⁷ Noel Levitz has reported that the average cost of recruiting undergraduate students is \$536 at public institutions and \$2,357 at private institutions (2018).



PLA and Cost Savings

Summary of findings: Adult students saved money by earning PLA credit.

• The adult students in our sample saved an estimated average \$2,244 at 2-year public institutions, \$4,829 at 4-year publics, \$11,587 at 4-year privates, and \$7,067 at for-profits, when considering the lower costs of PLA compared to course tuition.

As shown in the previous section, institutions may benefit from PLA, given that adult students with PLA may be more likely to persist and complete—and take more tuition-based courses—compared to non-PLA students. But PLA is also promoted to students as a way to save them both time and money in earning a degree. These are not contradictory concepts. The cost savings to students comes from reducing the overall cost of a degree. The revenue benefit to institutions comes from more students persisting, rather than stopping out or dropping out; the revenue benefit is based on comparing PLA students that are more likely to complete with non-PLA students who are less likely to complete.

Recent research that was part of WICHE's PLA landscape series revealed a specific example of cost savings for PLA students in the Colorado Community College System.¹⁸ An interview with a staff member revealed that, even with fees being charged, PLA had saved students more than \$62,000 in tuition in the 2018-2019 academic year (McKay & Douglas, forthcoming).

The student cost savings for PLA depends, of course, on the fees that institutions charge for PLA. Fee schedules typically vary from method to method and from institution to institution (Klein-Collins et al., 2015). The participating institutions provided information about their current fee policies. The pricing information from the participating institutions was reported by the institutional respondents in late 2019 and may be the pricing in effect in academic year 2018-2019, not necessarily the pricing students would have encountered during the study period. None reported charging a fee for reviewing military transcripts for the awarding of credit, but there was a range of fees for all of the other methods. In some cases, methods had flat assessment fees, in other cases, fees were based on a percentage of tuition that would normally be charged for a course, and in still other cases, institutions had more complicated structures such as flat fees for up to the first 15 PLA credits and then incremental assessment fees thereafter.

In the case of standardized exams, students at some participating institutions would pay just the fee for taking the exam (in the case of CLEP tests, at the time we collected the data, that was \$85 per exam; it has since increased to \$89 per exam, https://clep.collegeboard.org/register), while students at other institutions would pay both the exam fee and a test administration fee that generally would run from \$15-\$40 per exam. For challenge exams, some institutions charged 50% of tuition, while others provided them at no cost. Few institutions charged students to award credits for ACE/NCCRS recommendations or for certificates and licenses; when there were fees, they ranged from \$30 to \$500 per review. Portfolio fees could consist of portfolio development workshop fees (a one-time fee, usually based on tuition pricing, since the workshop was often offered for credit), assessment fees (ranging from no fee to \$1,500), and credit transcription fees. These fees are generally not covered by Title IV federal financial aid, but standardized exams are covered by G.I. Bill education benefits.

¹⁸ The individual colleges that are part of the Colorado Community College System are participating institutions in this study.



Using the information from 65 of the institutions in our study (several of the institutions had pricing schedules that were too complex to include), we estimated an average potential cost savings for adult PLA students within each institutional sector by comparing the maximum possible PLA fees each student might have paid (the price for each method at that institution multiplied by the number of credits earned through that method) with the estimated tuition the student would have paid for the same number of credits.¹⁹ For the tuition rate, we used data provided in IPEDS for in-state per credit hour charge for part-time undergraduates in 2018, even in the case of students having out-of-state zip codes

or studying online; for the three institutions where this IPEDS field was blank, we used annual tuition charges and divided by 30 credits. Our estimates did not include any student fees, nor could it account for any discounts in tuition, grants or scholarships a student may have had. Our calculation did not include any PLA credits the student earned that were above that institution's credit limit; the calculation assumes, then, that all remaining PLA credits (within the institution's credit limit) on a student's record were productive ones, allowing the student to forgo the equivalent course enrollments.

PLA SAVES MONEY

\$2,200 to \$11,600

Estimated adult student savings through PLA, depending on sector

In the case of the adult students at the institutions participating in this study, average estimated potential cost savings from PLA ranged from \$2,244 at 2-year publics to \$11,587 at 4-year private non-profits. As noted above, none of the participating study institutions charged fees for awarding credit through ACE credit recommendations for military, so average estimated cost savings for PLA methods other than through ACE credit recommendations for military were slightly lower, ranging from \$1,835 at 2-year publics to more than \$10,000 at 4-year private non-profits (Table 11). The range of potential savings per student varies considerably, due to different pricing structures, different combinations of methods used more commonly at each institution, different number of PLA credits earned, and different tuition rates. For comparison, The College Board estimated the average annual tuition and fees in 2018 to be \$3,700 at 2-year public institutions, \$10,390 at 4-year public institutions, and more than \$36,000 at 4-year private nonprofit institutions.

This calculation is a rough estimate only of the total cost savings from PLA. It is imperfect as it does not account for varying tuition rates for out-of-state or online students, varying tuition rates in the years in which the PLA credit

"I could only apply for certain amounts of loans, [so] throughout the last two years, I was actually paying some money out of pocket. That was already weighing heavily on me. It was already a struggle throughout the two years trying to pay for tuition. But being able to radically reduce it [with PLA] definitely helped me."

Adult learner

was earned, additional student fees, grants, scholarships, or tuition discounts. Further, when considering the total costs to the student, estimating additional costs associated with postsecondary enrollment would be useful, such as increased childcare costs, increased cost for meals-on-the-go, books, Wi-Fi, computers, and perhaps even foregone wages.

Nevertheless, the estimate is at least a signal of some of the bona fide potential cost savings of PLA for adult students. While these cost savings would only increase with additional PLA creditearning by adult students (provided that the credits are counted toward a credential), for some students the bigger savings might come in the form of time saved in earning a degree.

¹⁹ In the case of students with high numbers of PLA credits earned, we capped the number of PLA credits at the PLA credit limit at that institution.

Table 11. With PLA credit-earning, adult students saved between \$2,224 and \$11,587, on average, depending upon institutional sector, 2018-19 school year and dollars

	Stı	udents with PLA	Students with PLA-non-military		
	Mean 25%-75% distribution		Mean	25%-75% distribution	
2-year public (n=27 & 26 institutions)	\$2,244	\$787-\$2,484	\$1,835	\$578-\$2,428	
4-year public (n=19 institutions)	\$4,829	\$1,574-\$6,105	\$3,991	\$840-\$4,511	
4-year private nonprofit (n=10 institutions)	\$11,587	\$5,607-\$18,958	\$10,384	\$5,033-\$18,958	
For-profit (n=4 institutions)	\$7,067	\$6,393-\$7,742	\$5,903	\$5,495-\$6,312	

TIME AND COST SAVINGS

"Clara," a White woman in the Midwest, was in her early 20s when she enrolled in college, but she met the definition of "working adult learner" by living on her own and working two jobs while going to school. At one of her jobs, working as a patient advocate at the local hospital, she learned a lot about HIPPA, insurance, and hospital and medical terminology. At the urging of her advisor, Clara submitted a portfolio and earned credit for two courses based on what she had learned on the job. Clara was thrilled, recalling, "I was the one that was paying for it out of pocket, with financial aid and loans, so it was really nice that it helped me save that money by not having to take those classes." She was also able to graduate a semester earlier as a result.



PLA and Time Savings

Summary of findings: Adult students with PLA credit saved time in earning their degrees.

- · Associate degrees: At 2-year public institutions, adult students saved an average of 12 months in the earning of an associate degree if they earned at least 12 PLA credits. The time savings for associate degree earners was less at for-profit institutions—only about four months for students with more than 12 PLA credits, but overall time to the associate degree at for-profit institutions was far lower at for-profits than at 2-year publics.
- · Bachelor's degrees: On average, adult students saved more than seven months in earning a bachelor's degree when they had 12 or more PLA credits.

In addition to saving money, another key argument for PLA is that when students earn college credit for what they already know, they can save time earning a credential. The logic holds: if a student earns PLA credit for Management 101, they can use their time and resources to enroll in a different course that they need for their degree, and they are three or four credits closer to the finish line. For many students, saving time has a financial component as well. When students are in learning activities, they may need to forgo wages or they may incur additional expenses childcare, both of which add to the cost of each term of enrollment, above and beyond tuition. In addition, when students save time in earning a credential, they can access new occupations—potentially with higher wages—sooner. All of which is to say that when it comes to postsecondary enrollment, time is money.

Determining whether the students in our sample realized any time savings from PLA is somewhat complicated. There are many unknowns: we do not know whether or how many of the PLA credits in the students' records were productive ones (meaning that they counted toward the degree goal), and we do not know if some of the earned PLA credits themselves required significant time of the student (for example, in cases where the student studies independently in preparation for a CLEP test, which could potentially take as much time as taking a regular course, or in cases where a student would take a lower course load while preparing prior learning portfolios). In addition, the calculation of time savings is further complicated by the number of transfer credits that a student has

PLA SAVES TIME 7 to 12 Months

Estimated adult student time savings in earning degrees, with 12 or more PLA credits

(some of which also could be productive, others not), the number of PLA credits the student earned, and the student's enrollment intensity. There are surely even more factors that play a role, such as academic performance indicators, motivation, financial resources, a sense of belonging at the postsecondary institution, and so on.

While there are significant confounding variables related to the question of time to degree, we nevertheless wanted to explore the question of time savings. We focused on the adults in our sample with zero transfer credits whose first degree earned was an associate or bachelor's degree. In addition, we chose to remove students with very high enrollment intensity (80-100% of full time), since they are less representative of the adult student experience, and we also chose to remove those with very low enrollment intensity (less than 20% of full time), since those made up a very small proportion of the credential completers in our sample. Within the group of adult students with enrollment intensity of 20-80% of full time as defined by 15 credits per semester, the distribution of non-PLA adults and PLA adults was quite similar, with non-PLA students slightly more likely to be represented in the highest enrollment intensity band (60-80% enrollment intensity, closer to full-time enrollment) compared to PLA students, regardless of institutional sector. We then calculated the average number of months (including summer months) between matriculation and the degreeearning date for students with no PLA credits, students with 1-12 PLA credits, and students with more than 12 PLA credits.20

²⁰ We chose not to include certificates in this analysis because certificates can vary considerably in terms of expected time to completion.

Associate Degree Earners at 2-Year Public Institutions Saved 12 Months with 12 or More PLA Credits

Associate degree-earning adult students with PLA credits had fewer months between the date first enrolled to the date of earning their degree, compared to similar students with no PLA credit. At 2-year public institutions, adult students completed associate degrees with an average of about 12 fewer months if they earned more than 12 PLA credits*. The differences in months-to-degree for associate degree earners was less pronounced at for-profit institutions—only about four fewer months for students with more than 12 PLA credits, compared to non-PLA degree-earners* and students with 1-12 PLA credits*, but the average number of months to the associate degree at for-profit institutions was far lower than at 2-year publics* (Figure 18).

There is some logic in seeing some time savings for 12 credits or more, as an adult student studying part time could save a half-year or more with

that many credits, but perhaps not with fewer than 12 PLA credits. Sample sizes did not allow for further disaggregation to separately examine the months for degree for adult students with an even greater number of PLA credits.

"If I didn't do the credit for prior learning, I was going to have to do another semester because I had to take two more classes. The classes I needed weren't offered until the next semester, I couldn't do them on the spot, so [having PLA] was nice."

Adult learner

Figure 18. At 2-year public institutions, adult students completed associate degrees with an average of about 12 fewer months if they earned more than 12 PLA credits*; the time savings was less pronounced at for-profit institutions (adult students with no transfer credits and between 20% and 80% enrollment intensity)

MONTHS TO ASSOCIATE DEGREE 45.5 42.4 33.3 Number of months 28.2 28.5 24.3 1-12 PLA More than 12 No PLA credits More than 12 No PLA credits 1-12 PI A (n=1,541)credits (n=110) PLA credits (n=6.705)credits (n=389) PLA credits (n=108) (n=350)2-year public For-profit Sector and number of PLA credits

Bachelor's Degree Students Saved Seven Months in Earning a Degree with 12 or **More PLA Credits**

Bachelor's degree earning adult students also saw reduced time to degree with PLA credits. On average, adult students saved more than seven months on their path to earning their bachelor's degree when they had 12 or more PLA credits, compared to similar students with no PLA credit or 1-12 PLA credits* (Figure 19). Disaggregation by institutional sector was not possible at the bachelor's degree level, because sample sizes became too small at the four-year public and four-year private institutions. Due to the sizes of the samples in each sector, these results are therefore strongly representative of time savings at the for-profit institutions.

Figure 19. Adult students saved more than seven months on their path to earning their bachelor's degree when they had 12 or more PLA credits, compared to similar students with no PLA credit or 1-12 PLA credits* (students with no transfer credits and between 20% and 80% enrollment intensity; combined 4-year public, 4-year private, and for-profit institutions)

53.0 52.9 45.3 **Number of months** No PLA credits (n=3,106) 1-12 PLA credits (n=272) More than 12 PLA credits (n=1,059) Number of PLA credits

MONTHS TO BACHELOR'S DEGREE

These findings suggest that there is time savings related to PLA credits earned, providing students with a compound benefit: with PLA, adult students are more likely to graduate, and they will do so in a shorter period of time and at a lower cost. Yet, is it important to acknowledge that the question of time savings depends on so many other variables such as students' enrollment patterns and institutional policy environments. And, in the case of PLA, much also depends on whether earned PLA credits are productive ones. Critical for linking PLA to time savings, then, is for students to receive good advice and guidance about the applicability of PLA credits to their chosen degree plan, so that they can truly leverage such credits and accelerate toward a credential.²¹

TIME SAVINGS

"Sandra," a 60-year-old White woman, is a widow caring for her disabled sister in a small town. She worked for the same pharmacy store chain for 35 years, beginning as a cashier in high school and working her way up to regional office management and logistics. In 2017, when her company closed, the local workforce board offered employees the opportunity to take a few classes for free at the local community college, one of which was a course that introduced portfolios. Sandra soon enrolled at the college, where she completed six portfolios in IT and management based on her experiences on the job, before earning her associate degree less than two years later.

²¹ For additional discussion, see Amelia Parnell and Alexa Wesley, Advising and Prior Learning Assessment for Degree Completion, (Boulder, CO: Western Interstate Commission for Higher Education), forthcoming.





A Closer Look at Individual PLA Methods

Summary of findings:

- For the adult PLA credit-earners in our sample, the most common PLA methods were credits through ACE military credit recommendations (68%), standardized exams (22%), and credit for certifications and licenses (7.5%).
- For students using a single method of PLA, those with ACE military credits earned the largest average number of credits (25.2), followed by credit for certification and licenses (19.3) and portfolio assessment (18.5). Students using multiple methods of PLA earned more PLA credits on average: 44 credits for adult students using both ACE military and standardized exams, and 32.6 credits for those using other method combinations.
- · Adult students in our sample who earned PLA military credits had a slightly higher rate of completion compared to non-PLA students* (35% and 27%, respectively), but far lower than the credential completion rates for students earning credit through the other methods (65%-80%).

As discussed earlier in this report, institutions vary considerably in their administration of PLA. One way in which they vary is in offering or emphasizing different methods for recognizing prior learning. Some methods involve standardized tests offered through vendors, some involve individualized assessments designed and administered by the institution, and some involve reviewing external training or certifications for learning outcomes that are comparable to college-level learning.

The methods involving student assessments (standardized exams, challenge exams, and portfolio assessment) require the student to do something to demonstrate their learning—study for an exam, re-learn subject matter, or collect and describe documentation of their learning. The methods that involve reviewing external training (ACE/NCCRS credit recommendations, credit for certification or licenses, and ACE credit recommendations for military) typically do not.

The vast majority of the participating institutions reported that they offered—to all undergraduate students—standardized exams (94%) and ACE credit recommendations for military (90%), while fewer offered portfolio assessment (61%), ACE/NCCRS recommendations (61%), challenge exams (51%), or credit for certifications and licenses (46-47%) throughout some or all of the period during which this sample was enrolled. In terms of the number of methods offered to at least some students, 74% of the participating study institutions said that they offered nine or more PLA methods. As previously noted, offering a wide selection of PLA methods is not typical among postsecondary institutions; the institutions participating in this study were chosen in part because they offered at least two PLA methods by 2011-2012. And yet, despite the fact that the participating institutions offered multiple PLA methods, the overwhelming majority of students with PLA credit had it only from one method.

PLA methods using assessments of an individual student's learning

- Standardized exams (e.g., CLEP, DSST, etc.)
- · Challenge exams
- · Portfolio assessment

PLA methods that review transcripts, curriculum, or learning outcomes of external training

- ACE/NCCRS credit recommendations for corporate or other training
- ACE credit recommendations for military
- · Credit for certifications and licenses

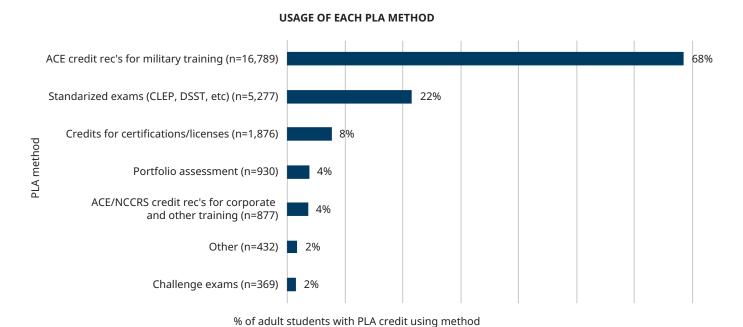


Usage of the Different PLA Methods

PLA Take-up by Method. For the adult PLA credit-earners in our sample, the most common PLA methods were credits through ACE credit recommendations for military (68% of adults with PLA credits), standardized exams (22%), and credit for certifications and licenses (8%) (Figure 20). Less common methods were portfolio assessment (4%), credit for corporate training through ACE/NCCRS (4%) and challenge exams (2%). Most of the students in our sample earned PLA credit through a single method; only 8% of all students in our sample had PLA credit from multiple methods. A staff representative from one of the participating institutions noted that "for the most part, students use the [PLA] opportunity with which their particular experience aligns." In other words, service members use ACE credit recommendations for military, industry-connected students request credit for certifications, and the remainder use options like standardized exams or portfolio assessment. A representative from another institution agreed that it is partly based on the type of credit needed, but they added that choice of PLA method is also "based on personal comfort level/preference." Some students prefer writing and therefore opt for portfolio, while others prefer testing methods.

The dominance of ACE credit recommendations for military in our sample may be partly due to specific circumstances regarding veterans and other service members during the observation period, as discussed later in this report. The popular use of standardized exams in our sample would be expected given that this is a common offering across all participating study institutions and is a relatively easy method for students to understand and for institutions to administer; further, some institutions encourage Spanish-speaking students to earn CLEP language credits (Klein-Collins & Olson, 2014), and other institutions promote CLEP as a way for students who are close to graduation to complete final needed credits (Goldstein, forthcoming). The other methods of PLA are less commonly offered across all institutions; they also require trained staff to administer and, in the case of challenge exams or portfolio assessment, time on the part of the institution's faculty in developing assessments or evaluating student learning. Further, as noted above, some of the lesser-used methods may also not have been available to students until part-way through the observation period.

Figure 20. The most common methods of PLA used by adult students at the participating institutions was through ACE credit recommendations and standardized exams (students using multiple methods are counted for each method used)

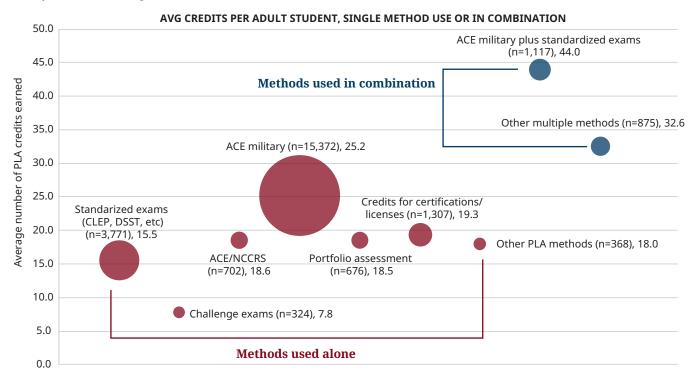


Total exceeds 100% due to 8% of adult students using more than one method.

Average PLA Credits by Method. There is variation in the average number of credits students earned with each method of PLA. For students using a single method of PLA, those with ACE credit recommendations for military earned the largest average number of credits (25.2), followed by credit for certification and licenses (19.3) and portfolio assessment (18.5). Students using multiple methods of PLA earned the most PLA credits on average: 44 credits for adult students using both ACE credit recommendations for military and standardized exams, and 32.6 credits for those using other method combinations (Figure 21).

See later section on current and former service members for discussion of why students with ACE credit recommendations for military may have higher rates of PLA credit-earning.

Figure 21. Number of adult students using method and average number of PLA credits per method, with bubble showing size of adult student population using that method; students using multiple methods are counted only in the multiple methods categories



PLA Methods and Credential Completion

As described earlier in this report, credential completion for PLA students is much higher than for non-PLA students, and when disaggregating to analyze completion rates for students receiving PLA-non-military credit, the effect on completion was even stronger. Figure 22 shows credential completion for students using each method of PLA, including those students using multiple methods. As we would expect given our earlier analysis, the adult students in our sample who earned PLA military credits had a completion rate that was eight percentage points higher than that of non-PLA students (35%) compared to 27% credential completion), but less than the completion rate for adult students using other methods, which ranged from 65% to 80%. When disaggregating by sector, completion rates for adult students were higher for students using any PLA method compared to non-PLA adult students in all sectors, with only one exception: students with ACE credit recommendations for military at 4-year public institutions had a slightly lower completion rate (27%) compared to non-PLA students in that sector* (31%) (Table 12).

"We did our own independent study of the value of PLA for our students and found that earning PLA credits is the second most important student characteristic associated with getting to graduation—the first being high school GPA. But for adult learners, PLA was the most important characteristic for earning a degree. Within that, portfolio assessment was the most helpful kind."

PLA program administrator, 4-year public institution

Figure 22. Adult student credential completion by PLA method

COMPLETION BY PLA METHOD adult students completing any credential 80% 78% 75% 74% 72% 65% 65% 59% 35% 27% ACE/NCCRS Portfolio Standarized Credits for No PLA Challenge Other ACE ACE Other ф assessment exam (CLEP, exams certifications/ credit rec's (n=368)credit rec's credit rec's for multiple credits (n=676)for military (n=324)(n=702)(n=208,110) DSST, etc) military plus methods licenses (n=3,771)(n=1,307)(n=15,372) standardized (n=875)exams (n=1,117)PLA Methods

Table 12. Within each institutional sector, adult students with credits through any PLA method had higher completion rates, compared to adult students without PLA, with the exception of adult students with ACE credit recommendations for military training at 4-year public institutions

	2-year public		4-year public		4-year private nonprofit		For-profit	
	% Completed	N	% Completed	N	% Completed	N	% Completed	N
Standardized exams: CLEP, DSST, etc.	71%	348	55%	640	72%	176	84%	2,607
Challenge exams	71%	133	72%	86	Not shown	Not shown	80%	81
ACE/NCCRS credit recommendations	76%	80	52%	61	Not shown	Not shown	64%	554
ACE credit recommendations for military	32%	1,115	27%	3,277	Not shown	Not shown	38%	10,931
Portfolio assessment	76%	94	80%	204	77%	159	85%	219
Credits for certifications/ licenses	44%	193	72%	278	81%	439	78%	397
Other	50%	191	71%	73	94%	94	Not shown	Not shown
ACE credit rec's for military plus standardized exams	Not shown	Not shown	54%	359	Not shown	Not shown	62%	731
Other multiple methods	90%	58	60%	329	83%	131	84%	357
Non-PLA	18%	54,096	31%	31,840	54%	14,360	28%	107,814

Some cell sizes were too small (<50) to include in the analysis.

" Students who need to complete numerous credits will choose between exams and portfolios. Rarely do they complete both methods. I attribute this to personal choice and strength. Most students prefer writing over testing or viceversa. They choose the method they feel will bring them the most successful result. [...] I would suggest that the reason they only use one PLA option is based on personal comfort level/preference and/or the type and amount of credit needed."

PLA program administrator, 4-year private nonprofit institution

Discussion of Usage and Completion by PLA Methods

The rates at which students earned credit from the various PLA methods are likely influenced by the method's availability at any given institution, the type of learning that the student has (e.g., military-related vs. industry-related), and the (perceived) ease or benefit of pursuing PLA compared to taking courses, student preference or comfort (as mentioned above), among other things. Usage may also be affected by the degree to which a particular method is visible or promoted at an institution.

Adult students in our sample had considerably higher credential completion rates for all methods of PLA. The following section explores possible reasons why the outcomes for adult students with military credit were somewhat lower than the other PLA methods.

The Experience of Service Members and Credit for Military Training

Summary of findings:

- The service members in our sample had very high PLA take-up rates (43%), compared to 3% of non-service members.
- Service members with PLA credit had higher credential completion compared to service members without PLA credit.
- · Compared with non-service member PLA-earners, service members with PLA credit had higher average numbers of PLA credits and lower completion rates.

Active military and veterans are an important segment of the adult student population. In 2019, there were more than 900,000 veterans taking advantage of their G.I. Bill and other education benefits (Veterans Benefits Administration, 2019). They are often pursuing postsecondary credentials as part of their transition to civilian life and occupations. In this section, we take a closer look at the experience of service members—both active military and veterans—with PLA. We are combining these two populations for the purpose of this study since both had access to similar education benefits and military transcripts that could lead to PLA credits, and since students could have transitioned out of the military, thus being both active military and veteran, during the observation period.

Adult service-member students with ACE credit recommendations for military make up the largest proportion of adult PLA credit-earners in our sample, compared to other PLA methods, which warrants a closer look in this study. Credit recommendations for military training is not a PLA option that is available to all adult students, but rather is a form of PLA that is only available to those with military service.²² Throughout this report, we have presented results for PLA adult students alongside the results for adults with PLA methods that exclude ACE credit recommendations for military, in an effort to show when the incidence of military credit may be skewing the results we want to be more broadly applicable. As is shown in the above analysis of PLA methods, adult students with ACE credit recommendations for military earned a higher average number of credits compared to adult students using other PLA methods, and, while adult students with ACE credit recommendations for military had higher completion rates compared to non-PLA students, their completion rates were lower than those of students using other PLA methods.

QUICK DATA 43% of service members (current or former) had earned PLA credits

While we do not have the ability to say definitively why results are so different for the adult students with ACE credit recommendations for military, possible explanations may lie in the experiences of service members more generally during the observation period.

²² In this report, "non-military PLA" is defined as PLA methods other than ACE credit recommendations for military, yet it is important to note that many service members also can receive credit for their military training through DSST exams. This study collected information about such credit under the larger category of standardized exams and cannot disaggregate the DSST credit-earning to include that in the "non-military PLA" definition.

Service Members, Postsecondary Enrollment, and Credit for Military Training in the Early 2010s

To fully understand the experience of the veterans and active service members in our sample, we must consider the larger context.²³ In academic year 2011-2012, the matriculation year of our cohort, postsecondary institutions were seeing historically high enrollments of veterans. At that time, the military was in the middle of significant personnel reductions due in part to the drawdown of U.S. forces in the wars in Iraq and Afghanistan (Blakely, 2017).²⁴ Newly discharged service members often choose between getting a job and pursuing education as they transition to civilian life, but this particular group of veterans faced some unique circumstances: first, the drawdown was taking place at a time of high U.S. unemployment as the economy was still recovering from the Great Recession, and second, there were now extended education benefits as part of the 2009 Post-9/11 GI Bill, which included funds for living expenses as well as for tuition. Economic conditions certainly made civilian employment more challenging, while the GI Bill benefits may have made postsecondary enrollment more appealing for new veterans. According to the annual reports of the Veterans Benefits Administration, the number of individuals using the various GI Bill education benefits (Montgomery GI Bill and Post-9/11 GI Bill) increased from 439,831 in 2009 to 680,118 in 2010 to 805,765 in 2011—an 83% increase in just two years (2011).

Over time, the Department of Defense would establish the Transition Assistance Program (TAP) to help those exiting the military with various aspects of their transition, including how to understand the GI Bill's education benefits and how to use them. In 2011, however, the TAP program was just getting off the ground, and initial efforts provided just a few days of guidance on the use of the educational benefit at the time of discharge—a time when veterans were most likely to be overwhelmed and more focused on other aspects of their transition.

"I honestly can't tell you the exact first time someone told me [about PLA in the service.] Basically, as soon as they start getting on you about going to school and stuff. They start telling you that all you have to do is go in and take a test, right, and then you get credit towards a degree, super easy."

Adult learner

In terms of actual postsecondary enrollments, a significant number of veterans responded to the recruitment efforts of online for-profit institutions, as is evident by the large number of veterans at for-profit institutions in the dataset collected for this study. But other postsecondary institutions were also enrolling large numbers of veterans. In 2011, however, not many colleges and universities had programs in place to support veterans in their transition from the military to higher education, nor did they always have policies in place to deal with issues, such as students being deployed overseas with little notice. As a result, an enrolled veteran who was part of the national guard could end up failing an entire term due to an unexpected deployment taking place after a college's official course-drop date. To address such issues, and to ensure that veterans also had peer communities and support services on campuses, organizations like the Servicemembers Opportunity College Consortium and the American Council on Education issued several publications between 2009 and 2012 about best practices for supporting student veterans within higher education. Organizations like CAEL also began working directly with institutions on initiatives to support veterans transitioning to higher education.

²⁴ Military personnel levels were also affected by the imposition of caps on defense spending due to the Budget Control Act of 2011, also known as sequestration. This act was passed in August 2011, too late to affect Fall 2011 enrollments, but could potentially have influenced Spring 2012 enrollments for our cohort.





²³ Special thanks to Michele Spires at American Council on Education, Sara Appel from the Multi-State Collaborative on Military Credit, and Amy Morys from Council for Adult and Experiential Learning for their accounts of this time period.

Public officials, meanwhile, were urging colleges and universities to support student veterans. One way to do that was to offer college credit to veterans based on the military training they had received, using the ACE credit recommendations listed on their military transcripts (in fact, by early 2012, both Indiana and Minnesota laws required public institutions to do this; see Sherman, Klein-Collins & Palmer, 2012). This could potentially explain some of the high incidence of credits from ACE credit recommendations for military, as well as the high PLA take-up rate generally among service members in our sample, as shown later in this section. In the early 2010s, college administrators often did not have clear internal guidelines on how to use the transcripts to award credit. At some colleges, large numbers of military credits were awarded regardless of whether those credits were applicable to the student veteran's planned degree. As a result, many student veterans ended up having large numbers of military PLA credits on their college transcripts that did not ultimately count for anything more than credit for elective courses. In such cases, the PLA credit would have limited value for the student's credential completion.

In summary, the veterans in our cohort, matriculating in 2011-2012, were starting their educational journeys at a time when there were mass discharges from the military, a lack of available jobs that spurred many veterans (and many others) to go to college, large numbers of veterans enrolling with new GI Bill benefits, a lack of guidance for the newly-discharged on where to enroll and what to study, and institutions that may not yet have fully understood how to support students transitioning from the military. Yet, in this context, the veterans in our sample may also have had expanded access to PLA, since many institutions were encouraged by public officials to grant credit for military training. While we do not have a way to determine the extent to which these were factors for the service members in our cohort, this context is nevertheless important to keep in mind when examining their PLA usage patterns and credential completion.

PLA Take-up and Credential Completion for Service Members

First, a note about the tracking of service members (current and former) in student information systems. Typically, military or veteran status is voluntary information on admissions and enrollment forms, and so there are many students whose actual service status is unknown. For the purposes of this study, we have grouped together students confirmed as non-service members with those of unknown status. Therefore, some former or current service members may possibly be included in our "non-service member" group. ²⁶ In addition, because this is a unique population of adult learner that is typically not defined by age, we are using the entire sample for this analysis and not just the sample of adult students age 25 and older.

Demographics and enrollment of service members (current and former) in our sample. Compared to non-service members in our sample, the service members were more likely to be male (71% of service members, compared to 38% of non-service members), more likely to attend for-profits (43%, compared to 36%) or 4-year publics (44%, compared to 24%) and less likely to attend 2-year publics (9%, compared to 36%)*. Service members and non-service members had similar distributions in terms of race/ethnicity, but notable differences by age; service members were more likely to be age 25-34 (45% of service members, compared to 28% of non-service members) and less likely to be under age 25 (31%, compared to 50%)*. Service members had slightly better first-term GPA and course success rates and were less likely, compared to non-service members, to take developmental education courses*. Service members were slightly more likely to be studying part time* (defined as 60% of enrollment intensity or less). (See Appendix B for demographics tables.)

²⁶ Some institutions attempt to improve their understanding of which students have had military service by flagging students who have used GI Bill benefits or who have earned credit through ACE credit recommendations for military, but we cannot assume that institutions in this study had done so. In fact, there were 2,591 students in our dataset who had military credit but were labeled as having no or unknown military service; we recoded these students to be identified as service members (this recoded group was 5% of the total service member sample in our analysis).





²⁵ Because excess credits on the transcript could jeopardize federal financial aid, over time, and with additional guidance from ACE in a 2012 toolkit, the problem of awarding too many military PLA credits has become much less of an issue. In addition, states like Minnesota and Ohio have passed legislation requiring that military credit only be awarded if it relates to the student's degree plan.

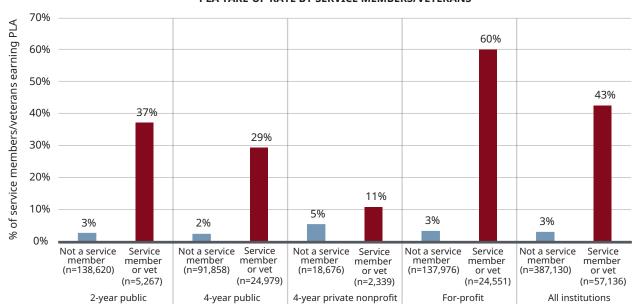
PLA take-up rates. Overall, the service members (current and former) in our sample (all ages) had a PLA take-up rate of 43%, significantly higher than the 3% PLA take-up rate of non-veterans or people with unknown service history*. ACE credit recommendations for military was not the only type of PLA credit that students who were either active military or veterans earned. Of all service members who earned any PLA credit (all ages), 92% earned credit through ACE military recommendations, and 11% earned credit through standardized exams (a category which included DSST along with other standardized methods). Very small percentages earned credit through the other methods (less than 2% each). The high take-up rate was driven somewhat by the high takeup rate at for-profit institutions (60%) and the large number of enrolled service members there, yet PLA take-up by service members was higher than non-service members for all institutional sectors* (Figure 23).

"We're more accepting of PLA than perhaps other 4-year universities might be. We have a strong record of serving military students, and PLA comes with that in a big way."

PLA program administrator, 4-year public institution

Figure 23. Service members had significantly higher PLA take-up rates, compared to non-service members*

PLA TAKE-UP RATE BY SERVICE MEMBERS/VETERANS



This includes service members of all ages, not just those 25 and over.

PLA credits earned. Service members with PLA at the participating institutions also earned more PLA credits, on average, compared to non-service members with PLA* (24.2 for service members, compared to 16.2 for non-service members). Compared to other students, service members had 4.9 additional credits at 2-year public institutions, 6.7 additional credits at 4-year privates, and 10.4 additional credits at for-profits*. At 4-year publics, PLA credit earning by service members was about the same as non-service members (Figure 24). In addition, 24% of the service members with PLA had 16 or more PLA credits, compared to only 1% of non-service members with PLA*.

AVERAGE PLA CREDITS EARNED BY SERVICE MEMBERS/VETERANS 30.0 28.3 24.2 25.0 Average PLA credits Earned 23.1 20.0 18.0 17.9 17.5 17.4 16.4 16.2 15.0 13.2 10.0 5.0 0.0 2-year ΑII 4-year 4-year private For-profit public public nonprofit institutions

Figure 24. Service members had significantly higher average PLA credit-earning, compared to non-service members*

This includes service members of all ages, not just those 25 and over.

■ Not a service member (n=11,107)

■ Service member (n=24,287)

Credential Completion. Service members with PLA credits in our sample had higher credential completion (35%) compared to service members without PLA credits (21%)—a difference of 14 percentage points*. Yet, service members had lower completion compared with non-service members, both with PLA and without (75% and 31%, respectively)* (Figure 25). A sector analysis reveals that service member completion was lowest at 2-year public institutions (31% for PLA students and 19% for non-PLA) and 4-year publics (28% PLA students and 13% for non-PLA). Outcomes for service members were somewhat better at for-profits (38% for PLA students and 32% for non-PLA), and much higher at 4-year private non-profits (68% for PLA versus 43% for non-PLA). In all sectors, service members with PLA had higher completion rates compared with service members without PLA* (Figure 26). The completion rates for service members in our sample were low when compared to results from the Student Veterans of America's national study of veteran student success; using a very different sample, multiple academic year cohorts, and a different definition of veteran, the SVA study found that that 54% of veterans enrolling in 2009-2013 completed a credential (Cate et al., 2017).

SERVICE MEMBERS, PLA, AND COMPLETION 100% % of students completing a credential 80% 60% 40% 75% 20% 35% 31% 21% 0% Non-PLA (n=376,023) PLA (n=11,107) Non-PLA (n=32,849) PLA (n=24,287) Not a service member Service member/veteran All institutions

Figure 25. Service members with PLA credit had higher completion rates compared with those without PLA credit*

This includes service members of all ages, not just those 25 and over.

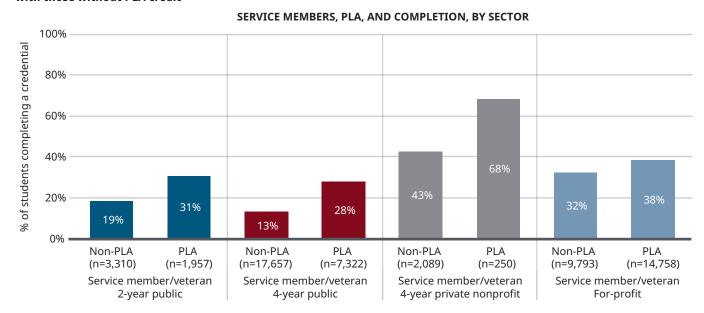


Figure 26. Within each institutional sector, service members with PLA credit had higher completion rates compared with those without PLA credit*

This includes service members of all ages, not just those 25 and over.

Discussion. The service members in our sample had very high usage rates for ACE credit recommendations for military and higher average numbers of PLA credits compared to non-service members. In addition, service members with PLA credit had higher completion rates compared to service members without PLA credit. To be sure, the completion rates for service members in our sample were much lower than for non-service PLA members. There were some sector variations: at 4-year publics, service members and non-service members had more similar PLA credit earning, and at 4-year private non-profits, service members had credential completion rates that were much higher than at other sectors.

The high PLA take-up rates for service members in our sample, along with what our subject matter experts confirmed about the awarding of military PLA credits in the early 2010s, suggest that when adult students know about PLA opportunities, when institutions have an interest in encouraging the awarding of PLA credits, and when the awarding of credit for prior learning has a simple process (like ACE credit recommendations for military), more students can earn credit through PLA. In other words, when it comes to the usage of PLA by all adult students, a 3% or 10% PLA take-up rate at an institution may be significantly lower than what should ultimately be possible.

The lower credential completion rates for service members with PLA may be the result of some of the context facing service members in 2011—based on the accounts from our subject matter experts, we might theorize that perhaps some of the service members found employment part-way through a degree program, or perhaps they felt unsupported in their transition from the military to postsecondary learning. But it may also be the case that the higher PLA take-up rate of veterans may also be playing a role in the completion results. The characteristics of PLA credit-earners from a high take-up group may be different in significant ways from the PLA credit-earners from a lower take-up group, in terms of educational background, employment history, motivation, initiative, and other factors for which we did not have data.

The high PLA take-up rates for service members suggest that a 3% or 10% PLA take-up rate at an institution is significantly lower than what should be possible.



Further research on this cohort of service members in higher education is warranted to understand better what their original motivations were for enrolling and the extent to which their military credits were able to count towards their degrees. In addition, further study of subsequent cohorts would help the field understand whether credential completion by service members with PLA increased over time, as institutions began to respond to recommendations for how best to support veterans and to guidance on how to limit the awarding ACE credit recommendations for military to only those that matter for credential completion.

Service members receive a lot of training that can be evaluated for college credit, but good advice is often needed to help them understand how the various credits count toward a degree.

"Alicia" is an African American service member in her mid-20s, stationed on a U.S. air force base. For the last seven years, she has worked in a human resources capacity on several bases. She hopes to get a civilian job in human resources when her current service commitment ends in two years. Alicia enrolled part time in an online bachelor's degree program while concurrently completing an associate degree through the Community College of the Air Force. Through the education office on base and the academic advisor she was assigned on campus, she has figured out how to get college credit for her Airman Leadership training and Tech School training. She has also been earning additional credits by studying independently for CLEP exams. She loves the fact that she has earned credit for knowledge and skills she has gained in the military. "I would recommend [PLA] because a lot of it is free and it definitely helps you get your degree a lot quicker," she notes. Yet, one challenge has been piecing together the advice she received from the military education office, the advisor at the online four-year institution, and the CCAF. She wonders in what ways advisors across sectors might be able to work together to better support military students.





Summary of Findings

This study found that at the participating study institutions, PLA was strongly associated with higher rates of credential completion for adult students. While only 27% of non-PLA adult students in our sample completed a postsecondary credential, much higher percentages of PLA students did: 49% of adult students with any PLA method, and 73% of adult students with PLA methods other than ACE credit recommendations for military. While the extent of the credential boost from PLA varied depending on the sector or specific student subgroup, the data showed that all of the various subgroups experienced a boost. Perhaps even more compelling were the results from the propensity score matching analysis that isolated the effect of PLA for the adult student population: when controlling for differences in the PLAearning population and the non-PLA-earning population, the effect of PLA on credential completion was positive and strong, showing a 17% increase in completion rates for adult students with any PLA credit and a 30% increase for adult students using methods other than ACE credit recommendations for military.

To be sure, there were limitations on and complexities to our analyses based on the particularities of our student sample and the specific group of institutions that participated in this study. The sample was overly representative of predominantly online institutions, some of the results (most notably for sector and for race/ethnicity groups) were influenced by a handful of large institutions or by institutions where key student groups were concentrated, and there were too few students in some of the race categories (Native Hawai'ian/Other Pacific Islander and American Indian/ Alaska Native) for us to analyze fully. Yet, our overall findings are that PLA is an important tool for credential completion: PLA is associated with higher levels of credential completion, cost savings, and time savings.

In addition, this study found that institutions can also benefit from PLA. Because adult students with PLA credit at the participating institutions were more likely to persist and continue to completion, they took more regular courses at the institution: adult students with PLA earned an average of 17. 6 more credits from institutional courses compared to adult students without PLA.

We also found, however, that students with PLA credits are to some extent part of a "secret club." Nearly 40% of the institutions in our study had adult student PLA take-up rates under 3%, and take-up rates for female, low-income, and Black adult students lagged take-up rates for other student subgroups. PLA take-up rates for adult students at 2-year public institutions were also very low. So while PLA could be an effective tool for improving equity and reducing achievement gaps, lower usage of PLA by key groups puts that equity goal out of reach.

Yet, PLA does not appear to be a secret for service members (active military or veterans). This group had a 43% take-up rate, primarily from the awarding of credit through ACE military quide recommendations. If service members can take advantage of PLA at such a high rate, then institutions should challenge themselves to have higher PLA usage by nonservice members. While we do not have enough data to fully understand what the right benchmark should be for PLA take-up rates, a 3% take-up rate by adult students at an institution seems to be far underperforming what should be possible.

Like all other student subgroups in our sample, service members in our sample also saw a boost in completion from PLA, but the completion effect for students with ACE credit recommendations for military was lower in magnitude than from any other form of PLA. We suspect that the service members in our cohort may be a unique cohort, given that the early 2010s was a time of large student veteran enrollments in higher education and that those student veterans were responding to a unique set of incentives created by military drawdowns, the new Post-9/11 GI Bill, and a lack of opportunity in the labor market.





What Has Changed in Ten Years?

After the release of 2010's Fueling the Race to Postsecondary Success, CAEL observed growing interest in PLA from individual institutions, state systems, foundations, and government agencies.²⁷ The power of data to draw attention to PLA and its benefits for adult students was one reason why CAEL and WICHE were committed to revisiting this research ten years later. On the whole, the results from this 2020 study of PLA has strongly reinforced the main take-away from ten years ago: PLA helps boost completion rates for adult students.

Compared to the 2010 results, the 2020 findings still show a significant PLA boost to credential completion. In addition, the effect from PLA on completion is still evident for all student subgroups, including race, ethnicity, income level, institutional sector, and many other categories. Building on this finding, this more recent examination of PLA provides even stronger evidence by incorporating a statistical modeling approach that isolates the impact of PLA, while controlling for many demographic and academic characteristics as well as various institutional environments. This approach also found strong positive PLA effects on credential completion for every subcategory of student examined.

Where this study's results differ from the one from ten years ago is in PLA take-up rates. The PLA take-up rates in this study's sample were far lower, with only 11% of all adult students in the sample earning credit through PLA, compared to 25% of the adult students in the 2010 sample. There are many possible explanations for this difference. First, the difference may be explained simply by the fact that a different group of institutions participated in this study versus the one in 2010, and the wide variability of take-up rates among institutions, along with varying population sizes, contributed to the very different take-up results. Second, while one criterion for institutional selection was the offering of at least two PLA methods in 2011, 63% of the participating institutions indicated that their PLA offerings became more beneficial to students between 2011 and 2019 (perhaps in the wake of the positive findings from Fueling the Race). It is possible that those enhancements were not implemented in time to make PLA more accessible to the adult student cohort that is the subject of this study. In other words, the institutions that participated ten years ago may have had more established and mature PLA programs than the institutions participating this time. Finally, 30 2-year public institutions participated in the 2020 study, compared to only 7 in 2010; both studies found that PLA usage was very low at the 2-year public institutions examined. The lower PLA take-up rates in this study, therefore, may be due to the very different group of participating institutions—it is not necessarily the case that the findings are reflecting a trend of decreasing PLA usage, but rather that this group of participating institutions in 2020 may not have had as strong a history with PLA than the 2010 institutions.²⁸

The studies from both 2010 and 2020 both benefitted from having access to data on very large numbers of adult students and their experiences with PLA. And while the usage of PLA may have been different among the various cohorts, the bottom line is that even when usage is low, the effect on adult student completion can still be great. The challenge for institutions is to address the take-up, or usage, issue and encourage more adult students to take advantage of PLA opportunities. The research findings show that it could have a big impact on credential completion.

²⁷ CAEL heard from many institutions that the findings from Fueling the Race were influential in advancing PLA with their faculty and administrators. In the years following the report's release, CAEL saw record attendance at the CAEL trainings and our annual conferences, with high numbers of first-time attendees interested in learning more about PLA. Numerous states developed system-wide PLA policies, including Tennessee, Ohio, Oregon, Washington, Utah, Idaho, Pennsylvania, Texas (through the A&M system), Montana, and Colorado (many of these are highlighted in Sherman & Klein-Collins, 2015). Most of these states cited the Fueling the Race findings as an important reason for the state to encourage more institutions to offer PLA. In addition, the state of Indiana passed legislation ensuring that state financial aid should cover PLArelated assessments, the U.S. Department of Labor required TAACCCT grantees to include PLA in their initiatives, and the U.S. Department of Education established an experimental site to test ways to use Title IV funding for PLA (Plumlee & Klein-Collins, 2017). 28 Still, the institutions in this study are likely doing more with PLA than is typically found across all of higher education. A recent survey by the Southern Association of Colleges and Schools Commission on Colleges (SACSCOC) found that only four percent of students at the responding institutions earned PLA credit (McKay & Douglas, 2020).

Recommendations

The findings presented in this report will undoubtedly shape our collective understanding of PLA for the next several years. In addition, they point to a number of recommendations for higher education, workforce development, and public policy. The following recommendations are grouped by the following themes: promoting equity, scaling PLA usage, building buy-in for PLA at the institution level, improving state and federal policies, and identifying future directions and research needs for the field.

To Promote Equity

This research study is compelling in that it shows strong effects on completion for every student sub-group. PLA has great potential to be a tool for improving equity in educational attainment, but it cannot fulfill that promise if key student subgroups—particularly Black adult students and low-income students—are not utilizing it to a sufficient degree. In this study, both Black and lowerincome adult students had significantly higher rates of credential completion when they had earned PLA credit. Yet, these students also had lower PLA take-up rates than other adult student groups: Black adults had lower PLA take-up (6%), compared to Hispanic (8%), Asian (8%), and White adult students (8%), and Pell Grant recipients had lower take-up (7%), compared to non-Pell Grant recipients (16%). In addition, use of PLA in our cohort was also limited at 2-year public institutions, precisely the institutions positioned to serve low-income, first generation students of color. So, while most adult student groups gained a credential completion boost from

"For us, PLA is a huge component of accessibility and equity. It is an equitable practice that does not discriminate on the basis of how the knowledge and skills were acquired: college-level learning does not necessarily mean college-classroom learning only. Workrelated learning and industry expertise can equal college-level learning and providing adults with an opportunity to petition for credit based on these types of learning experiences. It is a practice that removes barriers to higher education."

PLA administrator, 2-year public institution

earning PLA credit, that may not translate to the closing of completion gaps if access to PLA is not equitable. To ensure that PLA programs close opportunity gaps among students, institutions should:

• Ensure institutional data systems can and do link PLA credit, student demographics and student outcomes, so that institutions can better understand how well PLA is serving key student populations—whether students of color, student parents, or student veterans. Although the institutions in this sample largely demonstrated strong capacity to provide disaggregated data, including information about PLA receipt, other research suggests that many institutions are not able to access such information easily (Kilgore, 2020). Further, even at institutions with the capacity to analyze the equity implications of their PLA programs many are not doing so (Kilgore, 2020). There are creative ways in which institutions have been able to use existing data systems to track and report on PLA activities (Klein-Collins, 2016). Institutions must establish systems and processes for tracking information on PLA credit-earning, and they must regularly analyze programs to assess the equitability of student outcomes. If key populations, such as Black adult students, are not using PLA, the institution should investigate why and make changes to reach those students better. Similarly, if key populations, such as service members, have lower completion rates—whether with or without PLA credit—institutions should address how the success of those student groups might be improved.



- Target PLA marketing efforts to student populations with **completion and opportunity gaps.** Prior research has shown that traditional PLA marketing campaigns have a difficult time reaching students of color, and even if they do, these students have a hard time seeing themselves as worthy of earning credit for their prior learning (Wong, 2014; Wihak and Bourassa, 2013, as cited in Wong 2014; Leaker and Boyce, 2015; Klein-Collins and Olson, 2014). Institutions need to ensure their marketing and outreach strategies are not merely inclusive of all students, but also intentional in their focus on reaching those from underrepresented backgrounds, as part of an overall strategy to improve PLA usage by these groups. Institutions need to make PLA a mandatory component of adult student advising, with special strategies for encouraging key populations to pursue PLA options.
- Offer multiple methods of PLA. Not every type of learning can be assessed through a standardized exam. And not every student feels comfortable presenting their learning in a written portfolio. Institutions need to provide multiple methods for assessing a student's learning and to evaluate formal learning that has taken place outside of a college

or university. Doing so can provide additional opportunities for students to earn credit for what they know and meet unique student needs. (This recommendation is also included as a solution for scaling PLA usage, as described below.)

"In the recent years, ... we have been ramping up the program on so many levels. We completely revamped the process, we introduced more options and we are continuously communicating them to our students. CPL is no longer a best kept secret."

PLA program administrator, 2-year public institution

· Assess the institutional business case for scaled PLA offerings at low or no cost to the student. The data presented here show that students who earn PLA credit also take more classes at their institution. The data also show that students receiving Pell Grants are less likely to receive PLA, suggesting that one barrier to PLA usage could be the additional cost to the student from PLA fees. Institutions might consider developing creative funding strategies to provide PLA opportunities to low-income students with an expectation that it could recoup costs through better retention. Options that various institutions have explored include institutional grants or scholarships for PLA, and building the administrative cost of providing PLA into the overall cost of enrollment so that it can be covered by tuition assistance and financial aid programs.

"Lots of times, students graduate without being aware of [PLA]. Last year, we did a lot of new marketing efforts. We reached out to individual programs and students. ... [We] expanded the website and produced a professional marketing video—just two minutes long, quick and to the point. There are information sheets for each program where students can use prior learning, and we've been sharing those with students and faculty. We send target emails as well. I have seen a change from this. I now get a lot of responses and inquiries from students."

PLA program administrator, 4-year private institution



To Scale PLA Usage through Institutional Policies, Practices, and Partnerships

While students with PLA in this study, on average, had better outcomes than their peers without PLA, only about one in ten students had any PLA credit on their transcript at all, and only 4% had PLA credit through methods other than ACE credit recommendations for military. Given the strong, positive impact the findings show for PLA recipients, scaling PLA usage should be a priority. To scale PLA usage, institutions should:

- Make sure that PLA options are available and promoted as a key part of degree programs. Institutions can leverage data analytics to ensure their website is successfully promoting PLA; for example, one institution in the study reported, "we have dedicated credit for prior learning (CPL) pages on our institution website and through Google Analytics we track visits to CPL pages. We can break it down to unique page views to each individual CPL-related page (military CPL, Credit by Exam, etc.). We watch the traffic month over month." Institutions should talk about the benefits of PLA during recruitment events; one institution in our study has a banner for prior learning that they use during student-facing events and a digital campaign which states, "Did you know you can save time and money toward your degree?"
- Embed PLA into all aspects of the student lifecycle, with faculty 2-year public institution as key partners. Students should hear about PLA early in their enrollment and multiple times thereafter. One institution in the study found that their students were learning about PLA too late, so they added a CPL module to online orientation that all new students will complete prior to registering for their first class. Another institution said that while the enrollment staff know about and talk about PLA with incoming students, "Sometimes they don't grasp it yet because that's a busy time." Advisors should be well trained in PLA because, as one institutional representative noted, "They are the first people the students develop a relationship with" and meet with throughout their college career. Advisors and
- faculty (who also have an important advisory role) who are aware of PLA and what the options and benefits are can help students take advantage of it.
- Ensure availability of multiple methods of PLA and expand the range of coursework for which it can be applied. The vast majority of the PLA credit-earners in our sample only used one method of PLA. This may be the result of institutional or faculty preferences, student preference for or comfort level with one method versus another (i.e., with testing rather than preparing a portfolio), the students' particular type of skills or knowledge that is most closely aligned with a particular method (e.g., military or corporate training), or institutional policy barriers that limit use of PLA for certain types of courses or programs. And yet, students could be leaving credits on the table if they are not encouraged to explore whether other methods of PLA credit-earning could help them get closer to completion. There is no reason why students with military training could not also earn credit for their non-military learning through CLEP tests or challenge exams, and there is no reason why a student with specialized knowledge learned on the job could not use both standardized exams and portfolio assessment to demonstrate the breadth of their learning. The few adult students in our sample who did use multiple PLA methods had a higher than average number of PLA credits (32-44 credits), as well as very high credential completion rates (59%-75%). When advising adult students about PLA, institutions should consider how to be creative in helping students use a combination of PLA methods. Institutions should also examine their internal policies to see whether PLA can be used for a broader set of courses and programs.
- Establish policies to accept PLA credits awarded by other accredited institutions. When students move between and among different postsecondary institutions, there is often risk of students not having all of their previous course credits accepted by the receiving institution. This can be particularly problematic for PLA credits that are listed on a student's transcript. Institutions should ensure that their transfer credit policies have clear guidelines for how to evaluate credits awarded by other institutions through PLA methods, and these guidelines should not treat PLA credits as "lesser" in value, compared to other transcripted learning.

"Today, PLA is pitched during the registration process. ... We are proactively bringing it up. [...Our] recruiter brings PLA out to events. Enrollment and career fairs have a prior learning table. We talk about it during orientation. We are pests from the beginning. ... We're also aligning it with our degree programs... We give the students information on where they can take advantage of PLA the most [in terms of degree programs]."

PLA program administrator,

- Engage employers in the PLA enterprise. An institution's partnerships with employers could help to expand uses for PLA. Employers will find it appealing to know that the skills their workers have developed on the job could count toward postsecondary credential programs, helping to save on tuition costs and time spent in the classroom. This speaks directly to employers' bottom line if that employer is providing tuition assistance or is needing for employees to accelerate their completion of certain credentials.
- Invest in making their PLA programs robust. In order for an institution's faculty and staff to know and effectively talk about PLA opportunities with students, they need to be knowledgeable about PLA. Resources are needed to offer

"I learned about all three PLA methods through [the institution's PLA director]. The school was sending marketing emails promoting it and letting students know that that was available, so I emailed her to learn more about it.... She was great in showing me all of my options, and I took the lead from there."

Adult learner

- professional development opportunities and other tools regarding PLA. PLA staffing is needed to advise staff and students on PLA and to provide oversight and improvements to PLA programs. Institutions can also benefit from having tools and processes in place to help streamline and support PLA advising and administration. For example, one institution reported that their system for transcribing PLA credits used to have "lot of roadblocks...it used to be that the students had to wait a while." In response, their office has streamlined a lot of the processes so that "students can take a challenge exam in the morning and by the afternoon it's on the transcript."
- · Join with other postsecondary institutions and workforce development boards to build partnerships to scale PLA options and capacity. At many of the 72 institutions participating in this study, there are already robust PLA programs and policies. Institutions should collaborate with each other, connect with national organizations such as CAEL and WICHE that have produced best practice research, and seek out new models and practices from others writing or speaking about their lessons from and successes with PLA. Peer learning options include CAEL's membership community and the Prior Learning Assessment Network (PLAN), facilitated by SUNY-Empire State College. As one institution suggested, "Don't recreate something that is already there. Start talking to other community colleges, other colleges. Copy and steal everything you can. Adjust it to your needs. We wasted a lot of time [not] doing that. Once we started attending the CAEL conferences and engaging with other colleges, we could use them as models and build on those collaborations."

Scaling up anything in postsecondary education right now is challenging, to be sure, since so many budgets have been decimated due to the pandemic. Doing so may require external investments from philanthropy or the public sector. Partnerships with institutions with robust PLA programs also offer opportunities to quickly scale up strong programs without massive up-front investment (Goldstein, forthcoming). Further, as the data show, PLA recipients persist and take more credits than those who do not receive PLA, there can be a strong business case for developing a robust program that can attract students in need of reskilling and upskilling as a result of the pandemic and its economic fallout.

Adult students can doubt the value of their own learning—advisors can encourage and help these students see how their learning can count toward a credential.

"Tracy" is a 35-year-old White veteran who lives in a Plains state with her husband and two children. She has worked as a paralegal for the past several years. She is currently enrolled in an online bachelor's degree program and hopes to attend law school after graduating. Soon after enrolling, she met with her advisor who, upon learning about her work and military training and other experiences, suggested that she pursue PLA credit. She initially hesitated, thinking, "Obviously, I've had a lot of experiences in life. But how do you put that into words and then submit that to someone else?" With the help of her advisor and with coaching from a professor, Tracy earned three credits by submitting a portfolio of what she learned as a paralegal, as well as credits from her military training. Without her advisor "staying on top of her," Tracy doesn't think she would have been successful in completing her portfolio.



To Build Support for PLA at the Institution Level

This study found that adult students with PLA earned, on average, 17.6 more traditional course credits than the adult students without PLA credit. In other words, on average, institutions earned roughly a full-time semester's worth of additional tuition revenue from adult students with PLA compared to adult students without PLA. As institutions feel the economic impact of the COVID-19 pandemic, PLA may be one strategy that potentially has a net positive impact on institutional budgets over time. To build buy-in for PLA programs across the institution (administration, staff, and faculty), institutions should:

• Include PLA as part of the strategic planning at the institution. By including PLA in the strategic plan, institutional leadership, faculty, and staff will have benchmarks to work toward. For example, one of the institutions in the study reported that their 2014-2019 strategic plan specifically called out making PLA more consistent across the university. Another institution's strategic plan stated, "Every student's prior learning and achievements will be recognized and accommodated in his/her academic plan in a seamless and timely way. Our institution will adopt practices and strategies that minimize or decrease the cost to students of earning a

"You need institutional buy-in from faculty, staff and admin. Go in with a proposal. Do your research: what can it do for the students and the institution? Then start slow. Start with one program and go from there."

PLA program administrator, 4-year public institution

higher education credential." The institution responded by setting a goal of increasing the number of credits granted for prior learning and/or work experience applicable to their program of study from 161 in 2016-17 to 805 credits in 2022-23. Yet another institution reported including PLA as part of the internal quality course design rubric used across campus. Provide evidence such as the results from this study of the student and institutional benefit, for building the business case for PLA.

- Collaborate with other departments across campus to develop and implement PLA programs. Institutions are facing budget cuts and staff reductions resulting from COVID-19; even prior to Spring 2020, institutions in this study reported that their PLA offices were not likely to have many FTE and were often constrained by small budgets and minimal staff support. Yet, by collaborating across the campus, PLA administrators can expand support for PLA by making it a shared priority. For example, one institution reported, "[Our] office started with me and three administrators coaching me on how things had been. We created a council on PLA. That group was made up of people from different colleges, campus, and research folks. If there's not a group, build one. That group can bring in more people or do subcommittee stuff to look at what has to happen." Another institution in this study formed a similar working group with representatives from across the campus to enhance their PLA programs; this working group considers and addresses issues such as how to best connect learners to the PLA process. The coordinator of a PLA program at yet another of the study's institutions reported that it is "Important to get involved in groups and committees [on campus]—meet people so you know whom to ask for help."
- Work with faculty to garner buy-in. According to one institutional representative, "Among faculty there is a concern that prior learning, which is not acquired in a classroom, is somehow of an inferior quality. And this is where training and an officially developed assessment comes in to play." To assuage these concerns, PLA staff can educate faculty through trainings, professional development, and discussions. As one PLA coordinator said about their faculty trainings, "The discussion of rigor is always central. We always reference CAEL standards; credit is for learning and not experience only." PLA programs can gain buy-in from faculty by highlighting student successes. Faculty questions are also researchable propositions; effective data systems that track PLA and student outcomes can help address faculty questions and concerns.
- Ensure quality assurance. It is essential that an institution's PLA program be grounded in high-quality practices for learning evaluations and assessments. For example, CAEL's standards for assessing learning stipulate that college credits should never be awarded based on a student's description of their work experiences alone, and assessments of



learning need to be conducted by experts in the particular field for which credit is to be granted (Younger & Marienau, 2017). Institutions need to establish and adhere to clear processes, procedures, and oversight, as would be required for any other academic process. Campus representatives shared that they include faculty in discussions of quality assurance and program oversight. For example, one noted, "Ensuring quality—that's really important. Everything we do, everything involves faculty. I guide the process. Every three years, the essay topics and rubrics are reviewed by faculty to make sure it's course equivalent. We also review licenses and certifications every three year to see if there have been changes. It's an ongoing process, not all at once."

• Regularly conduct program evaluations. PLA coordinators can connect with institutional researchers to evaluate effectiveness of advising and outreach in promoting PLA usage, as well as student outcomes for individuals with PLA credits. For example, one institution's PLA coordinator reported collaborating with the director of assessment and accreditation at their institution to "develop an assessment plan of our own... we use [the data] when we talk to faculty and staff. We can look at which program and students are using PLA more than others and where there isn't success. We use that data [and information] to better our process [regarding PLA]." In addition to analyzing data from institutional research shops, institutions should get feedback from students themselves on the ease of access to PLA as well as the value of PLA for understanding their own learning and for their overall academic success. One PLA coordinator reported that they "track data on daily basis, which allows us to communicate how PLA program is doing across college. We survey students and ask them about opportunities to improve CPL offerings." Another representative suggested that institutions "Listen to what your adult students need."

To Improve System, State, and Federal Policies

There are several potential policy and practice adjustments that can also boost usage of PLA. Given that institutions are facing limited resources, there are ways in which institutions, state governments, and the federal government can collaborate and improve policy to support PLA programs:

- System leaders should encourage consistent PLA policies across all institutions. Students should not be faced with different PLA policies and practices within the same system. Leaders should work with institutions to encourage a range of PLA offerings and a harmonization of their policies and practices. In particular, institutions within the same system should honor and accept each other's PLA credit awards to ensure that no PLA credits are lost due to student transfer.
- Policymakers at the state and federal levels should adjust financial aid models to cover expenses related to the assessment of prior learning. Costs associated with earning PLA credits are not currently covered by federal Title IV financial aid programs or most state financial aid policies (GI Bill benefits do cover the costs of many standardized assessments). This can be a barrier for students, particularly those from low-income backgrounds. The U.S. Department of Education has been conducting an experiment for the past several years on how federal financial aid regulations can be modified to cover the costs of PLA (Plumlee & Klein-Collins, 2017). Recently, the Indiana legislature passed a bill that makes PLA expenses eligible for the state's financial aid program (Indiana General Assembly, 2017). Financial aid should cover PLA costs.
- State and federal policymakers should incent and invest in both colleges and workforce development organizations to expand PLA offerings across all of their programs. Over the last ten years or so, many postsecondary institutions were able to launch new PLA initiatives with financial and technical assistance they received by participating in a as part of the federal Trade Adjustment Assistance Community College and Career Training (TAACCCT) grants. One institution PLA coordinator reflected on their institution's experience participating in this program. "Once we became part of a TAACCCT grant, that's when it took off. [Prior to the grant], the college catalogue wasn't clear about PLA, there was nothing on the website about PLA. ... With this grant, we recruited more students toward [our degree that offered PLA] as a quicker way to finish; and our institution determined that PLA should be available to all students and included on all recruitment/marketing materials." Another grantee reported, "We were able to use the grant to have CAEL come in and help us with training, rubrics. Would not have been as efficient without



that grant." Given the current economic impact of COVID-19, there are millions of unemployed Americans who will be looking to reskill and upskill as they navigate the economy—while also bringing with them years of skills and knowledge they have acquired from their work experiences. In workforce development and training investments that are designed to address dislocated workers during this recession, PLA needs to be an important component to use public resources more efficiently and to help workers complete their training more quickly.

To Support Future Directions and Research Needs for the Field

While this project has provided strong evidence of the positive connection between PLA credit-earning and adult student success, the analysis has also raised new questions for researchers to explore on the topic of prior learning assessment.

"We saw a lot of displaced workers being laid off in our community and needing help with so many businesses closing down [in recent years]. We have a program for students who have attended college before and want to return; most are adult learners. We wanted a pathway to success for these students. From the federal funding we received through the TAACCCT grant, that program grew rapidly. We focused on the needs of these adult students. They have prior learning and licenses, so we started ramping up PLA efforts to help these students."

PLA program administrator, 2-year public institution

- Further study of past and current experiences of service members with the recognition of their military learning within higher education. In this study's data sample, the preponderance of military credit was noteworthy. Large numbers of student veterans could be partly explained by the military discharges during the early 2010s, as well as the incentives provided by GI Bill education benefits. Yet, those facts do not explain why the PLA take-up rate for service members in our sample was so much higher (43%) compared with non-service members (3%), nor do those facts explain why service members with ACE credit recommendations for military did not see as high a boost to completion as did adult students using other PLA methods. The possible explanations laid out by our subject matter experts from ACE, the Multi-State Collaborative on Military Credit, and CAEL were based on their own recollections from that time, specifically of the choices service members faced while being discharged during a slow economy, as well as of the way postsecondary institutions scrambled to develop new practices and policies for supporting those student veterans, including how best to award credit for military training. There are clear lessons to be learned from a more formal accounting of these experiences, not only for higher education but also for the U.S. Department of Defense and Veterans Benefits Administration. In addition, since the cohort of service members in our study was likely an unusual one, given the circumstances facing service members in these years, it would be valuable to study more recent cohorts of service members in higher education to understand how their learning is recognized by colleges and universities during periods of greater equilibrium in veteran enrollment, and whether changes in how ACE credit recommendations for military are awarded result in different completion results for service members.
- Exploration of PLA credit productivity. Not every credit on a student's transcript ultimately counts against credential requirements. A limitation of this study was the inability to ascertain whether the PLA credits on a student's record were credits that would count toward a student's credential goal, although we suspect that there were some instances of "excess" PLA credits being awarded: 204 (3%) of all associate degree-seeking PLA adults had more than 60 PLA credits on their records, and 37 (.2%) of all bachelor's degree-seeking PLA adults had more than 120 PLA credits. The lack of information about which credits mattered for completion likely masks the true effect of PLA on completion, cost savings, and even time to degree, as calculated here. It may also have had implications for our understanding of the value of ACE credit recommendations for military on completion. Future research should investigate the extent to which PLA awards are made that are relevant for the student's specific educational goals versus those that should be part of a more universal transcript of a student's learning. Similarly, understanding what types of traditional course credits are taken by PLA students, and whether those additional course credits are productive ones, would also be valuable.

- Multivariate analysis of time-savings from PLA. The question of how much time adult student completers were able to save with PLA credits is a complicated question, as there are many variables that influence how long it takes for someone to complete a degree: the number of transfer credits from other institutions (and whether those credits are "productive" or not), the number of PLA credits that are earned and that can be applied to a credential, the student's enrollment intensity, and the time needed by the student to study for or compile their learning for a PLA assessment. These factors need to be known and accounted for in future research that calculates the time savings from PLA. Further, the fact that PLA recipients are also more likely to complete degrees suggests a compound benefit that potentially could be addressed through additional quantitative methodologies.
- Deeper exploration of equity implications of PLA. Finding tools that support credential completion for historically underrepresented groups in higher education is an important goal, and the findings in this report suggest that PLA has great promise for helping more Black, Hispanic, and low-income students reach the finish line—provided, of course, that these students have access to PLA at the institutions they are attending. More work remains to identify why opportunity gaps with PLA exist and how policy and practice can help to reduce disparities in usage. Lack of awareness, time, and cost of PLA have been identified by students as to barriers for accessing PLA (Kilgore, 2020). Future research could explore effective marketing and outreach strategies, as well as the impact of lowering or eliminating assessment fees for key populations. New research could examine the recent experiences of lowincome students of color with PLA, particularly at public 2-year and 4-year institutions, many of which may have expanded their PLA offerings in more recent years thanks to a growing body of research on PLA and public policies that have supported and encouraged its use. New studies could identify exemplar institutions, where Black and low-income students fare as well as—or better than—their peers. New research could also explore multivariate analyses to determine factors that influence PLA usage for groups historically underrepresented in postsecondary education. Lastly, institutions can better track PLA usage and impact, linking that data to student demographic data, to understand how they can better serve those students who may be missing out on opportunities to earn credits for college-level learning they have already acquired.
- Identification of effective strategies for increasing PLA awareness and usage. Not only are key target populations not taking advantage of PLA, but at 27 of the participating institutions in our study (39% of them), fewer than 3% of adult students had PLA credit at all. Adult students may not be aware of PLA, or they may not be aware of its potential value to them as a credential completion, time-savings, and cost-savings tool. While institutions with mature PLA programs will describe how they communicate with students in multiple ways about PLA, or incorporate it into their advising conversations, or train faculty and staff to understand it, there is scant data on what really works to increase usage of PLA. Research looking at the relationship between institutional practices and take-up rates is needed to understand which institutional investments matter

"If a college doesn't have someone like the team that [I had] to help walk them through [PLA], they certainly need it. There are so many people out there who just need that little extra boost and this is the thing that helps it out."

Adult learner

- most, which messages have the greatest effect (particularly on key target populations), and which processes can help improve access to this alternative credit-earning option. Such research should also focus on how to improve access to and usage of specific forms of PLA that might otherwise be underutilized, when they could be used to open more opportunities for credit-earning, either when used alone or in combination with other methods.
- Exploration of why there are differences among the take-up rates for different PLA methods. For the adult PLA credit-earners in our sample, the most common PLA methods were credits through ACE military recommendations (68% of adults with PLA credits) and standardized exams (22%). Less common methods were credit for certifications and licenses (7.5%), portfolio assessment (3.8%), credit for corporate training through ACE/NCCRS (3.6%) and challenge exams (1.5%). The variation in take-up rate is likely due to a confluence of factors, including: specific methods offered at different institutions, specific institutional practices regarding which methods are promoted, whether certain methods are more closely aligned with specific programs or areas of study, the specific type of learning for which credit might be awarded, faculty preferences, and student preferences. Research that examines how these various factors influence PLA usage would provide important insights for encouraging greater PLA usage as well as insights on what new forms of assessment might be needed.



Conclusion

When institutions recognize a student's college-level learning—regardless of how that learning is acquired—good things follow. In the case of PLA, the data show that adult students save time and money when they can substitute PLA for regular course-taking, and perhaps more importantly, adult students have higher rates of credential completion.

While this report provides clear and compelling evidence that PLA can be an important tool to support adult student credential completion, there is still much work to do. For PLA to have a real impact, PLA can no longer be a best kept secret that adult students hear about through happenstance or word of mouth. PLA students should not be part of a "secret club." Institutions need to provide multiple methods for adults to have various types of learning evaluated and recognized. PLA options should be promoted early and often, so that the recognition of learning becomes integrated into the institution's culture, and indeed, the learn-and-work ecosystem. And institutions need to invest in staff who can oversee PLA promotion, ensure its integrity, create greater access, and build acceptance across the institution.

Of critical importance is to make sure that there is better access to PLA among adult students who can benefit the most. Institutions need to make concerted efforts to encourage low-income adult students and adult students of color—and other student groups whose completion rates are low—to take advantage of PLA offerings. This requires leveraging an institution's own student records to understand where there might be opportunity gaps, as well as providing targeted outreach and coaching. To be sure, institutional budgets are severely strained. Institutions may need to be creative in borrowing best practices and partnering with their peers to expand PLA capacity. Also, the public and private sectors and philanthropy will need to offer their partnership and support to expand and accelerate PLA practices.

College and university budgets are not the only challenge. At the time of this writing, every region and state is facing tremendous economic challenges in the months and years ahead as they rebuild labor market opportunities for workers dislocated during the pandemic recession. Postsecondary credentials of all kinds will be part of the solutions the nation collectively pursues to help

"Five years from now, we see this being bigger and better. We are passionate about this, so it won't go away. Research projects like CAEL's, and pushing this agenda, will help make sure that this continues. I don't see it declining, it will only grow. But lack of financial resources will be a challenge. Will have to be creative. Will need people to help us promote this without paying them. Could be a challenge getting that up and running. We are tracking PLA and can provide this info right away. Admin can see the benefits. We need to continue this kind of work and then we can build this."

PLA program administrator, 2-year public institution

these workers—a significant portion of which are Black and Hispanic workers laid off from hospitality or retail jobs—to position themselves for new kinds of in-demand occupations. Workforce strategies could be more effective at helping workers reach their goals—and do so quicker and at lower cost—by incorporating methods that recognize and value what these workers already know and can do.

By assessing learning, recognizing learning, and valuing learning, our postsecondary institutions and workforce agencies will help more learners and workers earn the credentials they need to reach their goals.

Students benefit from advisors trained to see potential for PLA

"Alan," is a 51-year-old White man who lives in a small town. Immediately after high school, he enrolled in college and began working as a laborer in a chemical plant. After earning 70 college credits, he stopped out of school because of his growing work obligations. Over the next 27 years, he worked his way up through the same chemical plant, from laborer to lab manager to service manager. When the plant closed in 2018, he enrolled in a local community college to earn an associate degree in transportation management. An advisor noted that he could get PLA credit for the learning he had from certificates in Hazardous Materials and Forklift Operations. Although Alan was able to apply these elective credits toward his degree, he wonders if he could have earned more credit for other things he had learned on the job. "Nobody ever reviewed my resume," Alan reflected. "But, you know, there wasn't anybody that did that, that looked at my resume to see what experience I had that wasn't part of a certificate."





List of Participating Institutions and Other Acknowledgments

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List of participating institutions:

Arapahoe Community College Atlanta Metropolitan State College

Capella University

Charter Oak State College

Community College of Allegheny County

Community College of Aurora Community College of Denver Community College of Vermont/ Vermont State Colleges System **CUNY School of Professional Studies**

D'Youville College

Dakota County Technical College Dallas College Eastfield Campus

Endicott College Ferris State University

Florida International University Franklin Pierce University

Front Range Community College

George Fox University Goddard College Gordon State College **Governors State University** Hawai'i Community College Inver Hills Community College James Madison University Kapi'olani Community College Leeward Community College

Lewis University

Metropolitan State University of Denver Metropolitan State University-MN

Miami Dade College

Mid-America Christian University Montana State University Billings

Montgomery County Community College Mountwest Community & Technical College

Mt Hood Community College National Louis University North Shore Community College Northcentral Technical College

Northeast Wisconsin Technical College

Northeastern Illinois University Northeastern Junior College

Peirce College Penn State

Pikes Peak Community College Pueblo Community College Purdue University Global Red Rocks Community College

Rio Salado College Sacramento State

Sinclair Community College Southern Oregon University

Southwestern Oregon Community College

Stark State College The New School

The University of Tennessee at Chattanooga

Tidewater Community College Union Institute & University University of Alaska Anchorage University of Hawai'i - West O'ahu University of Hawai'i at Hilo University of Hawai'i at Mānoa

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University of Maryland Global Campus

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University of Southern Maine University of West Georgia University of Wisconsin Oshkosh

Walden University

West Hills Community College District—

Coalinga College

West Hills Community College District—

Lemoore College

Western Governors University





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About the Organizations



Recognizing that adult learners are the backbone of the U.S. economy, CAEL helps forge a clear, viable connection between education and career success, providing solutions that promote sustainable and equitable economic growth. CAEL opens doors to opportunity in collaboration with workforce and economic developers, postsecondary educators, and employers, industry groups, foundations, and other mission-aligned organizations. By engaging with these stakeholders, we foster a culture of innovative, lifelong learning that helps individuals and their communities thrive. Established in 1974, CAEL, a Strada Education Network affiliate, is a nonprofit 501(c)(3) membership organization. Visit www.cael.org to learn more.



For more than 65 years, the Western Interstate Commission for Higher Education (WICHE) has been strengthening higher education, workforce development, and behavioral health throughout the region. As an interstate compact, WICHE partners with states, territories, and postsecondary institutions to share knowledge, create resources, and develop innovative solutions that address some of our society's most pressing needs. From promoting high-quality, affordable postsecondary education to helping states get the most from their technology investments and addressing behavioral health challenges, WICHE improves lives across the West through innovation, cooperation, resource sharing, and sound public policy. Visit www.wiche.edu to learn more.



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