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# Redesign of Prior Learning Assessment in an Award-Winning Degree Completion Program

Carrie J. Boden, Texas State University, San Marcos, USA

 <https://orcid.org/0000-0001-5991-5908>

Catherine A. Cherrstrom, Texas State University, San Marcos, USA

Todd Sherron, Texas State University, San Marcos, USA

## ABSTRACT

In the 21st century economic landscape, many argue the importance of a college degree, as entry into many occupations now requires advanced credentials. Pursuing a college degree costs time and money, often presenting barriers to those pursuing the dream. Prior learning assessment (PLA) offers a solution to spend less time and money earning a college degree by documenting outside learning. PLA shortens time-to-degree, reduces tuition costs, supports student persistence, and boosts degree completion, particularly for adult learners (non- and post-traditional students) and underserved populations. The purpose of this article was to examine PLA within an award-winning degree completion program primarily serving adult learners in order to improve practice. Aligned with the Council for Adult and Experiential Learning's (CAEL) standards for assessing learning, this article discusses the degree completion program, PLA course and competency portfolio, block credit competency model and block credit competency model and portfolio assessment, program administration, and implications.

## KEYWORDS

Adult Learners, Best Practices, Block Credit, CAEL, Model, Non-Traditional Students, PLA, Post-Traditional Students, Prior Learning Assessment, Standards for Assessing Learning

## INTRODUCTION

In the shifting economic landscape of the 21<sup>st</sup> century, many argue a college degree is more important than ever (Insik & Kim, 2017), as advanced credentials are required for entry into many occupations (Cherrstrom & Boden, 2018). According to the U.S. Department of Labor (2017), college graduates average \$61,828 in annual income compared to high school graduates who average \$26,780. Over a lifetime, this difference in education equates to significant difference in income. Compared with high school graduates, women and men with bachelor's degrees respectively earn \$630,000 and \$900,000 more over the lifespan (Social Security Administration Research, Statistics, & Policy Analysis, 2015). Pursuing a college degree, however, costs time and money (Bowers & Bergman, 2016), and such

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costs often present barriers to those pursuing the dream of a college degree. Prior learning assessment (PLA), however, offers a solution to spend less time and money earning a college degree.

PLA involves documenting outside learning through competency portfolios or assessment testing to receive academic credit (Klein-Collins & Wertheim, 2013). Put another way, PLA evaluates college-level “learning and knowledge that students acquire while living their lives: working, participating in employer training programs, serving in the military, studying independently, volunteering or doing community service, and/or studying open source courseware” (Department of Organization, Workforce, and Leadership Studies (OWLS), 2019a, para. 2). PLA shortens time-to-degree, reduces tuition costs, supports student persistence, and boosts degree completion, particularly for adult learners (non- and post-traditional students) and underserved populations (CAEL, 2017; Hayward & Williams, 2015; Klein, 2017; Klein-Collins & Hudson, 2017; McKay, Cohn, & Kuang, 2016; Plumlee & Klein-Collins, 2017). Those with PLA credit have higher graduate rates, irrespective of gender, race-ethnicity, age, academic ability, grade point average, and financial aid, compared to those without (Council for Adult and Experiential Learning (CAEL), 2010). PLA often empowers adult learners who, based on past experience or negative messaging from others, do not view themselves as “college material” (Klein-Collins & Hudson, 2017). Based on a study of underserved student populations, CAEL (2011) reports “the positive findings for low-income, black non-Hispanic and Hispanic students suggest that awarding college credit for significant life learning could be an effective way to accelerate degree completion” (p. 1). PLA can make the difference between earning or not earning a college degree.

In addition to those pursuing a college degree, PLA offers numerous benefits to educational institutions offering such programs. Because PLA grants college credit, there is often the misconception that PLA costs institutions revenue. However, the higher persistence and graduate rates of PLA students make the opposite true. Students with PLA credit take more credit hours, resulting in greater enrollment continuity and overall revenue (CAEL, 2017). Excluding transfer and PLA credit, students with PLA credit average 53.7 credit hours compared to those without PLA credit who average 43.8 credit hours (CAEL, 2017). These incremental credits result in increased tuition and fee revenue to the institution. The purpose of this article was to examine PLA within an award-winning degree completion program primarily serving adult learners in order to improve practice. Aligned with the Council for Adult and Experiential Learning’s (CAEL, 2019) standards for assessing learning, we discuss the degree completion program, PLA course and competency portfolio, block credit competency model and portfolio assessment process, program administration, and implications for practice and the future.

## **AWARD-WINNING DEGREE COMPLETION PROGRAM**

In 1973, faculty and administrators at Texas State University conceived the Bachelor of Science in Occupational Education to serve military veterans with courses delivered on military bases. As the program expanded, course delivery evolved into distance-education to best meet learners’ needs, using videotapes and DVDs with limited classroom time (Related Authors, 2015). Today, Texas State University is a large, doctoral, high research activity, Hispanic serving institution, including the College of Applied Arts and Department of Organization, Workforce, and Leadership Studies (OWLS). Within the department, the degree program, now known as the Bachelor of Applied Arts (BAAS), leverages online course delivery to serve the breadth of adult learners, including active military and veteran service members, returning stopout learners, and learners with multiple roles, such as full-time parents or caregivers or employees who work and may attend school part-time. Here we discuss the unique BAAS degree, PLA program as a critical tool, and demographics for university, degree, and PLA learners.

### **BAAS Degree**

Rather than focusing on a single major, the unique BAAS degree plan includes four modules. The first, or cornerstone module of 48 credit hours, comprises general education/core courses, an



introductory interdisciplinary studies course, and an adult development and career planning course. Collectively, these courses introduce students to “human development, learning theory, transition theory, interdisciplinary studies, career planning, and goal setting” (Texas State University, 2019a) to clarify their reasons for returning to school, introduce them to interdisciplinary studies, and assist them in selecting appropriate courses for their individualized programs of study. The second, 48-credit-hour occupational emphasis module, includes previous college coursework and the Independent Study in Prior Learning Assessment (PLA) course. In this collection of courses, learners reflect on their past work and experiences. These reflections are used to inform the next, 21-credit-hour professional development module where learners focus on career goals and the knowledge, skills, and abilities the need to develop in order to meet their goals. In the final 6-credit-hour module, learners integrate their past paths and demonstrate new learning to produce a professional capstone project.

Since inception, the BAAS degree has focused on flexible delivery and evolved to meet the needs of learners and the workforce. Keeping pace with changing learner and stakeholder needs has been challenging and required extensive updates for improvement. In the most recent redesign, faculty, subject matter expert consultants, administrative assistants, graduate assistants, instructional designers, professional advisors, and administrative offices of the university worked in teams to redesign the BAAS degree (Cherrstrom & Boden, 2018). The resulting updates and improvements unfolded in three phases over five years, and in 2018, the BAAS degree at Texas State University received the American Association of Adult and Continuing Education’s (2019) Malcolm Knowles Award for outstanding adult education program leadership. A hallmark of the BAAS degree, PLA plays a critical role in many adult learners earning a college degree.

## **PLA Program**

As part of redesigning the BAAS degree, faculty re-envisioned the PLA program, untouched for 40 years, including the underlying course, competency portfolio design and template, block credit competency model, assessment process, and program administration. The redesigned PLA program required and gained approvals at the department, college, university, and Texas Higher Education Coordinating Board levels and aligns with the Council for Adult and Experiential Learning’s (CAEL, 2019) standards for assessing learning (see Table 1 for standards and application to the redesigned PLA program).

The first CAEL (2019c) standard for assessing learning focuses on ensuring credit is awarded for evidence of learning, rather than the learner’s experience. Standards two through four state criteria for learning outcomes should be clearly stated and shared, assessment should lead to and enable future learning, and appropriate subject matter experts should determine the amount of credit awarded. Standards five through seven require institutions to use PLA to enhance equity and access for diverse learners, to provide proper guidance and support to those seeking PLA, and to implement policies and procedures that are inclusive of all stakeholders. Standard eight requires fees to be charged for assessment passed on services performed. The last two standards require those involved in PLA to receive adequate training and professional development and for programs to engage in improvement and evaluation processes to continuously respond to learner and institutional needs. We now turn to PLA learners and include BAAS degree and university learner demographics as context.

## **University, BAAS, and PLA Learners**

Table 2 summarizes demographic data for the 38,644 learners enrolled at Texas State University and 362 learners enrolled in the BAAS degree program in Fall 2018 and the 213 learners who submitted a portfolio in the past two years (Department of OWLS, 2019b; Texas State University, 2019b). Here we highlight findings related to PLA regarding gender, race/ethnicity, and age.

In regard to gender, more women than men participate in PLA, are pursuing a BAAS degree, and attend the university. Specifically, 58.69% of PLA learners were women, compared to 52.76% in the BAAS degree program and 58.48% at the university (Department of OWLS, 2019b; Texas State

Table 1. CAEL standards for assessing learning applied to PLA at Texas State University

Standard <sup>a</sup>	Course and Portfolio	Model and Assessment	Program Administration
1. Credit or competencies are awarded only for evidence of learning, not for experience or time spent.	Portfolio template prompts reflection on learning	Model calculates credit award based on assessment of learning	Administrator reviews assessments with significant credit award differentials
2. Assessment is integral to learning because it leads to and enables future learning.	Reflection on prior learning develops skills for future learning		Administrator maintains course site in learning management system
3. Assessment is based on criteria for outcomes that are clearly articulated and shared among constituencies.	Course content includes the model	Assessors participate in model training each term	Administrator includes assessment training in course content and assessor training
4. The determination of credit awards and competence levels are made by appropriate subject matter and credentialing experts.		All assessors are full-time faculty members	Administrator recruits and trains full-time faculty to assess portfolios
5. Assessment advances the broader purpose of equity and access for diverse individuals and groups.	Fully online course provides access to diverse learners, including women and learners of color	Model does not assess based on learner demographics	Administrator statistically analyzes credit awards based on learner demographics to ensure equity
6. Institutions proactively provide guidance and support for learners' full engagement in the assessment process.	Instructional designs scaffolds portfolio creation		Administrator maintains course site in learning management system
7. Assessment policies and procedures are the result of inclusive deliberation and are shared with all constituencies.	Course content includes policies and procedures	Each term, assessors participate in training and norming session, including policy and procedures	Department website includes a page for PLA with policy and procedures
8. Fees charged for assessment are based on the services performed in the process rather than the credit awarded.	Tuition paid prior to course and not based on credit award	Course fee paid prior to assessment and not based on credit award	Tuition and fee relate only to course and administrative expenses
9. All practitioners involved in the assessment process pursue and receive adequate training and continuing professional development for the functions they perform.		Assessors participate in training and norming sessions each term	Each term, the administrator facilitates a training and norming session for assessors
10. Assessment programs are regularly monitored, evaluated and revised to respond to institutional and learner needs.			Administrator collects, analyzes, and synthesizes PLA data for research and practice improvement

Note. <sup>a</sup>CAEL. (2019). Ten standards for assessing learning. Retrieved from <https://www.cael.org/ten-standards-for-assessing-learning>

University, 2019b). Conversely, 41.31% of PLA learners were men, compared to 47.24% in the BAAS degree program and 41.52% at the university (Department of OWLS, 2019b; Texas State University, 2019b). In regard to race/ethnicity, learners who participate in PLA generally mirror those pursuing a BAAS and attending the university. In all three categories, most learners are White/non-Hispanic, followed by those who are Hispanic, followed by those who are Black/non-Hispanic (Department of OWLS, 2019b; Texas State University, 2019b).



**Table 2. University, degree, and PLA course student demographics**

Demographic	University <sup>a</sup>	BAAS Degree <sup>a</sup>	PLA <sup>b</sup>
<i>Gender</i>			
• Female	58.48%	52.76%	58.69%
• Male	41.52%	47.24%	41.31%
<i>Race/Ethnicity</i>			
• White, non-Hispanic	45.31%	48.34%	48.83%
• Hispanic	37.06%	32.04%	35.21%
• Black, non-Hispanic	11.18%	14.09%	12.21%
• Asian	2.54%	1.93%	1.88%
• Multi-race, non-Hispanic, non-Black	1.85%	1.38%	1.41%
• American Indian/Alaskan Native	--	0.83%	--
• Hawaiian/Pacific Islander	--	--	--
• Non-Resident International	1.39%	--	--
• Unknown	--	1.38%	--
<i>Age Groups Represented</i>			
• 18-20	44.07%	2.21%	1.16%
• 21-29	47.56%	37.85%	38.37%
• 30-39	5.49%	25.69%	25.58%
• 40-49	2.01%	19.61%	23.26%
• 50+	0.87%	14.64%	11.63%
<i>Adult Learners (Non- and Post-Traditional Students)</i>			
• <25	81.77%	18.51%	9.88%
• 25+	18.23%	81.49%	90.12%

*Note:* <sup>a</sup>Texas State University. (2019b). *University enrollment explorer*. Retrieved from <https://www.ir.txstate.edu/>. <sup>b</sup>Department of Organization, Workforce, and Leadership Studies (OWLS, 2019b). *Prior learning assessment (PLA)*. Retrieved from <https://www.owls.txstate.edu/undergraduate-degrees/Work-life-Experience-Credit.html>

In regard to age, more PLA and BAAS students are adult learners (non-traditional and post-traditional) compared to the university (see Table 3; Department of OWLS, 2019b; Texas State University, 2019b). The literature offers various definitions of non- and post-traditional learners, including those 25 years and older (Langrehr, Phillips, Melville, & Eum, 2015). Using this age-based definition, 90.12% of PLA participants are adult learners, compared to 81.44% in the BAAS degree program and 18.23% at the university (Department of OWLS, 2019b; Texas State University, 2019b). Adult learners juggle multiple roles and responsibilities in the home, workplace, and community (Panacci, 2015; Ross-Gordon, 2011). They pursue higher education for a variety of reasons including the aspirational goal of earning a college degree, job lay-off, and career transition (Chen, 2015). Therefore, they seek flexible programs offering prior learning assessment (PLA) and online and accelerated course formats, bringing work and life experiences to the physical and virtual classroom (Chen, 2015; Ross-Gordon, 2011). During the last two academic years, learners pursuing the BAAS degree, taking the PLA course, and submitting a portfolio ranged in age from 20 to 60 years and averaged 36 years.

Table 3. PLA course design

Module	Lesson	Learning Content	Assignment
M1 PLA and O*NET	L1 Introduction	Overview	<ul style="list-style-type: none"> <li>• Forum: Introductions—original post</li> <li>• Forum: Introductions—reply to others</li> </ul>
	L2 PLA	Multiple approaches 10 standards Academic success University	<ul style="list-style-type: none"> <li>• Quiz: PLA</li> <li>• Quiz: Department policy and procedures</li> </ul>
	L3 Using the O*NET	O*NET overview Competency (assessment) model	<ul style="list-style-type: none"> <li>• Quiz: O*NET</li> <li>• Assignment: Competency model</li> </ul>
M2 JTA and work verification	L4 Job task analysis	O*NET specifics Job task analysis	<ul style="list-style-type: none"> <li>• Assignment: Job task analysis</li> </ul>
	L5 Verify experience	Verifying work experience Verifying non-collegiate training	One of the following: <ul style="list-style-type: none"> <li>• Assignment: Work verification form</li> <li>• Non-collegiate training documentation</li> </ul>
M3 Competency statements and assessment	L6 Competency statements	Competency portfolio template Competency statement overview Example statements	<ul style="list-style-type: none"> <li>• Assignment: Rank order example competency statements</li> </ul>
	L7 Competency statement assessment	Bloom’s taxonomy Competency statement sections Course grade O*NET job zone O*NET specific vocational preparation level	<ul style="list-style-type: none"> <li>• Assignment: First competency statement</li> <li>• Forum: First peer review</li> <li>• Assignment: 5 competency statements (first edited + 4 new)</li> <li>• Forum: Second peer review</li> <li>• Assignment: 8 competency statement (5 edited + 3 new)</li> </ul>
M4 Competency portfolio	L8 Competency portfolio and course conclusion	Work application Position description Job task analysis Competency statements Work verification, letter, certification, and other evidence	<ul style="list-style-type: none"> <li>• Assignment: Competency portfolio</li> </ul>

## PLA COURSE AND COMPETENCY PORTFOLIO

Each term at Texas State University, 40 to 60 learners pursuing the BAAS degree take Independent Study in Prior Learning Assessment, a course facilitating reflection on prior learning and creation of a competency portfolio. This course-based approach and creating a portfolio support seven CAEL (2019) standards for assessing learning (see Table 1 for standards 1-3 and 5-8).

Prior to PLA program redesign, the Department of OWLS offered the original 16-week, three credit hour course, required course through traditional face-to-face and hybrid formats. After redesign, the department now offers an 8-week, one credit hour, optional course online through extended programs. Learners not seeking PLA no longer take the previously required course, and learners with multiple occupations can repeat the course to apply for credit related to each additional occupation. With this new approach, learners not seeking PLA save money by not taking a required course, and learners seeking PLA continue to save money by paying for one credit hour to potentially earn many more credit hours. Here we discuss the course and final assignment, a competency portfolio, and best practices for instructors and learners.

## Course and Competency Portfolio

Instructional design began with the end in mind. Through eight learning outcomes required to complete the course, learners will be able to:

- Identify the rules and processes for using PLA for credit;
- Identify the components of the O\*NET;
- Use the O\*NET to identify job-specific tasks, technology skills, and knowledge for an occupation;
- Select work-life learning or non-collegiate training for evaluation by identifying the highest job zones in which your job's functions represent;
- Develop a job task analysis (JTA);
- Write competency statements utilizing the following elements: task, knowledge dimensions, cognitive process dimensions, and tools and technology;
- Evaluate example competency statements and distinguish between does not meet expectations, meets expectations, and exceeds expectations;
- Create a competency portfolio which includes the following components: application, position description, job task analysis, competency statements, verification letters, and certificates.

To achieve these learning outcomes, the course comprises eight lessons grouped into four modules (see Table 3).

In the first module, learners study PLA at the macro and micro levels and use the U.S. Department of Labor's Occupational Information Network (O\*NET Online, 2019) to examine one prior or current occupation. O\*NET Online (2019) is "the nation's primary source of occupational information" (About O\*NET, para. 1) for over 950 occupations. For each occupation, O\*NET provides relevant tasks, technology skills, knowledge, skills, abilities, work activities, detailed work activities, work context, job zone, education, credentials, interests, workstyles, work values, related occupations, wages and employment trends, job openings on the web, and sources of additional information. Appendix A presents 28 examples of occupations recently examined by learners for PLA. The breadth includes occupations related to business, education, emergency services, financial services, healthcare, photography, procurement, publishing, real estate, religious organizations, sales, sports and athletics, and personal services.

In the second module, learners conduct a job task analysis (JTA) and verify work experience or non-collegiate training. Learners begin the JTA by identifying one O\*NET occupation title and code and continue with three sequenced steps, each focused on a skill level—instrumental, component, and atomistic:

- Identify and sequence three-to-five macro categories of level-1 instrumental skills;
- Analyze and divide each level-1 instrumental skill into two-to-three level-2 component skills;
- Analyze and divide each level-2 component skill into at least two level-3 atomistic skills.

Appendix B presents an example JTA for first line supervisors of retail sales workers (O\*NET 41-1011-00). The learner identified three instrumental skills—planning, organizing, and executing. After analyzing planning, the learner identified two component skills—budgeting and hiring. After analyzing budgeting, the learner identified three atomistic skills—researching, forecasting, and finalizing. Learners pursuing work life experience identify 8-25 atomistic skills, and those pursuing non-collegiate training, identify 8-32 atomistic skills. Learners essentially develop a macro to micro skills map used to perform a job. To complete the module and verify work experience, learners initiate two Work Experience Verification Letters (a form), signed by prior employers. To verify non-collegiate training, learners provide evidence of prior learning (e.g., certificates, syllabi).

In the third module, learners write a competency statement and study how assessors will evaluate each statement using a block credit competency model. The JTA drives development of competency statements, one for each level-3 atomistic skill. To maximize the credit awards, learners pursuing work life experience write 25 competency statements for a maximum of 24 credit hours, and earners pursuing non-collegiate training write 32 competency statements for a maximum of 30 credit hours. Each competency statement includes three sections—a skill statement, knowledge and cognitive process dimensions, and tools and technology. Appendix C presents an example competency statement for the JTA's (see Appendix B) level-one instrumental skill of planning, level-two component skill of budgeting, and level-three atomistic skill of forecasting. In the skill statement, learners quantitatively and qualitatively address one atomistic skill from the JTA (see Appendix C, section A). In the next step, learners use knowledge and cognitive process dimensions from Anderson and Krathwohl's (2001) revised Bloom's taxonomy as a framework (see Appendix C, section B). The knowledge dimension types range from the concrete to abstract and comprise factual, conceptual, procedural, and metacognition. The cognitive process dimension categories range from lower- to higher-order thinking and comprise remember, understand, apply, analyze, evaluate, and create. Last, learners discuss tools and technology (see Appendix C, section C) which also includes physical space or working environment and supplies.

In the final module, learners create a competency portfolio, the course's major assignment or output, which becomes the input for the assessment process. The portfolio comprises an application for work life experience or non-collegiate training, a position description, the JTA, the competency statements, and work verification form(s) or non-collegiate training documentation (e.g., certificates, syllabi). In addition to compiling prior learning experiences, the competency portfolio prompts learners to develop or hone reflection and metacognition skills. While creating the portfolio, learners apply Kolb's (1984) experiential learning theory by recalling learning experiences, reflecting upon them, forming abstract concepts, and actively experimenting with their understandings. According to Moss and Brown (2014), such self-reflection on work, often "foreign" (p. 61) to non-traditional learners, facilitates the process of moving from "well, that's just what I do" (p. 61) to articulating and demonstrating prior learning.

Reflection on prior learning helps students create new learning (Marienau, 2014) which supports future and lifelong learning. To demonstrate college-level learning in the competency portfolio, learners must articulate the cognitive process, ranging from lower-order (remembering, understanding, applying) to higher-order (analyzing, evaluating, creating) thinking skills (Anderson & Krathwohl, 2001). Likewise, learners must demonstrate their acquired or constructed knowledge (factual, conceptual, procedural, or metacognitive). Internalizing the skill of recognizing and reflecting on "everyday" learning, on the job or otherwise, prepares learners to be complex thinkers and reflective practitioners. The internal schema built during portfolio creation serves as a scaffold on which learners may build future learning as they progress through college, work, and life. Based on our PLA redesign, experience, and data, we offer best practices for instructors and learners to maximize the PLA experience and credit award.

### **Best Practices for Instructors and Learners**

In addition to supporting CAEL (2019) standards for assessing learning, we offer best practices for instructors and learners based on the redesign experience. Best practices for PLA instructors begin with creating a collaborative and cooperative online environment to support learning (Kalogiannakis & Touvlatzis, 2015). Early in the course, instructors can confirm learners have identified their most effective occupation and corresponding O\*NET code and title to maximize the PLA experience. Most effective usually means an occupation in which the learner has sufficient time and experience to examine prior learning coupled with the highest levels of prior learning (Anderson & Krathwohl, 2001). We suggest instructors closely follow the course's instructional design to provide learners with many opportunities to practice new skills, starting with low- and progressing to high-level (and stakes)

assignments (Tinto, 2012). Promptly grading assignments (within 24-48 hours when possible) helps learners integrate feedback into next assignments. For feedback, Microsoft Word's comments and track changes functions provide effective tools for written and audio comments to assist learners in improving their work. To confirm original work, require learners to submit each portfolio to Turnitin.com or other plagiarism detection tool. As a final instructor best practice, celebrate mastery and success to enhance learner efficacy and motivation.

Best practices for PLA learners include time management for learning and writing. Instructors scaffold the PLA course's design, so learners develop skills through content and assignments to complete each portfolio section before progressing to the next (Liu & Adams, 2017). When staying on schedule, learners also benefit from reading peers' competency statements and have the time to reflect on and integrate peer and instructor feedback to strengthen their own competency statements. Competency statements require quantity and quality. Accomplishing each step of the writing process—prewriting, research, drafting, revising, proof reading, and polishing—leads to the strongest statements and, ultimately, competency portfolio. Learners with reflective, clear writing and higher levels of knowledge types and cognitive process categories produce stronger competency statements and portfolios and earn more credit for prior learning. Upon completion of the course, portfolios created by learners become inputs for assessment of prior learning.

## **BLOCK CREDIT COMPETENCY MODEL AND PORTFOLIO ASSESSMENT**

Texas State University's overhaul and redesign of the BAAS degree and PLA included redesigning the proprietary, block credit, competency model and improving portfolio assessment. Block credit, also known as non-course matching, awards PLA credit without matching to current, specific course syllabi and academic program descriptions (Lambe, 2011). The model and assessment process support six CAEL (2019) standards for assessing learning (see Table 1 for standards 1, 3-5, and 7-9). Here we discuss the competency model, portfolio assessment, and offer best practices for model designers and portfolio assessors.

Prior to PLA program redesign, the model was based on the U.S. Department of Labor's (1991) *Dictionary of Occupational Titles (DOT)*, originally published in the industrial economy of the 1930s and emphasizing blue-color jobs (Pierson, 2002). The model effectively measured prior learning for those who worked in a single occupation for a number of years. However, the model was less effective in measuring the prior learning of those who changed occupations, even when developing and applying knowledge, skills, and abilities across work domains. The model also inadvertently disadvantaged women, who more frequently left and re-enter the workforce due to children and caregiving; as well as racial, ethnic, and religious minorities, who more frequently left lower paying occupations for higher paying ones.

As the economy shifted to information and services, DOT's relevance diminished, so the U.S. Department of Labor created O\*NET (Occupational Information Network) in the 1990s (Mariani, 1999). After redesign, the competency model uses O\*NET Online along with Bloom's revised taxonomy (see Course and Competency Portfolio above; Anderson & Krathwohl, 2001). Learners can now demonstrate proficiency based on the depth of learning and complexity of thinking, regardless of time in any occupation. Furthermore, when learners repeat the course to create a new portfolio based on an additional occupation, the model can be used to assess learning in the original and subsequent occupations.

Prior to PLA program redesign, only one assessor evaluated the competency statements submitted by a learner in a portfolio. After redesign, however, evaluation expanded to two assessors, increasing fair and equitable review (Kayapinar, 2014). Using the competency model (an Excel spreadsheet), assessors rate each statement's four domains 100-point scale—skill, knowledge dimension, cognitive process dimension, and tools and technology—to create a summative competency measure (see Table 4). Each skill statement addresses one atomistic skill from the JTA; assessors evaluate each skill

Table 4. Block credit competency model assessment components, criteria, and scale

	Component	Criteria	Measurement Scale
Summative Competency Measure Based on Competency Statement Domains	Skill statement	Quantitative	0 for none 50 for one 100 for two
		Qualitative	
	Knowledge dimension	Factual	0-25
		Conceptual	26-50
		Procedural	51-75
		Metacognitive	76-100
	Cognitive process dimension	Remembering	0
		Understanding	50-59
		Applying	60-69
		Analyzing	70-79
		Evaluating	80-89
		Creating	90-100
	Tools and technology	Use of tools and technology needed to perform skill/tasks and physical conditions	0-100
External factors	Course grade	Underlying course in which learners created competency portfolio	0-100
	O*NET Job Zone	Group of occupations based on needed education	1-5 multiplied by a factor
	O*NET Specific Vocational Preparation (SVP)	Amount of time needed to learn for average performance	1-15 multiplied by a factor

statement for quantitative and qualitative components. For the knowledge dimension, assessors use Bloom’s revised taxonomy (Anderson & Krathwohl, 2001) to evaluate the highest level of knowledge evidence—factual, conceptual, procedural, or metacognitive. Similarly, assessors evaluate for the highest cognitive process evidenced—remembering, understanding, applying, analyzing, evaluating, or creating. For the last domain, assessors evaluate for tools, technology, and physical conditions or environment. At this point, assessors return all completed competency models to the PLA administrator for final steps.

Using the competency model, the PLA administrator adds three external measures to the total competency score—course grade and O\*NET Online (2019) job zone and SVP—to create a performance indicator score. Course instructors provide access to the learning management system for the PLA administrator to retrieve course grades. Each O\*NET Online (2019) occupation includes specific measures, such as occupation number and title, job zone, and specific vocational preparation (SVP). A job zone is “a group of occupations similar in how much education people need to do the work, how much related experience people need to do the work, and how much on-the-job training people need to do the work” (O\*NET Online, Help, Job Zones, para. 1). The five job zones span occupations needing no or little preparation to those needing extensive preparation. The SVP measures “the amount of lapsed time required by a typical worker to learn the techniques, acquire the information, and develop the facility needed for average performance in a specific job-worker situation” (O\*NET Online, Help, SVP, para. 2). The nine SVP levels span from short time duration to over 10 years. The PLA administrator averages the resulting total hours for each portfolio from both



evaluators. If scores differ by 9 credit hours or more, the PLA administrator reviews the portfolio to reconcile the difference. Ultimately, current PLA awards range from 0 to 30 credit hours and average 13 credit hours. Based on our PLA redesign, experience, and data, we offer best practices for model designers and portfolio assessors.

### **Best Practices for Model Designers and Portfolio Assessors**

In addition to supporting CAEL (2019) standards for assessing learning, we offer best practices for model designers and portfolio assessors based on the redesign experience. Best practices for model designers include vigilant focus on awarding credit for evidence of learning, grounding the model with a theoretical foundation, organized spreadsheet design, and analyze data to test model performance. Although assessment of prior learning seems obvious, model designers must vigilantly ensure the model assesses evidence of learning, not experience or spent time (CAEL, 2010, 2019). We recommend grounding the model with a solid theoretical foundation, for example, one or more models or theories related to adult development or adult learning. For design, an organized spreadsheet, using the same measurement scales across constructs, facilitates consistency and interpretability in measurement. Last, collect and analyze data to test model performance. Such tests include calculating reliability and validity measure to determine if the model accurately and fairly assess prior learning across all learners despite differing demographics.

Best practices for assessors include scheduling sufficient review time and disciplined use of effective tools (Hoffman, 2010). Administrative deadlines and assessor work schedules must allow enough time for each assessor to evaluate 10-20 competency portfolios, each requiring 45 to 90 minutes, totaling 7.5 to 30 hours each term. Disciplined use of effective tools help assessors stay on pace and facilitate consistency. We recommend three tools available from the Center for Excellence in Learning and Teaching at Iowa State University (2019). The first, a table, lists Anderson and Krathwohl's (2001) knowledge dimension types across the top and cognitive process dimension categories down the side, including descriptions and examples for each intersection. The second table provides definitions for each knowledge type, and the third example verbs for each cognitive process category. No matter the occupation, using these tools while assessing portfolios keeps the focus on skill statement verbs, knowledge and cognitive process dimensions, and ultimately, prior learning. Having discussed the underlying course and learners, competency statement and portfolios, we now turn to overall program administration.

## **PROGRAM ADMINISTRATION**

PLA program administration supports all 10 CAEL (2019) standards for assessing learning, guiding the course's instructional design, creation of competency portfolios, block credit competency model design and application, and assessment process. Here we focus on four CAEL (2019) standards particularly supported by administration (see Table 1 for standards 7-10) and discuss policies and procedures; funding structure; assessor training and norming sessions; ongoing monitoring, evaluating, and revision; and best practices for program administrators.

### **Policies and Procedures**

Prior to PLA program redesign, the program administrator unilaterally decided on policies and procedures related to the assessment of prior learning. Although available to learners upon request, most learners did not avail themselves of policy and procedure information to understand intricacies of the process. Rather, learners sought informal and anecdotal information and often did not adequately understand the process. Following submission and assessment of portfolios, learners received memorandums of credit awards mailed to their home addresses. Learners had no access to the process or sense of required time between portfolio submission and credit award notification. If

they had questions regarding credit awards or believed the awards unfair, learners could not view the completed block credit competency model used to assess their prior learning.

During the redesign, faculty actively analyzed, revised, and adopted updated policies and procedures. After redesign, PLA policies and procedures are now available to all on the Department of OWLS website. In the PLA course, learners study the policies and procedures and demonstrate their understanding with a quiz. The PLA administrator informs learners of portfolio assessment deadlines and when to expect notification of credit awards to university email addresses. If they have questions regarding the credit awards or believe the awards unfair, learners may view the completed model used to assess their prior learning.

### **Funding Structure, Assessor Training, and Ongoing Program Revision**

In regard to funding structure, prior to PLA program redesign, all learners paid tuition and fees for a required three-credit-hour course including PLA along with other topics and content. Learners pursuing PLA sat next to those not pursuing PLA but with different levels of interest and priorities. After redesign, the original, now expanded, course includes content applicable and relevant to all learners in a degree completion program. A new, optional, one-credit-hour PLA course, offered through continuing education, solely focuses on PLA. The one-credit-hour tuition and a \$350 fee fund PLA administration and assessment and have no relations to credits awarded. In addition to funding course instruction, the new structure shifted faculty assessment of competency portfolios from required, unpaid service to optional, paid work. Funding also supports a part-time graduate assistant to manage organizational tasks, maintain a database, and support research activities.

In regard to training, prior to PLA program redesign, faculty assessors originally attended a one-time training to learn about the competency model and assessment process. The training generally occurred at time of hire and excluded feedback, norming, and professional development. After redesign, faculty assessors participate in training and norming session each term, to continually develop PLA knowledge and practice and a common frame of reference supporting inter-rater reliability. In some cases, faculty also attend professional conferences and meetings related to PLA and online course delivery.

Prior to PLA program redesign, little monitoring, evaluation, or revision of the PLA program occurred. During the redesign, participants used anecdotal and contextual information as well as historical, institutional, and national data to address learner and institutional needs. After redesign, the PLA administrator and graduate assistant compile, aggregate, segregate, and analyze portfolio evaluation data to identify historical patterns, strengths, and needed improvements for PLA. The administrator shares these data at faculty meetings, and stakeholders improve instructional and training programming and the overall PLA process to meet learner and institutional needs. Based on our PLA redesign, experience, and data, we offer best practices for administrators who, through their leadership, shape programs and experiences for all stakeholders.

### **Best Practices for PLA Administrators**

As program leaders, PLA administrators ensure the entire process and all policies and procedures align with department, university, professional organization, and accreditation standards. In addition to implementing CAEL (2019) standards throughout PLA programs, we offer several best practices for PLA administrators based on our redesign experience. Overall, we recommend administrators seek and disseminate information related to PLA by attending professional conferences, reading peer-reviewed journals articles, studying the CAEL website including published reports, and sharing such information with instructors, learners, assessors, and other stakeholders.

As leaders of PLA teams, administrators can confirm instructors and assessors have the tools needed to respectively deliver quality course instruction and accurate portfolio evaluation. Each term, quality course instruction includes updating and providing an online course shell in the university's learning management system and, if applicable, accessing all course sections to maintain consistency

and provide similar experiences for all learners. Each term, accurate portfolio evaluation includes scheduling and facilitating assessor training and norming sessions at a convenient time, offered in-person and online to meet faculty needs.

For learners, PLA administrators can ensure effective systems and proper procedures are in place to expeditiously and professionally communicate credit awards. This practice provides learners the maximum amount of time to determine how such awards affect their degree plans and course selections before registering for the next term. For internal and external stakeholders, PLA administrators can regularly analyze portfolio assessment data to identify patterns, determine needed improvements, and communicate the general value of PLA and specific value of the PLA program. Collectively, this examination and best practices provide implications for practice and the future.

## **IMPLICATIONS FOR PRACTICE AND THE FUTURE**

This article examined PLA within an award-winning degree completion program and offers implications for PLA programs, professional organizations, teaching, learning, models, assessment and program administration, and the future. For PLA program revision, sometimes a structure must be dismantled in order to rebuild. This examination serves as an exemplar for utilizing standards or benchmarks provided by professional organizations to inform program redesign and administration. For the PLA program at Texas State University, national policies and best practices, particularly CAEL's (2019) standards for assessing learning, influenced and shaped revision of the underlying course, competency portfolio and model, assessment process, and program administration. For PLA professional organization, the examination illustrates the challenges members face and the standards, benchmarks, quality assurance documents and tools, and other resources benefiting members in strengthening practice and innovating programs.

For teaching and learning, this examination contributes a course structure of modules and lessons to scaffold learners in creating competency portfolios and transferring new skills to future learning. The instructional design illustrates the use of theory as foundation for and content in a course, specifically Kolb's (1984) experiential learning theory applied to prior learning and Anderson and Krathwohl's (2001) revised Bloom's taxonomy to characterize the knowledge and cognitive process dimensions of such college-level learning. The latter also informs the competency model used by assessors to evaluate prior learning. This examination further contributes an overview of a block credit model and recommends specific tools for assessor ease and consistency in evaluating portfolios.

For program administration, this examination recommends and illustrates the application of CAEL's (2019) standards for assessing learning. We further recommend every program actively and continually collect, analyze, and disseminate PLA data for research and practice. Looking to the future, we will continue to test and refine the PLA competency model for accurate and equitable credit awards. In addition, we will use such data, along with instructor, learner, and assessor feedback, to enhance the course design, competency model, assessment process, and program administration, as needed. Future research includes examining prominent PLA themes and trends over time through a systematic literature review; such analysis and synthesis could be used as a roadmap to inform future inquiry. We will also use longitudinal data to develop an analytical model to test the competency model's predictive validity. Contributing to and learning from theory and practice benefit all involved in PLA.

Innovative PLA programs serve learners pursuing the dream of a college degree, especially adults and those from underserved populations. A college degree equates to significantly greater income over a lifetime, but the required time and money often present barriers to pursuing and achieving the dream. PLA offers a solution to spend less time and money earning a college degree. In this examination, learners paid for one credit hour and earned an average of 13 credit hours, shortening their time to degree by three to five months. In addition, they learned knowledge and developed skills to support future learning. PLA can make the difference between earning or not earning a college degree.

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## APPENDIX A

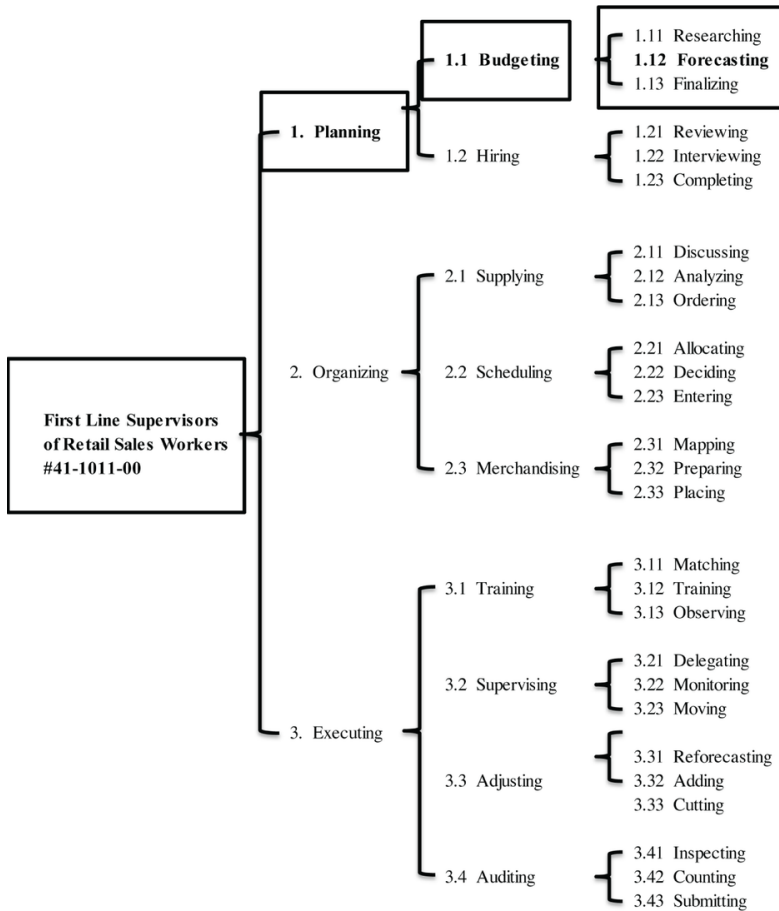
Examples of O\*NET examined occupations for PLA:

Advertising Sales Agents	Barbers	Bookkeeping, Accounting, and Auditing Clerks	Budget Analysts
Business Intelligence Analysts	Career/Technician Education Teachers, Secondary School	Cashiers	Certified Nursing Assistant
Clergy	Clinical Research Coordinators	Coaches and Scouts	Customer Service Representatives
Database Administrators	Dental Hygienists	Desktop Publishers	Dietitians and Nutritionists
Directors, Religious Activities and Education	First-Line Supervisors of Police and Detectives	First-Line Supervisors of Production and Operating Workers	First-Line Supervisors of Retail Sales Workers
Office Clerks, General	Patient Representatives	Personal Care Aids	Personal Financial Advisors
Pharmacy Technicians	Photographer	Police Patrol Officers	Police, Fire and Ambulance Dispatchers
Preschool Teachers, Except Special Education	Procurement Clerks	Property, Real Estate and Community Association Managers	Sales Associate



**APPENDIX B**

Example job task analysis (JTA):



## APPENDIX C

Example competency statement:

O\*NET # 41-1011.00

O\*NET Occupational Title: First Line Supervisors of Retail Sales Workers

Level 1 Skill: Planning. Level 2 Skill: Budgeting

1. **I can forecast** a weekly sales goal for each of the 52 weeks of the year; **well enough to** provide enough daily sales floor coverage to make sure the store runs as efficiently as possible and can adapt to any increases or decreases in hourly sales while maintaining high merchandising standards.
2. **Knowledge and Cognitive Process Dimensions.** The Knowledge and Cognitive Process Dimensions contain four types of knowledge and five levels of cognitive processing dimensions. Use these types of knowledge and cognitive dimensions to describe your knowledge and cognitive skills used to execute the skill listed in your skill statement.

### Knowledge Dimension

If I have:

- **Factual knowledge** of what our corporate headquarters projects our weekly sales goal and how much it has deviated from actual sales the past few weeks, I can make an accurate forecast that will allow the store to make payroll;
- **Conceptual knowledge** of forecasting tools and payroll management applications, I can use them to submit a weekly forecast to my District Manager;
- **Procedural knowledge** of how payroll is directly affected by an increase or decrease in daily sales I can use that knowledge to make forecast adjustments during the week;
- **Metacognitive/strategic knowledge** of how recent sales trends have deviated from corporate sales projections, I can use that to make a more accurate weekly sales forecast and be able to give my data to back up my forecast.

### Cognitive Process Dimension

If I:

- **Understand:** Classify the many variables involved when making a weekly sales forecast. Having experience and knowledge of the variables will give me confidence when submitting a sales forecast that is considerably different from our corporate forecast for the week;
- **Apply:** Implement the knowledge and experience I have gained over the years of making sales forecasts to recognize trends and patterns that will allow me to make accurate predictions in sales based on current conditions;
- **Analyze:** Analyzing promotions, recent sales trends, traffic patterns and other variables will give me the information to make a forecast that will be able to sustain any major increase or decrease in sales and payroll;
- **Evaluate:** Critiquing the information I have acquired for each week will allow me to be able to confidently submit and back up my forecast if it is questioned by my District Manager or suggested to change;
- **Create:** Generating a sale forecast after analyzing and critiquing available information to the District Manager.

3. **Tools and Technology:** What are the physical conditions (e.g. In a professional office setting with a desk, chair, computer, printer, and internet)? List, describe, and explain what tools and technology are needed to perform the skill in section 1 above.

If I have, or if I use...

1. An office with a desk, chair, computer, printer;
2. Gap Inc. provided forecasting tool that lets me see what sales deviations will do to payroll;
3. Promotion application that lets me know what upcoming promotions will be implemented and how they may affect sales based on recent trends;
4. Corporate provided sales forecast tool that sets a base for our stores forecast and allows me to make adjustments based on my own first-hand knowledge of our store.