Innovation in Prior Learning Assessment: Program, Course, Model, and Best Practices

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Abstract

Prior learning assessment (PLA) supports student persistence, shortens time-to-degree, and boosts degree completion, particularly for post-traditional (adult or non-traditional) students and underserved populations. This proceeding examines an innovative approach to PLA using block credit. Administered within the award-winning Department of Occupational, Workforce, and Leadership Studies at Texas State University, the current PLA competency model integrates components from an original model, Bloom's revised taxonomy, and the U.S. Department of Labor's Occupational Information Network (O*NET Online) measures. We discuss PLA innovation, including course and students, competency model and portfolio evaluation, best practices for stakeholders, and implications for research and practice.

Keywords: *Prior Learning Assessment, PLA, Best Practices, Model, Post-Traditional Students*

Background

As the economy shifts and technology evolves, jobs and careers increasingly require advanced credentials, thus increasing the need for and significance of a college degree (Cherrstrom & Boden, 2018). Earning a degree, however, requires resources such as time and money. Prior learning assessment (PLA) evaluates learning gained outside a traditional academic environment (Klein-Collins & Wertheim, 2013; McKay, Cohn, & Kuang, 2016), bridging the gap between experiential non-collegiate learning and collegiate credit. Stated another way, PLA captures the college-level learning and knowledge students acquire while living their lives—working, participating in employer training programs, serving in the military, independently studying, volunteering or doing community service, and studying open-source courseware. PLA supports student persistence, shortens time-to-degree, and boosts degree completion, particularly for post-traditional (adult or non-traditional) students and underserved populations (Klein-Collins & Hudson, 2018; McKay, Cohn, & Kuang, 2016), offering benefits to students, higher education institutions, and ultimately, employers.

After World War II, PLA emerged as a process of evaluating training for college-level learning, as veterans on the G.I. Bill earned college credits for military training (Travers, 2012a, 2012b). Partially in response to Vietnam veterans returning home, Texas State University created what is now known as the Bachelor of Applied Arts and Sciences (BAAS) degree program (Springer, Kakas, & Gottschall, 2015). Since inception, the program has expanded to include a variety of students with prior learning in a variety of contexts. Although on the cutting edge when designed, PLA remained largely untouched for almost 40 years. Updating presented a major challenge and predicament: making one change to PLA would have a domino effect across the BAAS program, including administration, the degree plan, the advising structure, and the course housing PLA. In 2012, faculty, consultants, administrative assistants, graduate assistants, instructional designers, the advising center, and the registrar's office collaborated to overhaul and redesign the entire BAAS program, including PLA.

Administered within the award-winning Department of Occupational, Workforce, and Leadership Studies at Texas State University, PLA plays a critical role in primarily post-

traditional students completing their college degrees, specifically earning a BAAS (Cherrstrom & Boden, 2018; Springer, Kakas, & Gottschall, 2015). The new and improved PLA aligns with the Council for Adult and Experiential Learning (CAEL, 2019) standards and obtained approvals at the department, college, university, and Texas Higher Education Coordinating Board levels. The purpose of this proceeding is to examine this innovative approach to PLA using block credit. We will discuss the PLA course and students, competency model and portfolio evaluation, best practices for stakeholders, and implications for research and practice.

PLA Course and Students

PLA involves documenting an individual's outside learning through competency portfolios or assessment testing to receive academic credit (Klein-Collins & Wertheim, 2013). Using the portfolio-based assessment approach, Texas State University offers a PLA course to facilitate student learning and portfolio creation. During the overhaul and redesign, the required 16-week, three semester credit hour (SCH) course, offered through traditional face-to-face or hybrid formats, evolved into an optional 8-week, one SCH course, offered online through extended programs. Students not seeking PLA no longer take the previously required course, and students with multiple occupations can repeat the course to apply for credit related to each additional occupation. This approach saves money for non-PLA seeking students and lowers the cost for students seeking PLA by two-thirds less a small fee.

Each semester, 40 to 60 students take the PLA course, ranging in age from 20 to 60 years with an average age of 36 years. Based on the most recent student demographics, 64% of PLA students were women, a higher percentage compared to 53% in the department and 58% at the university (Texas State University, 2018). African-American students comprised 11% of PLA students, a lower percentage compared to 14% in the department and 12% at the university. White students comprised 47% of PLA students, compared to 50% in the department and 45% at the university; Hispanic students comprised 38% of PLA students, compared to 33% in the department and 39% at the university.

The fully online course includes four modules in a compressed eight-week term. In the first module, students learn about PLA and use the U.S. Department of Labor's Occupational Information Network (O*NET Online, 2019.) to examine one prior or current occupation. In the second module, students conduct a job task analysis (JTA), using one O*NET occupation code and title, and verify prior experience. Students have analyzed a wide variety of occupations, representing the breadth of prior learning (see Figure 1).

In the third module, students learn how to write a competency statement and how assessors will evaluate each statement using a proprietary competency model. Each competency statement includes three components—a skill statement, knowledge and cognitive process dimensions, and tools and technology. At the beginning of the competency statement, students address one skill from the JTA, including quantitative and qualitative descriptions, in the skill statement. In the next step, students use knowledge and cognitive process dimensions from Anderson and Krathwohl's (2001) revised Bloom's (Bloom & Krathwohl, 1956) taxonomy as a framework. 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. At the end of the competency statement, students discuss tools and technology along with supplies and physical space. In the final course module, students create a competency portfolio including an application for work life experience, position description, the JTA, up to 25 competency statements (one for each job task), and work verification letter(s). The competency portfolio, the course's major output, becomes the input for portfolio evaluation.

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Figure 1. O*NET occupations analyzed by students for prior learning assessment (PLA).

Competency Model and Portfolio Evaluation

Texas State University's overhaul and redesign of PLA included redesigning a proprietary competency model and improving portfolio evaluation. Pierson (2002) created the original model used from 1973 to 2014, based on the U.S. Department of Labor's (1991) *Dictionary of Occupational Titles (DOT)*. No longer in print and deemed obsolete, *DOT* was eventually replaced by O*NET Online (Mariani, 1999). The current PLA competency model integrates components from the original model, Bloom's revised taxonomy (Andersen & Krathwohl, 2001), and O*NET Online (2019) measures, specifically occupation number and title, job zone, and specific vocational preparation (SVP).

O*NET Online (2019) includes information for more than 950 occupations. 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 of time span from short duration to over 10 years.

To create a summative competency measure, assessors rate four domains using a 100-point scale—skill, knowledge dimension, cognitive process dimension, and tools and technology. To create a performance indicator score, three external measures are added to the total competency score—course grade and O*NET Online (2019) job zone and SVP. The performance indicator score correlates to the total award, ranging from zero to 30 SCH, and currently averaging 13 SCH. Each semester, the PLA administrator applies a confirmatory factor analysis (CFA) to test the PLA competency model for construct validity. The most recent CFA model indicated construct validation ($\chi 2 = 2.72$, $p = .10$; Sherron, 2019).

For portfolio evaluation, the redesigned process expanded from one to two assessors for each portfolio, and the two scores are averaged to yield the semester credit award. Using two assessors increases validity to ensure students receive fair and equitable review of their portfolios for credit. If the assessor scores differ by 9 SCHs or more, the PLA coordinator reviews the portfolio to reconcile the difference. To facilitate a common frame of reference and to increase inter-rater reliability, assessor training expanded from a one-time training upon hire to training every semester for all assessors. Rater reliability has ranged from $r = 0.65$ to 0.81, implying rater consistency (Sherron, 2019).

Additional improvements included changing the course's fee and payment structure, so PLA portfolio evaluation shifted from a required and unpaid service activity to optional and paid work. The latter accommodates faculty members' capacity to assess, or not, in any given semester. To support PLA administration, the revised process now includes a part-time graduate assistant to manage administrative tasks, maintain a database, and support research activities. Last, students originally could not review the scoring rubric for their competency portfolios. In the updated transparent feedback process, students may request anonymous assessor feedback to better understand the rationale for the credit award. Collectively, these competency model and portfolio evaluation improvements enhance the robustness of PLA and align with best-practices promoted by national organizations to best serve students.

Best Practices for Stakeholders

The Educational Opportunity Association (2018) defines best education practices as "the wide range of individual activities, policies, and programmatic approaches to achieve positive changes" (para. 3). In that spirit, we offer best practices for PLA students, instructors, assessors, and administrators.

For students, time management is an essential best practice. For example, instructors carefully scaffold the learning content and assignments in the PLA course, so students master skills for each portfolio section before progressing to the next section. In addition to mastery, staying on schedule enables students to maximize vicarious learning (Kozar, Lum, & Benson, 2015) from reading sections of peers' portfolios and to integrate instructor and peer feedback on their own writing. Repeating each step of the writing process—prewriting, research, drafting, revising, proofreading, and polishing—while composing each portfolio section produces the strongest product. The higher the levels of knowledge types and cognitive process categories and writing clarity in the portfolio, the higher the likelihood students will earn more credits for college-level learning outside of traditional academic environments.

For instructors, best practices include creating a collaborative and cooperative environment to support learning. From the first moment a student enters the course, the instructor can teach, model, and emphasize this course ethos. We recommend instructors confirm students use the best O*NET code and occupation title to maximize the PLA experience. Instructors can give students many opportunities to practice new skills, starting with low- and progressing to high-stakes assignments. When instructors promptly return work (within 24-48 hours when possible), students can integrate feedback. Microsoft Word's comments and track changes functions provide effective tools for written and audio comments to assist students in improving their work. To confirm original work, require students to submit each portfolio to Turnitin.com or another plagiarism detection tool. As a final instructor best practice, celebrate mastery and success to enhance student efficacy and motivation.

For assessors, best practices include allowing sufficient time to evaluate, as each portfolio requires 45 to 90 minutes. Similar to grading course assignments, stronger portfolios are easier and quicker to assess and weaker ones more challenging and time consuming. To stay on pace and for greater consistency, we recommend three tables available from the Center for Teaching Excellence in Learning and Teaching at Iowa State University (2019). The first 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 and third tables respectively provide definitions for each knowledge type and example verbs for each cognitive process category. Using these tools while evaluating portfolios keeps the focus on skill statement verbs, dimensions, and prior learning.

For administrators, best practices span the PLA process and have an impact on leaders, students, instructor, and assessors. As leaders, administrators can stay current on course, department, university, and accreditation publications to certify PLA remains in line with policies, rules, and standards. Like instructors, the administrator can confirm students have identified the best O*NET occupation code and title. When students repeat the course, administrators can verify students are using a different O*NET code and occupation title for each submitted portfolio. At the end of the process, administrator can communicate credit awards to students in a timely manner, ideally prior to registration opening for the next semester.

In addition, administrators can provide instructors and assessors with the tools they need to deliver the course and evaluate portfolios. Each semester, for example, administrators can provide an updated course shell to instructors in the university's learning management system (LMS). We recommend administrators have access to all course sections in the LMS to ensure

consistency between sections and a meaningful student experience. For assessors, administrators can schedule convenient online or in-person training sessions to prepare for evaluation and afford ample time for assessors to accurately evaluate portfolios. We recommend administrators have access to all assessor sites to monitor portfolio evaluations in real-time. Last, data administrators can compile, aggregate, segregate, and analyze portfolio evaluation data to identify historical patterns, strengths, and needed improvements for PLA. We share these best practices and offer possible implications.

Implications for Research and Practice

This proceeding examined an innovative approach to PLA and offers implications for research and practice. For research, the proceeding documents the redesign and overhaul of a PLA program, including an underlying course, student demographics, competency model, portfolio evaluation, and best practices. For practice, the course scaffolds student progression from learning about PLA, to analyzing a prior or current occupation, to writing competency statements, to creating a competency portfolio. The tuition and fee structure provides student affordability, paying for one SCH to earn, on average, 13 SCHs, while funding a graduate assistant and compensating instructors and assessors. The PLA model and portfolio evaluation benchmark a unique, fair, and equitable block credit approach to awarding credit hours. Best practices offer implications for stakeholders, including how students and instructors can maximize the PLA award through learning and teaching activities, how assessors can fairly and equitably evaluate PLA in a timely manner, and how administrators can establish, evolve, and grow a robust PLA program.

As future research, we continue to test the PLA competency model to ensure consistency across students, independent of age, gender, and race/ethnicity as well as in measuring skills, knowledge types, cognitive process categories, and tools and technology. For future practice, we anticipate ongoing curricular updates and professional development. As the workplace and workforce increasingly demand a college degree, higher education must innovate to bridge the gap between traditional practices and contemporary student needs. An innovative and robust PLA program serves the needs of diverse, 21st century, post-traditional students.

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